## LARGE FILING SEPARATOR SHEET

CASE NUMBER: 12-426-EL-SSO

12-427-EL-ATA

12-428-EL-AAM

12-429-EL-WVR

12-672-EL-RDR

FILE DATE:

10/05/12

SECTION:

BOOK 3 (PART 1 OF 2)

201

NUMBER OF PAGES:

DESCRIPTION OF DOCUMENT: APPLICATION - CONTINUED

# BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

#### THE DAYTON POWER AND LIGHT COMPANY

**CASE NO. 12-426-EL-SSO** 

**CASE NO. 12-427-EL-ATA** 

**CASE NO. 12-428-EL-AAM** 

**CASE NO. 12-429-EL-WVR** 

**CASE NO. 12-672-EL-RDR** 

**ELECTRIC SECURITY PLAN** 

**BOOK III – Testimony and Appendices** 

# THE DAYTON POWER AND LIGHT COMPANY CASE NO. 12-426-EL-SSO

**Electric Security Plan** 

## **Testimony**

The Dayton Power & Light Company

#### **BEFORE THE**

#### PUBLIC UTILITIES COMMISSION OF OHIO

#### THE DAYTON POWER AND LIGHT COMPANY

**CASE NO. 12-426-EL-SSO** 

**CASE NO. 12-427-EL-ATA** 

CASE NO. 12-428-EL-AAM

**CASE NO. 12-429-EL-WVR** 

**CASE NO. 12-672-EL-RDR** 

ELECTRIC SECURITY PLAN (ESP)
DIRECT TESTIMONY
OF WILLIAM J. CHAMBERS

- □ MANAGEMENT POLICIES, PRACTICES, AND ORGANIZATION
- OPERATING INCOME
- □ RATE BASE
- ALLOCATIONS
- □ RATE OF RETURN
- □ RATES AND TARIFFS
- OTHER

#### **BEFORE THE**

#### **PUBLIC UTILITIES COMMISSION OF OHIO**

## ELECTRIC SECURITY PLAN (ESP) DIRECT TESTIMONY OF

#### **WILLIAM J. CHAMBERS**

## ON BEHALF OF THE DAYTON POWER AND LIGHT COMPANY

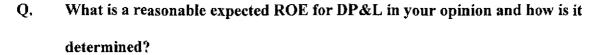
I.	INTRODUCTION	7
II.	PROFESSIONAL BACKGROUND	6
III.	AN OVERVIEW OF THE CREDIT RATING PROCESS	10
IV.	ANALYSIS OF DP&L'S BUSINESS RISK	21
V.	EVALUATION OF DP&L'S PROJECTED FINANCIAL CONDITION	28
VI.	POTENTIAL CONSEQUENCES OF CHANGES TO DP&L'S CREDIT RATING	50
VII.	OTHER	53
VIII	CONCLUSION	58

### i. <u>Introduction</u>

18

- 2 Q. Please state your name and address.
- 3 A. My name is William J. Chambers. I reside at 3 Albion Place, Charlestown, Massachusetts
- 4 02129. I am currently an Associate Professor of Finance at Boston University.
- 5 Q. What is the purpose of your testimony?
- My testimony will focus on the financial integrity of The Dayton Power and Light 6 A. 7 Company ("DP&L"), the importance of maintaining that integrity and how the proposal 8 before the Commission will serve this purpose. As part of my analysis, I will address 9 whether DP&L's ESP proposal, if accepted by the Commission in most economically material respects, will provide the utility with an opportunity to earn a reasonable return 10 on its average equity (ROE) over the next five years. This is important to DP&L's financial health because DP&L's expected profits should be sufficient not only to 12 motivate and enable DP&L to provide safe and reliable service to its customers, but also 13 to avoid financial distress and provide a rate of return to investors that is commensurate 14 15 with the risk they bear. Otherwise, DP&L's cost of capital will increase, its access to 16 capital may be restricted, and its financial health will deteriorate, jeopardizing its ability 17 to provide safe and reliable service to its customers. Indeed, if rates are severely lowered,

the impact on DP&L's financial integrity and survival probability likewise will be severe.



Α.

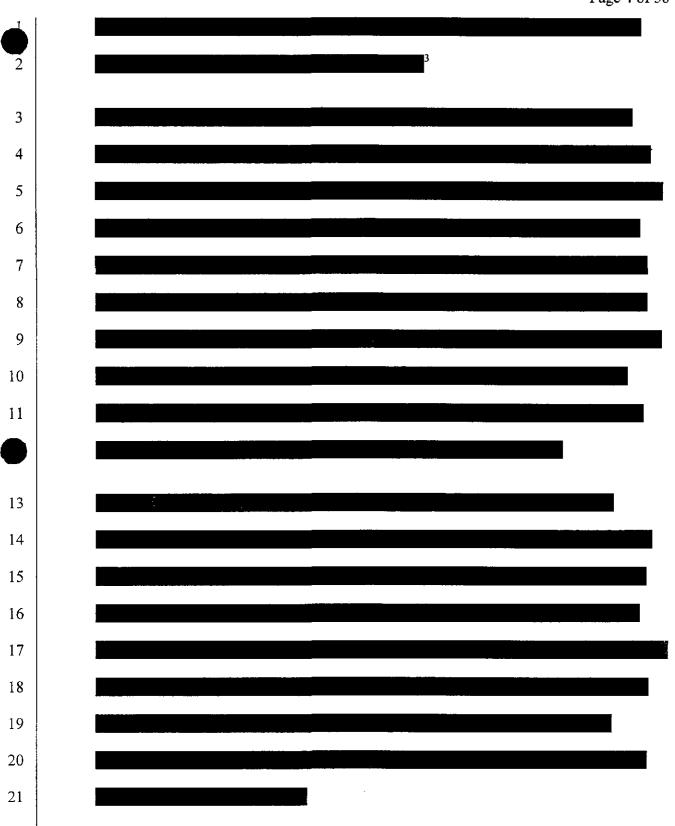
A company's ROE is one of the more important metrics for judging its financial integrity and viability. While it is understood that with the move to a more competitive and market-driven environment, utilities will not be guaranteed any given level of ROE, nevertheless they must be afforded the opportunity to earn a reasonable, market-driven rate of return in order to remain financially sound. The expected rate of return should be commensurate with the risk that investors bear when they invest their equity capital in the enterprise. For DP&L, this includes the risk of a vertically integrated utility transitioning to a distribution utility with market-based capacity and energy procurement. To determine an appropriate ROE for such an enterprise, I have gathered data on actual and projected ROEs for utilities of similar risk. In addition, I have relied on a recent decision by the Commission in which it determined that a reasonable expected ROE for this type of enterprise is in the range of 7% to 11%. Based on market information, I believe that a range of 7.7% to 10.4% is a reasonable ROE for DP&L to be able to function effectively and maintain its financial integrity.

Opinion and Order in the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan. Case No. 11-346-EL-SSO et. al., at 33.



2 Assuming that DP&L's ESP rate proposal, including the Service Stability Rider (SSR) A. and the Switching Tracker, 2 is adopted in all economically material respects, and DP&L's 3 future performance is comparable to the projections underlying the ESP proposal, DP&L 4 probably will be able to maintain an ROE in line with historical and projected ROEs for 5 6 firms of comparable risk, and in the range of reasonableness defined by the Commission. Specifically, my analysis indicates that comparable firms' ROEs are in the range of 7.7% 7 to 10.4%, consistent with the Commission's range of 7% to 11%. 8 9 10 11 13 14 15 16 17 18 19 20

<sup>&</sup>lt;sup>2</sup> The Switching Tracker is essentially a true-up mechanism designed to compensate DP&L for lost revenues related to additional customer switching. For convenience, I refer to incremental switching that takes place absent approval of the Switching Tracker as "uncompensated switching" (or "uncompensated shopping").



<sup>&</sup>lt;sup>3</sup> See, e.g., Bluefield Water Works and Improvement Company v. Public Service Commission of the State of West Virginia (262 U.S. 679); Federal Power Commission et. al. v. Hope Natural Gas Company (320 U.S. 591).

d	
	•

6

7

8

9

11

12

13

14

15

16

17

18

19

- Q. Please identify the Exhibits attached to your testimony.
- 2 A. The following exhibits summarize the projected financial ratios for DP&L from 2013-3 2017:
- WJC-1: DP&L's ESP as filed.
  - WJC-2: Pro forma Base Case that modifies the capital structure of DP&L.
    - WJC-3: Pro forma case including the consequences of anticipated additional customer shopping.
    - WJC-4: Pro forma case including the consequences of a full rejection of the proposed SSR.
    - WJC-5: Pro forma case including the effect of anticipated additional customer shopping and rejection of the proposed SSR.

Each of these exhibits contains a number of supporting schedules, numbered with suffixes of A through D. For example, Exhibit WJC-1.A contains the variables used to calculate the financial ratios in Exhibit WJC-1. These data in turn come from the projected income statement (WJC-1.B), balance sheet (WJC-1.C) and statement of cash flows (WJC-1.D).

A number of exhibits summarize the results. I graph the projected ratios from these scenarios in Exhibits WJC-6.A through WJC-6F. Exhibit WJC-7.A is a graph of the projected dividend payments and Exhibit WJC-7.B shows the projected issuance of short-

10	II.	PROFESSIONAL BACKGROUND
9		from third-party sources.
8		Appendices A through I contain various supporting documents, including information
7		sample of peer firms.
6		Exhibits WJC-12.A through WJC-12.C provide the historical and projected ROE for a
5		Ratings. Exhibit WJC-11 provides the details of the pro forma debt adjustment. Finally,
4		Exhibit WJC-10 provides financial ratios for a sample of peer firms from a study by Fitch
3		Exhibit WJC-9 provides data on the capital structure for a sample of DP&L's peer firms.
2		2013 and 2017 for each scenario.
		term debt. Exhibit WJC-8 summarizes the implications of the likely credit ratings in

#### H. PROFESSIONAL BACKGROUND

Q. What is your educational and work background?

12 A. I received a B.A. in Economics & History at the College of Wooster. I then received 13 M.A., M.Phil. and Ph.D. degrees in Economics at Columbia University. 14 I joined the faculty of Boston University in 2005. I teach courses in finance, investment 15 analysis, portfolio management, capital markets and financial institutions. Prior to 16 joining Boston University, I worked in various capacities for Standard & Poor's for 22 17 years. A complete listing of my professional experience is included in my curriculum 18 vitae, which is attached as Appendix A.

- The large majority of my time at Standard & Poor's ("S&P") was in its debt rating 2 A. 3 division. Initially, I worked to rate sovereign governments, states and localities and government-owned enterprises, including utilities and financial institutions. 4 5 Subsequently, I had oversight over all corporate credit ratings for companies domiciled 6 outside of the U.S. and was responsible for the merger and integration of the international 7 group with the U.S. domestic corporate rating group. I was actively involved in the 8 rating of many utilities as they moved from public to private ownership or underwent 9 deregulation. 10 My last years at S&P were with a consulting unit established to work with corporate entities and financial institutions to improve their internal credit evaluation systems. 12
- Throughout my tenure in the credit rating part of the business, I was involved in the development and application of credit rating criteria for sovereign risk, general corporate risk and specific topics including parent-subsidiary relationships.

#### 15 Q. Have you previously given testimony before the PUCO?

- 16 A. No. I have not previously testified before the PUCO. I have previously testified before other regulatory and judicial bodies. This testimony is listed in Appendix A.
  - Q. What has been the nature of that testimony?

18

19 A. My work has concentrated on the creditworthiness of companies and other entities and
20 the impact that creditworthiness can have on a company's access to capital markets and

A.

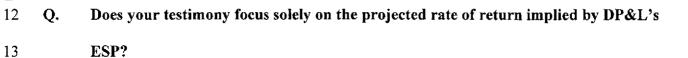
A.

on the cost of funds that they obtain in those markets. Of course, an evaluation of the revenues and profits of these various enterprises was an important element of my analysis for those cases.

#### 4 Q. How does your experience relate to your testimony in this proceeding?

I understand that a critical issue in this hearing is the financial integrity of DP&L and the Company's ability to earn a reasonable rate of return under the approved rate structure.

Ready access to financial markets and the ability to meet financial obligations in a timely manner are essential to every utility. If the financial integrity of DP&L is impaired or damaged, the cost of capital to the utility would likely rise materially and the availability of capital will be diminished. These effects would harm both DP&L and its customers, through higher costs and diminished quality of service.



No. My testimony and analysis include the projected rate of return but also extend beyond the ROE to consider wider-ranging aspects of financial integrity. While, as noted previously, the projected rate of return is a critical element to any analysis of financial integrity, financial integrity is a broader concept that incorporates both business and financial parameters. In other words, expected profitability (e.g., as measured by the ROE) is one of the most important of several important elements of an assessment of financial integrity but not the entire story.

#### Q. How do you define financial integrity in this context?

A.

There is no single, simple definition because financial integrity has many different dimensions. For a firm like DP&L to have strong financial integrity it must have a solid business as well as a sound financial position. It must be able to operate its business efficiently, by means of having qualified management, capable personnel and adequate infrastructure. It must have the financial means to meet its obligations in a timely manner and to be able to invest to maintain its infrastructure and develop new infrastructure for the future. It must be sufficiently flexible to address changing conditions and to respond to those changes. A company's financial integrity also must be assessed in the context of the risks and uncertainties associated with the company's own performance, looking forward, not just backward, within the framework of the regional, national and international economies. One way of defining financial integrity is to relate it to a company's overall creditworthiness.

#### Q. How does one assess the creditworthiness of an enterprise like DP&L?

A. When evaluating a company's creditworthiness, investors in a company like DP&L must assess a number of different factors encompassing both its business and financial risk.

The rate of return and other financial parameters are important elements of that assessment but they do not represent the entire picture. Ratings assigned by independent rating agencies also constitute such an assessment, and contribute to the information available to investors. My analysis has followed the criteria and approach established by the rating agencies and adopted by many investors.

#### AN OVERVIEW OF THE CREDIT RATING PROCESS

#### 2 Q. Why are credit ratings important to a company like DP&L?

*III*.

A.

A.

Many debt and equity investors pay close attention to credit ratings as an independent view of the creditworthiness of the companies they are considering. Such ratings may supplement an investor's own analysis or in some cases may be used in lieu of such internal analysis. For many institutional investors, investment guidelines (whether statutory, regulatory or self-imposed) refer to credit ratings. Additionally, historically there has been a close, inverse relationship between ratings assigned by the major agencies and the rates of interest paid by, and default rates of, borrowers – lower ratings are associated with higher rates of interest and higher default rates. Consequently, lower ratings tend to increase the cost of borrowing for a company.

#### Q. What are the rating agencies and what do they do?

Rating agencies provide an independent assessment of and opinion about the creditworthiness of both borrowers and the specific obligations they issue. The primary rating agencies – Fitch Ratings, Moody's Investors Service, and Standard & Poor's – have been rating debt obligations since early in the 20<sup>th</sup> century. Fees received for credit ratings make up the vast majority of the revenues for these companies, which employ a large group of experienced credit analysts to generate those ratings. Their sole focus is on the assessment of creditworthiness and the ratings are not recommendations either to buy or sell particular securities or opine on the suitability of particular securities for any investor.

A.

- Q. Do the rating agencies attempt to tell the Commission or a utility what policies they should adopt or what actions they should take?
- A. No. None of the rating agencies attempt to influence either a regulator's or a company's decisions. Their ratings are intended to assess the future performance of the business over time, which depends, in part, on the current and anticipated regulatory environment.
- 6 Q. What is the rating scale and what do the rating symbols mean?
  - Each credit rating agency uses a rating scale that allows investors to compare the debt issued by different firms across industries. Appendix B displays the rating scales for S&P, Moody's and Fitch. S&P rates firms on a scale of AAA (the most creditworthy), AA, A, BBB, BB, B, CCC, CC, C and D (default). For ratings below AAA, this basic scale is refined with plus and minus suffixes to gradate the ratings further. Debt with a rating of BBB- or higher is considered to be "investment grade." An investment grade rating indicates a high level of creditworthiness and a low likelihood of default. Such companies are expected to meet their obligations in a timely manner across a wide range of foreseeable economic conditions and have ready access to medium- and long-term debt markets. Debt rated below investment grade (*i.e.*, BB+ or lower) is sometimes called "speculative grade," "high yield" or "junk." Fitch's rating symbols are similar to S&P's.
  - For Moody's, debt that is rated Aaa, Aa, A or Baa is considered investment grade; debt assigned a rating of Ba, B, Caa, Ca or C is considered below investment grade. Moody's also distinguishes within the major categories other than Aaa by assigning a 1, 2 or 3 to the rating, with 1 signifying the highest rating within the category and 3 the lowest.

In addition, credit rating agencies provide investors with further insight and granularity to the rating. For example, S&P comments on the firm's rating as being "stable" or as having a "negative outlook" or "positive outlook," indicating that S&P anticipates a possible credit rating change in the coming 6 to 24 months.

A.

When an event occurs that will potentially affect a company's rating but its consequences may not be immediately determinable, the agencies signal this possible change to the market by formally designating the company as being on Rating Watch (Fitch), CreditWatch (S&P) or Watchlist or Under Review (Moody's). For example, when S&P places a company on CreditWatch, it generally indicates that S&P anticipates that a credit rating change may occur in the short run (e.g., 90 days).

Q. How does DP&L's credit rating and outlook compare to those of other major integrated electricity, transmission and distribution utilities?

DP&L currently has a BBB- long-term credit rating from S&P and has been on CreditWatch with Negative Implications since April 23, 2012, indicating that S&P is closely monitoring the firm's situation and that a downgrade of the credit rating is a distinct possibility. S&P also lowered the evaluation of DP&L's business position, discussed in more detail below, from "Excellent" to "Strong." Moody's currently has a slightly higher rating of Baa2 with a Stable outlook. Fitch Ratings rates DP&L BBB-with a Stable outlook. In all cases, the reference here is to the long-term, senior unsecured debt of the Company. DP&L's ratings are currently toward the lower end of the spectrum of integrated electricity utilities, with the vast majority holding credit ratings in the A, A-, BBB+ and BBB rating categories.

### Q. What criteria do the agencies use to establish their ratings?

2 All of the rating agencies regularly publish the criteria that they employ to assign ratings. A. These criteria cover both the business and financial risk of the subject company as well as 3 how the agency views specific features of debt issues, such as pledged collateral or 4 subordination. Each agency develops its own criteria, but across the major rating 5 agencies the criteria employed are highly similar. While the published criteria identify 6 the factors that are considered, there is no fixed weight assigned to each of the factors in 7 determining a final rating. Rather the agencies use a judgmental approach to weighing 8 the various factors and determining a final rating outcome. Appendix C contains a 9 sample of the ratings criteria used for investor-owned regulated utilities. 10

#### Q. Is one of those criteria the Company's ROE?

11

15

16

17

18

19

Yes, definitely. Various measures of actual and expected profitability, including ROE, are among the most important of the financial criteria reviewed by the credit rating agencies or, indeed, by any investor along with other cash flow and leverage indicators.

### Q. Can you provide an overview of the credit rating process?

A. Yes. The rating agencies have established a clear process for gathering information and assigning their ratings.<sup>4</sup> As noted above, the agencies publish documents explaining their ratings criteria. The debt rating process is careful, considered and deliberative and involves a great deal of interaction between the rated entity (the debt issuer) and the

<sup>&</sup>lt;sup>4</sup> The following description is based on my experience with Standard & Poor's and published materials. See Standard & Poor's, Corporate Ratings Criteria, 2008, at 16-19.

A.

rating agency. It is an ongoing process in which past projections and results are considered along with the outlook for the future.

#### 3 Q. What types of information does a rating agency use to determine a rating?

The rating process involves evaluating a broad range of information concerning the company's business and financial position and involves qualitative information including the business risk factors as well as quantitative analysis. Public and private/confidential information received from the debt issuer (the borrower) is reviewed and incorporated into the assessment of the company's creditworthiness. Because a rating is forward looking, endeavoring to determine the creditworthiness of the issuer always involves an assessment of what will transpire in the future, for the economy at large, the company's industry and the company itself. This assessment includes management's projections for the future as well as reviews of what has occurred in the past. Rather than try to predict specific outcomes, the rating agency tries to ascertain how much of a margin of safety the debt issuer will be able to maintain in terms of timely payment of principal and interest under various possible outcomes. Information received from the issuer is not taken at face value but is assessed as to its credibility, and is considered in the context of the overall economy and the company's industry sector.

#### Q. How do ratings agencies obtain information from the company?

19 A. The issuer's principal contact with the agencies is through the primary analyst assigned to
20 the company. However, most interactions between the issuer and the agency include two
21 or more analysts, the primary and a backup, and many of the discussions, particularly for
larger, more complex companies, would involve several members of the agency team.

4

6

7

8

10

14

16

17

18

19

20

21

on its watch list.

This back-up procedure is designed to ensure the accurate collection and understanding of all information provided by the borrower as well as to assure continuity of the information flow should the primary analyst be reassigned or leave the agency and to provide for longer-term institutional consistency.

5 Q. How do the rating agencies distill the information they obtain into a rating?

Information received from the issuer, along with other economic and industry Α. information is gathered by the rating agency and analyzed. The primary analyst prepares a report, which includes a recommendation regarding the assigned rating. The agency 9 then convenes a rating committee composed of several senior analysts. The primary analyst presents his/her report to the rating committee, which discusses its content, compares it with information regarding similar companies and compares the 11 recommended rating with those assigned to those companies. The rating committee then votes on a rating. All agency ratings are the outcomes of committee processes. No single 13 analyst determines any rating. Along with the rating itself, the rating committee will also 15 decide on an outlook for that rating, if one is to be assigned, or the need to place a rating

> The rating agency then communicates its rating and the reasoning behind that decision to the debt issuer and the wider investment community.

Q. Do rating agencies provide information to the public about the financial condition of firms at various rating levels?

Yes. The agencies frequently publish ratings guidance regarding specific financial ratios A.

and the range of those ratios featured by companies receiving certain letter ratings. These factors are useful for the debt issuers as well as investors and other observers. An example of this kind of overview is provided in Appendix F, a review of U.S. Utilities published by Fitch Ratings in June 2012. However, no single factor or ratio necessarily dictates a particular debt rating. Frequently, companies will display financial ratios for various factors that might suggest different ratings. For example, the company may feature a relatively high level of profitability, suggesting a high rating, while also displaying a high level of debt, indicative of a lower rating. The rating committee process is designed to balance and evaluate all available information and determine a single final rating to be assigned to the issuer.

#### Q. Do the rating agencies adjust their ratings over time?

3

4

5

6

7

8

9

10

11

14

19

20

A. Yes. After an agency has published a rating, it maintains surveillance on that rating so 13 long as the debt is outstanding and the agency has sufficient information to make an informed rating decision. The surveillance process is similar to that of the assignment of an initial rating in terms of frequent exchanges of information between the debt issuer 15 16 and the agency and regular committee reviews. The monitoring process may result in the periodic affirmation of a rating or, should conditions change, an appropriate modification 17 18 to the rating. The agency will disseminate any rating changes and affirmations to the general investment community.

#### Do the ratings include an assessment of the business as well as the utility's finances? Q.

21 Α. Yes. A rating involves the evaluation and assessment of a wide range of both business and financial factors and balancing these factors to determine the overall rating. The

business analysis is critical since it defines the context or environment in which the utility operates. S&P has stated:

 Our corporate analytical methodology organizes the analytical process according to a common framework, and it divides the task into several categories so that all salient issues are considered. The first categories involve fundamental business analysis; the financial analysis categories follow. (Credit ratings often are identified with financial analysis--especially ratios. And we publish ratio statistics and benchmarks both for sectors and individual companies. But ratings analysis starts with the assessment of the business and competitive profile of the company. Two companies with identical financial metrics are rated very differently, to the extent that their business challenges and prospects differ.)<sup>5</sup>

#### Q. What are some examples of these business factors?

A. Appendix D shows the relative importance that S&P assigns to a number of business factors affecting several industries, including regulated utilities and competitive power generation. As noted above, the types of factors considered by Moody's and Fitch are similar in my experience.

Within the utility sector, S&P notes the following:

For most companies, business profile scores are assessed using five categories; specifically, regulation, markets, operations, competitiveness, and management. The emphasis placed on each category may be influenced by the dominant strategy of the company or other factors. For example, for a regulated transmission and distribution company, regulation may account for 30% to 40% of the business profile score because regulation can be the single-most important credit driver for this type of company. Conversely, competition, which may not exist for a transmission and distribution company, would provide a much lower proportion (e.g., 5% to 15%) of the business profile score.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Standard & Poor's, "2008 Corporate Criteria: Analytical Methodology," April 15, 2008, at 1.

<sup>&</sup>lt;sup>6</sup> Standard & Poor's, "New Business Profile Scores Assigned for U.S. Utility and Power Companies; Financial Guidelines Revised," June 2, 2004, at 10.

_	A more detailed list of factors considered by S&P for electric utilities is shown in
2	Appendix E. Based on this business analysis, S&P publishes a business profile score. As
3	noted previously, in April 2012, S&P assigned DP&L a business profile score of
4	"Strong," which was a downward revision from the previous score of "Excellent," and
5	reflects the increased competitive environment facing the company.

- Q. 6 How do the rating agencies factor in the utility's regulatory environment?
- 7 A. The rating agencies see a stable, consistent, transparent regulatory environment that sets reasonable objectives for the regulated entities as a positive for all affected parties. 8
- 9 Q. Have the recent financial and operational challenges facing utilities increased the 10 financial community's focus on the actions of utility regulators?

A.

12

13

14

15

16

Yes. The challenges facing utilities have increased as they have moved into a more competitive, market-based environment, and the uncertain economic environment has compounded these challenges. A consistent, transparent approach to regulation, which facilitates planning and provides appropriate flexibility to address these many uncertainties, establishes an environment in which a utility can operate effectively and best serve its stakeholders.

	Q.	What financial factors do the rating agencies consider in assessing creditworthiness?
2	A.	On the financial side, the rating agency analysis is also comprehensive, with the greatest
3		emphasis being on the level of debt and the sufficiency of cash flow to meet debt and
4		other obligations <sup>7</sup> .
5		The financial factors fall into several main categories:
6		1) Capital Structure and Leverage
7		Total Debt to Total Capital
8		Total Debt to Funds from Operations
9		• Total Debt to Free Operating EBITDA <sup>8</sup>
10		Maturity Structure of Outstanding Debt
11		O) Cool, Plans A dansees
12		2) Cash Flow Adequacy
13		Funds from Operations to Interest Expense     Fund Operating Cook Flow to Interest Expense
14		<ul> <li>Free Operating Cash Flow to Interest Expense</li> <li>EBIT<sup>9</sup> to Interest Expense</li> </ul>
15		THE PARTY AND A STATE OF THE PARTY AND A STATE
17		
18		<ul> <li>Funds from Operations plus Interest to Capital Expenditures</li> <li>Common Dividend Payout Ratio</li> </ul>
19		Common Dividend Layout Natio
20		3) Profitability
21		Operating Profit to Revenue (Operating Profit Margin)
22		• EBIT to Assets
23		Net Income to Revenue (Profit Margin)
24		Net Income to Total Assets (Return on Assets)
25		Net Income to Total Equity (Return on Equity)
26		
27		4) Liquidity
28		<ul> <li>Operating Cash Flow plus Available Cash to Funds Required for</li> </ul>
29		Operating Expenses
30		<ul> <li>Operating Cash Flow to Gross Capital Expenditures</li> </ul>
31		Available Backup Credit Facilities
32		

 <sup>&</sup>lt;sup>7</sup> See, e.g., Standard & Poor's, "Utilities: Key Credit Factors: Business and Financial Risks in the Investor-Owned Utilities Industry," November 26, 2008.
 <sup>8</sup> EBITDA is earnings before interest, taxes, depreciation and amortization.
 <sup>9</sup> EBIT is earnings before interest and taxes.

The ranges of these key ratios associated with particular rating levels are published by the agencies. One recently published review of regulated utilities by Fitch Ratings is 3 attached as Appendix F. 4 As noted, no one single factor or ratio determines the ultimate credit rating. Nor are the 5 indicated benchmark levels for each ratio necessarily binding. Instead, it is the analysis 6 and balancing of all the relevant factors including the business profile score over a 7 medium-term horizon that determines the final rating. Once the rating agencies have evaluated both the company's business and financial 8 Q. 9 position, how do they determine an overall credit rating? 10 The business risk and financial risk for the entity are reviewed and weighed by the rating A. 12

13

14

15

16

17

18

19

20

21

committee. If a company has strong scores on both business and financial risk (e.g., low risk) then the subsequent rating would be high. Conversely if the company is viewed as highly risky from both a business and financial perspective, the consequent rating will be low. But there are many instances when the relative risk levels vary. These situations are obviously more challenging. This interaction is illustrated in Appendix G.

Notably, this evaluation of the business and financial risk is not a mechanical process, but rests on the judgment of the rating committee. There is no single factor, formula or ratio that automatically determines the rating. There is no fixed weight to any of the individual factors, or the business or financial risk scores overall. I believe this is especially important since the rating is forward-looking and attempts to look into the inherently uncertain future. The experience of the members of the rating committee and the



backgrounds they bring to the table are extremely valuable here, and the close correlation of the ratings assigned and default rates by borrowers indicate that the system is robust.

#### 3 IV. ANALYSIS OF DP&L'S BUSINESS RISK

- 4 Q. In this context, how do you assess the business risk for DP&L?
- 5 A. In my analysis I focused on four principal areas:
  - 1) The demographic and economic environment in DP&L's service area;
- 7 2) DP&L's infrastructure;
- 8 3) DP&L's regulatory environment; and
  - 4) Increased competition facing DP&L.
- 10 Q. What are the important demographic trends and elements of the economic environment that are affecting DP&L?
- 12 DP&L provides services to a significant portion of west-central Ohio, focused around the A. 13 Dayton Metropolitan Area. The service area comprises the majority of 13 counties and 14 portions of an additional 11 counties. According to the U.S. Census, the total population 15 of the 13-county primary area was approximately 1.24 million in 2010, virtually 16 unchanged from the 2000 figure. Over the same period, Ohio's total population rose by 17 1.6% to 11.54 million. Population growth is a mixed blessing for electric utilities in that 18 it represents both potentially increased sales opportunities, but also creates a demand for the development of new infrastructure, as does the redistribution of population. 19

Income levels of the service area population were close to the state average. U.S. Census data indicate that average per capita income between 2006 and 2010 was \$25,400 in the Dayton Metropolitan Area and \$23,800 in the 13-county primary area, as compared with the state average of \$25,100. On a per household basis, the median household income for the state was \$47,400, equal to that of the Dayton Metropolitan Area and lower than the \$49,700 for the 13 county primary area. Thus, on an ability-to-pay basis, the population of the DP&L service area appears to be similar to that of the remainder of Ohio. In a like vein, the unemployment rate for May 2012 showed that Clinton, Montgomery, Fayette and Preble counties were slightly above the state average of 6.9%, while Champaign, Shelby, Greene, Logan, Miami, Darke, Warren, Auglaize, Union and Mercer counties were all below the state average, according to the Ohio Department of Jobs and Family Services.

Q. What is the current general business and economic climate in DP&L's service territory?

The economic outlook for the Dayton area is subdued. Moody's projects that unemployment will remain near current levels for two more years and "low productivity and restrained income growth will cause [Dayton's] economy to lag that of the U.S." over the longer term. <sup>10</sup> Further, Moody's ranked Dayton 339<sup>th</sup> out of 384 metro areas for vitality and 266<sup>th</sup> out of 392 for job growth from 2011-2016. DP&L operates in a manufacturing-oriented region, and, as a result, approximately one-half of its load comes

A.

<sup>&</sup>lt;sup>10</sup> Moody's Analytics, "Precis U.S. Metro - Dayton," June 2012, at 1.

from industrial and commercial customers, who tend to be relatively price sensitive and prone to shopping.<sup>11</sup>

#### 3 Q. What type of infrastructure does DP&L have?

A. Approximately \$1.74 billion, or 33%, of DP&L's gross property, plant and equipment are transmission and distribution assets. In addition to transmission and distribution facilities, DP&L owns portions of 7 generating stations and 100% of the coal-fired Hutchings Station. Ownership percentages, capacity and book asset values as of the end of 2011 for these facilities are as shown below.

	Ownership	Summer Capacity (MW)	Gross Plant in Service (\$ mil.)	Accumulated Depreciation (\$ mil.)	SCR and FGD Equipment Installed and In Service (Yes/No)
Production Units:			-		
Beckjord Unit # 6	50	207	\$75	\$58	No
Conesville Unit #4	17	129	121	32	Yes
East Bend Station	31	186	202	133	Yes
Killen Station	67	402	617	299	Yes
Hutchings Station	100	365	124	114	No
Miami Fort Units #7 & 8	36	368	366	129	Yes
Stuart Station	35	808	725	278	Yes
Zimmer Station	28	365	1,059	626	Yes
Transmission	Varies	_	91	57	
Total		2,830	\$3,380	\$1,726	

Currently, only the Beckjord and Hutchings Station plants are not equipped with SCR and FGD pollution control equipment. Duke Energy, operator of the Beckjord plant, has indicated its upcoming closure at the end of 2014 or early 2015, and DP&L is currently deciding on action with respect to the Hutchings Station plant, the capital cost of which is

9

10

11

12

<sup>&</sup>lt;sup>11</sup> Miller, T., "DPL Incorporated," Morningstar Equity Research, September 27, 2011, at 2.

virtua

virtua

with j

poten

capita

elema

6

7

8

9

10

11

13

14

15

16

17

18

A.

virtually fully amortized. Some analysts have concluded that all of the coal-fired plants with pollution-control equipment are relatively low cost. However, the constant potential for new environmental regulations, which could affect the need for additional capital expenditures or the viability of such plants in a competitive landscape, adds an element of risk to DP&L's operations. DP&L also owns or has interests in a number of natural gas-powered peaking units and a solar-powered unit.

#### Q. What is the regulatory environment facing DP&L?

DP&L's activities are regulated by the Public Utilities Commission of Ohio. Over the past ten years, the Commission has been in the process of implementing a wide series of initiatives affecting Ohio electric utilities, most especially regarding the introduction of competition in generation, permitting customers to choose their electricity supplier ("shopping"), and mandates regarding energy efficiency and the use of alternative energy sources. While the actual and potential effects of such changes are indeed likely to be substantial, the changes appear to have been introduced in a reasonable, transparent and straightforward manner, which has permitted the affected utilities to adapt to the new requirements. However, "the interplay between standard-service rates and market prices will continue to be a key driver of cash flow and shareholder value as long as the regulatory structure holds in Ohio."

<sup>&</sup>lt;sup>12</sup> See, e.g., Baird Equities Research, "DPL Inc. (DPL)," July 29, 2011, at 2.

<sup>&</sup>lt;sup>13</sup> Morningstar Equity Research. "DPL Incorporated," September 27, 2011, at 2.

#### Q. How has competition affected DP&L?

A.

A.

Competition has been introduced to Ohio utilities in several inter-related ways. Utilities are transitioning to an open, competitive market for power generation. This development is expected to result in lower revenues for the power they produce. Simultaneously, customers have been able to shop amongst energy suppliers to be able to obtain lower rates, thus removing the generation and some transmission revenues from some customers in DP&L's service area. Hence, DP&L potentially faces both lower unit sales and a lower average price per unit. The effect of these adverse changes has been and will continue to be significant. The proposed Switching Tracker can help DP&L mitigate some of those risks.

#### Q. Please describe the switching that has occurred to date.

I understand that essentially all of DP&L's larger industrial and commercial customers have switched to either third-party generation providers or to DP&L's affiliate DPLER at lower rates. For residential customers, the rate of switching to date has been much lower. However, the pace of residential switching has increased as information has been disseminated more widely. Such switching reduces DP&L's retail load, thereby reducing its revenues as it sells more of its power at wholesale (lower) rates. I understand that DP&L had experienced about 55% switching through February 2012 (as incorporated in its previous MRO filing) and Company Witness Hoekstra has indicated that switching increased to 62% as of August 30, 2012. The proposed Switching Tracker is designed to protect DP&L from further loss of revenue from additional switching.

#### Q. What other business risks does DP&L face?

9

10

12

13

14

15

16

17

18

19

Α.

DP&L faces a number of other risks that are listed in DPL, Inc.'s SEC Form 10-K that
may lead to profit fluctuations despite DP&L's regulated rates. These risks include
volatility in fuel costs, volatility in emission allowance prices, the possibility of
operational problems with its facilities, problems caused by severe weather, issues in
dealing with PJM Interconnection (the regional transmission organization ("RTO") that
controls DP&L's transmission functions and through which DP&L markets much of its
power), and other risks.

# Q. What conclusions have you reached regarding the overall business position of DP&L?

Having weathered the first significant round of competition, DP&L's current business position appears relatively stable, though weaker than in previous years, with a stable economic and demographic service area and good infrastructure. However, increased competition in particular could present significant challenges to the Company, especially if the Switching Tracker is not approved and if the level of customer switching increases beyond levels experienced to date. In addition, there is always some risk that new environmental regulations concerning the Company's coal-fired generation capacity could require some additional capital investment or alternatively make those plants less economic to operate.

	Q.	How does your conclusion correspond with those of the rating agencies?
2	A.	My views closely correspond with recent statements by the rating agencies. In its
3		April 23, 2012 announcement placing DP&L on CreditWatch, S&P noted that,
4 5 6 7 8		We have revised our assessment of DPL and DP&L's business risk profiles to "strong" from "excellent" to reflect the increased competition in Ohio along with the expected growth of the unregulated retail business. In addition, we expect the increasing competitive pressure due to lower wholesale electric prices will materially stress DPL's profit margins. 14
9		It went on to add:
10 11 12 13 14 15 16 18 19		We base the strong business risk profiles of both entities on DP&L's eventual transition to generation market rates. We expect that growth of DPL's retail subsidiary combined with increasing competitive pressure due to lower wholesale electric prices will materially stress DPL's profit margins in the near term. Our assessment of business risk also takes into account the increasing retail competition, a lack of fuel diversity, and a weak economy in Dayton. Those factors are partially offset, in our view, by the lower-risk regulated transmission and distribution (T&D) portion of the business; generally low-cost generating facilities; and the completion of a heavy environmental compliance program. <sup>15</sup>
21		Moody's lowered the ratings for both DP&L and DPL Inc. on November 28, 2011. In
22		announcing the change, Moody's noted:
23 24 25 26 27		The rating also reflects DP&L's reasonably supportive regulatory framework in Ohio although the utility has some uncertainty with its upcoming Electric Security Plan (ESP) rate filing in 2012. We anticipate that the supportive regulatory framework, comparable to other Ohio utilities, will continue. <sup>16</sup>

Standard & Poor's, "S&P May Cut Dayton Power & Light Co. Ratings," April 23, 2012 (emphasis added).
 ibid
 Moody's Investors Service, "Moody's Downgrades DPL to Ba1 and DP&L to Baa2 Following Acquisition by

AES," November 28, 2011.

Moody's subsequently noted its view of DP&L as "a low-cost utility" and that it anticipated a "reasonable transition to market rates" but also cautioned that "if DP&L experiences material, unrecoverable cost increases or capital expenditures, the rating of 3 both DPL and DP&L could be downgraded."<sup>17</sup> 4 Fitch Ratings, in announcing a downgrade of the ratings in November, 2011, cited "[a]n 5 6 increasingly competitive operating environment in Ohio due to customers' ability to choose electricity providers" as well as a "generating fleet that is nearly 100% coal-fired 7 and exposed to potential additional environmental regulation," mitigated by 8 9 "[c]onstructive regulatory mechanisms that allow for timely recovery of costs" and a

"low-cost generating fleet with environmental control equipment on the majority of its

coal-fired plants." 18

### EVALUATION OF DP&L'S PROJECTED FINANCIAL CONDITION

#### 13 Q. Can you describe the entity whose financial condition you are analyzing?

12 V.

14

15

16

17

18

19

A. I am analyzing the utility DP&L, a wholly-owned subsidiary of DPL Inc. Pursuant to an acquisition on November 28, 2011, DPL Inc. is now a wholly-owned, indirect subsidiary of The AES Corporation. Aside from DP&L, DPL Inc. has several other subsidiaries, including DPL Energy Resources ("DPLER"), which sells competitive electric energy services, and DPL Energy, LLC ("DPLE"), which owns and operates peaking generation facilities from which it makes wholesale sales.

<sup>&</sup>lt;sup>17</sup> Moody's Investors Service, "Moody's Disclosures on Credit Ratings of DPL Inc.," March 30, 2012.

<sup>&</sup>lt;sup>18</sup> FitchRatings, "Fitch Downgrades DPL to 'BB+' and DP&L to 'BBB-' Following Acquisition by AES; Outlook Stable," November 29, 2012.



A.

A.

# Q. How do analysts determine whether the financial ratios for a firm are favorable or unfavorable?

Where possible, financial analysis is undertaken in several different ways to provide the most comprehensive view of the entity. One method is to track the performance of a single company over time, a so-called time series analysis or trend analysis – to gauge its absolute performance and to note whether this performance is improving or deteriorating. The second method is to compare a company's performance relative to an industry standard or similar peer companies, a so-called cross-sectional analysis.

#### Q. Were you able to undertake both types of analysis for DP&L?

Yes. The time series analysis can be readily based on the projections of DP&L's financial position as filed by the Company. I treat these projections as a forecast of DP&L results as a hypothetical stand-alone entity, with one exception related to DP&L's debt described later. However, rating agencies and investors do not typically rely on just one set of assumptions. They will examine the sensitivity of the results of the analysis to certain critical assumptions – a "what would happen if..." analysis. For this reason, I have examined the case as filed but also have analyzed the financial consequences of some alternative outcomes.

The cross-sectional analysis is hampered by the fact that DP&L has historically held a low proportion of debt on its own balance sheet relative to its peers. For example, in Fitch's recent review of U.S. utilities there were eight other integrated utility companies in addition to DP&L that were rated BBB-. As shown in Exhibit WJC-10, the median ratio of total debt to total capitalization (debt plus equity) among those eight firms was

53.9% and, excluding DP&L, the ratio ranged from a low of 45.4% to a high of 61.5%. DP&L's debt ratio of 40.0% is clearly below those of its peers. In contrast, the debt ratio of DPL Inc., DP&L's immediate parent, was 54.1% at the end of 2011, much closer to that of DP&L's peers rated BBB-. The apparent low level of debt at the DP&L level while a higher proportion of debt is held at the parent level has the potential to distort the analysis and the ability to compare DP&L with its industry peers.

#### 7 Q. How did you handle the relatively low level of DP&L debt?

3

4

5

6

16

17

8 The most effective way to adjust for this difference and to be able to compare DP&L with A. 9 its peers and with rating agency metrics is to impute a higher proportion of debt to DP&L's capital structure.<sup>20</sup> I have developed a pro forma analysis under which DP&L 10 has a 50% debt / 50% equity capital structure as of the beginning of 2013. The selected 11 50% total debt to total capital ratio is between the 53.9% median for peer companies with 13 similar credit ratings (see Exhibit WJC-10) and the 49.5% median for the sample of utilities in Exhibit WJC-9. The selected 50% ratio is also below that of DPL Inc. on a 14 15 consolidated basis, but is a reasonable level for analysis.

Q. Are you implying that DP&L has too much equity and too little debt, and should increase the amount of debt on its own balance sheet?

18 A. No. The point is that from an economic perspective, a portion of the debt held on the

19 DPL Inc. balance sheet is attributable to DP&L. The pro forma adjustment presents an

<sup>&</sup>lt;sup>19</sup> Exhibit WJC-9 shows that the median debt ratio among an alternative sample of thirteen utilities was 49.5%. That sample was used in DP&L's prior rate case 08-1094-EL-SSO.

As noted above, this type of adjustment is consistent with Section 4928.142(D)(4) of the Revised Code, which states that ROE comparisons should be made after making "such adjustments for capital structure as may be appropriate."

economically realistic picture of the financial condition of DP&L based on industry norms. Without making this adjustment, comparisons between DP&L and other utilities or the rating agencies metrics would be distorted. For example, the unadjusted numbers from the Fitch study (Appendix F) suggest that DP&L should be rated A+ or higher, if the rating were based solely on this factor. The fact that Fitch's rating of DP&L is substantially lower at BBB- indicates that the rating agencies make this type of adjustment to the raw, reported numbers for their analysis.

Q. Can you summarize the key assumptions underlying the financial projections
 included in the filing?

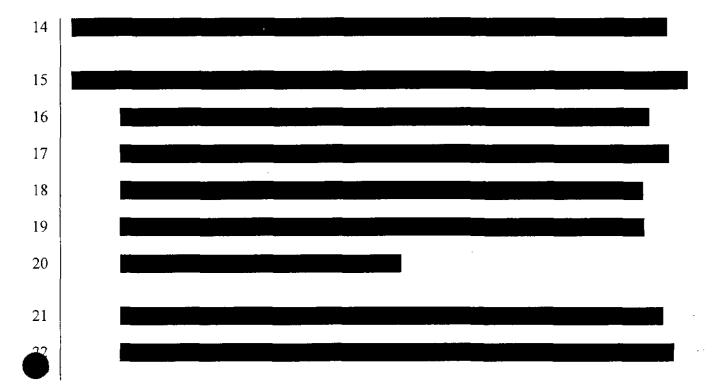
As explained by Company Witness Jackson, the as-filed projections are based on forward market pricing and a transition to auction pricing of 10% of load beginning January 2013, 40% beginning June 2014, 70% beginning June 2015, and 100% as of June 2016. The as-filed projections assume no growth in output through 2017 and use capital and O&M assumptions consistent with the MRO filed on March 30, 2012. The EIA projects electricity usage will grow at an annual rate of only 0.4% nationally between 2011 and 2017, thus providing support to this zero-growth projection.<sup>21</sup>

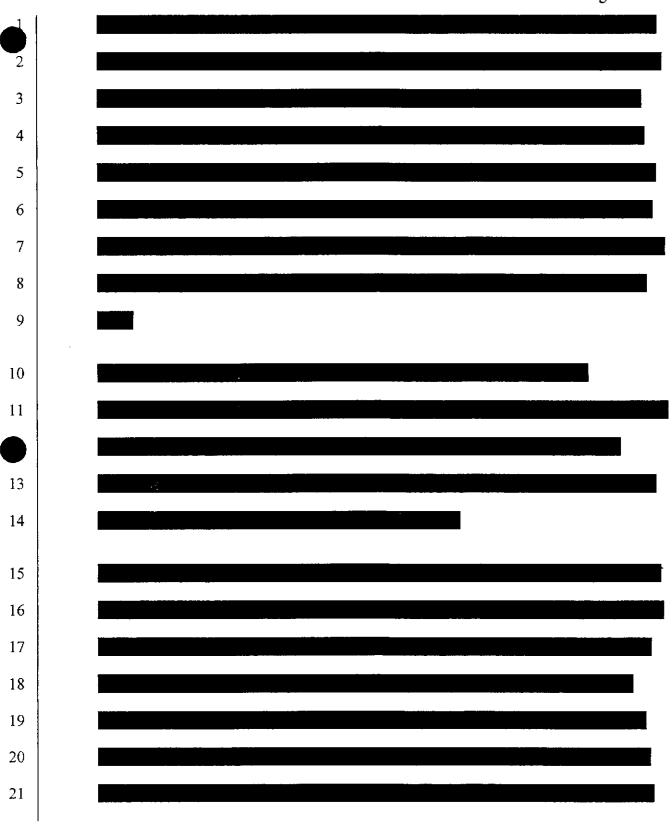
Obviously, any projections are subject to many different factors. For example, the overall load growth, customer switching, and changes in market prices for energy could all have significant impacts. One of the biggest uncertainties associated with the projections is the assumption regarding customer shopping and switching to other providers. Since February 17, 2012, DP&L has experienced a significant increase in

A.

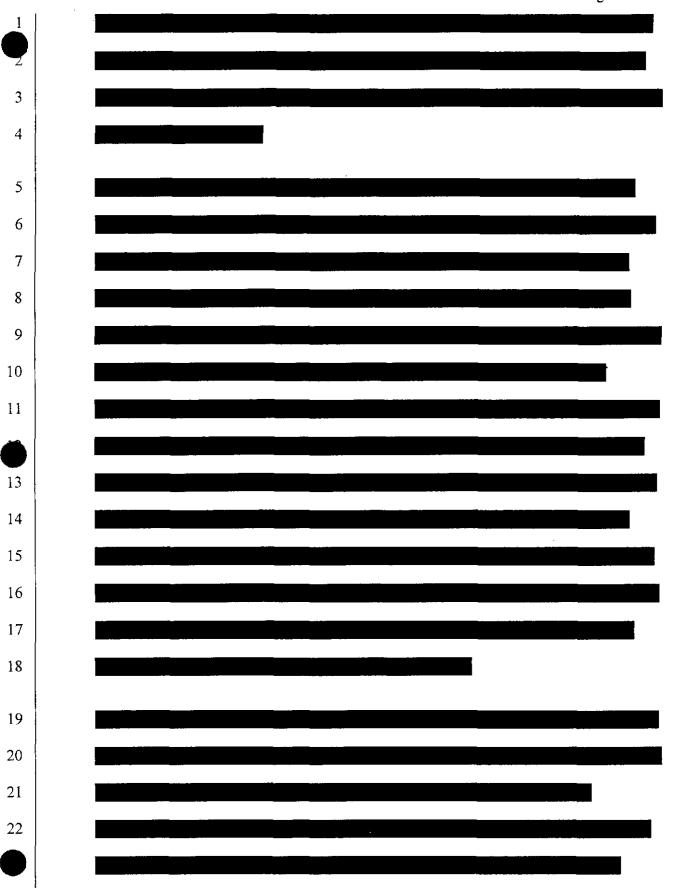
<sup>&</sup>lt;sup>21</sup> EIA Annual Energy Outlook 2012.xlsx.

customer switching. Specifically, as of February 17, 2012, 55% of DP&L's customers had chosen to switch to generation service from suppliers other than DP&L. As of 3 August 30, 2012, 62% of DP&L's customers had chosen to switch to service from 4 alternate suppliers. DP&L projects customer switching to continue to increase going 5 forward. DP&L's belief is that the shopping rate will reach an estimated of 6 customers choosing to switch to generation service from suppliers other than DP&L by 7 December 31, 2013 and will rise to almost by the end of 2017. DP&L's Base Case 8 projections assume no additional customer switching beyond that which had occurred as 9 of August 2012. That is, the Base Case is based on the then-existing level of switching 10 and does not attempt to project additional customer switching that would occur. 11 Consequently, as noted below, I have examined scenarios under which the customer 12 switching level is higher. These scenarios highlight the impact on DP&L's financial condition if the Switching Tracker is not approved.





 $<sup>^{22}</sup>$  Note that there are slight differences between my exhibits and WP-12 due to rounding.



#### Q. How do you construct the pro forma financial statements?

A.

As shown in Exhibit WJC-11, I increased debt at the start of 2013 by \$278 million to \$1.182 billion so the debt-to-capital ratio is 50% at that time. As noted above, the 50% debt ratio is selected based on peer data (see Exhibits WJC-9 and WJC-10). To offset the increase in debt I reduced equity by a corresponding amount. On a consolidated basis, these changes offset each other at the DPL Inc. level so there is no net change. The increased debt for DP&L raises the annual interest costs to \$55 million from \$41 million under the base case, assuming a 5% interest rate on the incremental long term debt. This interest rate is consistent with DP&L's cost of debt as of the end of 2011 (see WP-12.2) and with market data on the yields for utilities with credit ratings similar to DP&L (see Appendix H).

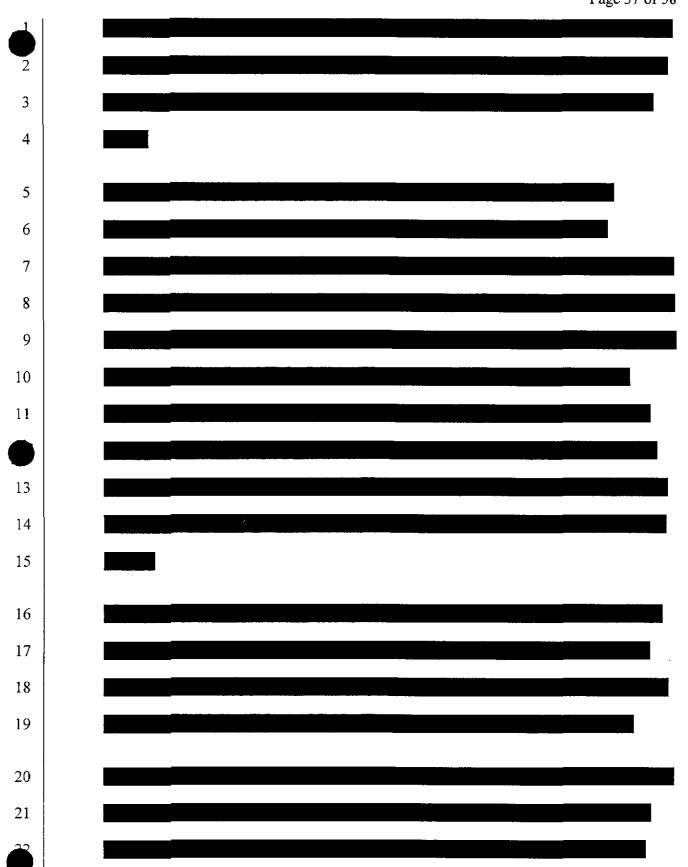
The pro forma adjustments cause the projected financial statements to differ from those filed by Company Witness Jackson.<sup>23</sup> In order to maintain internal consistency among the income statement, balance sheet and statement of cash flows in the pro forma projections, I linked these statements together. Specifically, I have modeled DP&L's dividend policy as follows. If there is adequate cash flow to pay the full dividend in the projections as filed by DP&L and still leave at least \$10 million in cash at year-end, I maintained that dividend payment. If payment of that dividend would leave the cash balance below \$10 million at year-end, I limited the dividend to preserve a \$10 million cash balance. In the extreme case where cash would fall below \$10 million even without

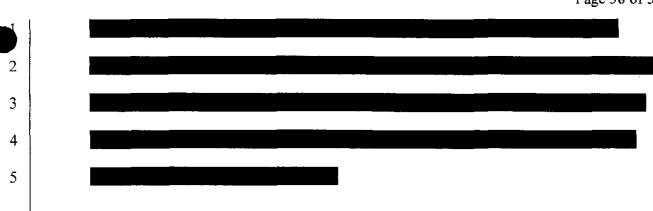
<sup>&</sup>lt;sup>23</sup> As my calculations require additional detail beyond what is included in WP-12, I rely on the underlying spreadsheet 'WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING with Detail.xlsx' provided to me on September 26, 2012.

maintain a \$10 million cash balance.<sup>24</sup> For consistency, I assumed DP&L pays income tax at a rate of 35.8 percent (rates from the projections filed by DP&L range from 35.7% to 36.2%). 

any dividend payment, I have assumed DP&L takes on additional short-term debt to

<sup>&</sup>lt;sup>24</sup> I assume that the interest rate on that short term debt is 1.18%, the yield on an index of one year, BBB- rated U.S. utilities from Bloomberg (C0401Y) as 9/27/12.





### Q. What alternative scenarios did you examine?

A.

I examined three alternatives to the Base Case to determine how sensitive the results would be, should some factor or factors differ from that of the case as filed. First, I examined the impact of additional customer switching. The case as filed did not attempt to project any customers switching beyond the levels realized as of August 2012. There is a risk that customers will continue to shop subsequent to that date and thus DP&L will lose additional retail generation sales. This scenario provides a quantitative assessment of the impact of that switching if the Switching Tracker is not approved. Second, I examined the impact of rejecting the proposed SSR under the Base Case assumption of no additional switching beyond the August 2012 level. Third, I considered a scenario that combines SSR rejection and increased customer switching (absent the Switching Tracker).

### Q. What information did you rely upon to develop these scenarios?

2

3

4

5

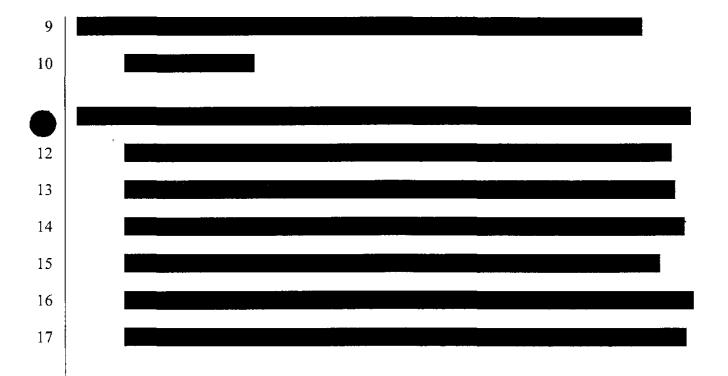
6

7

8

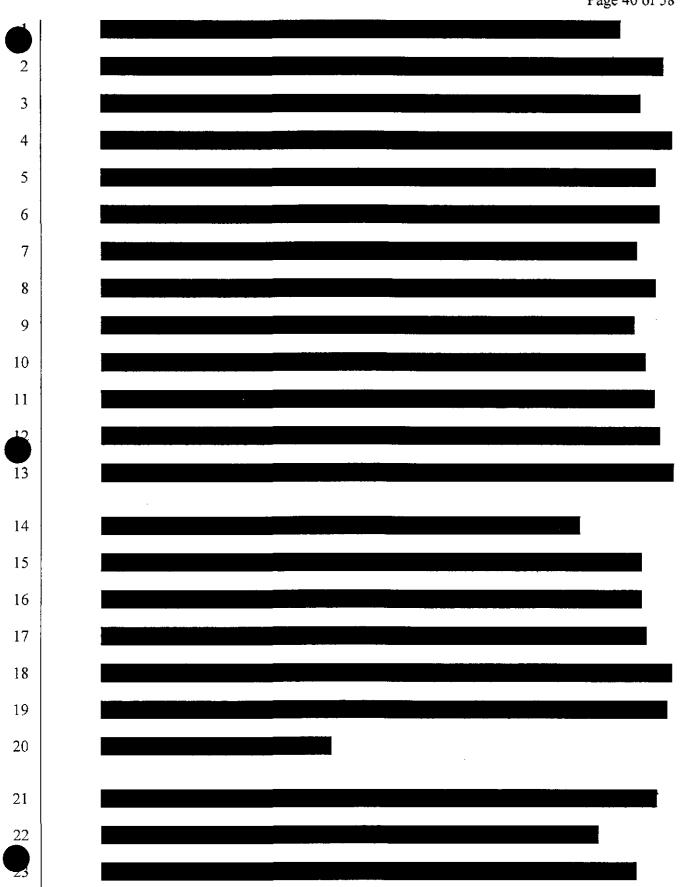
A.

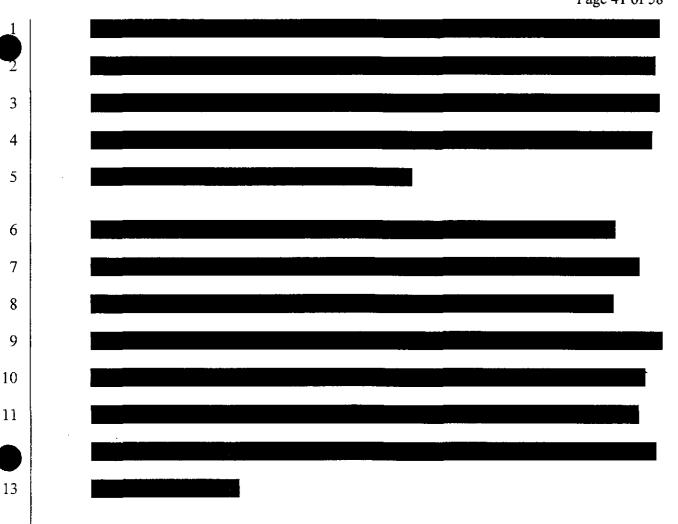
The Company provided projections of DP&L's financial statements factoring in projected incremental switching but without the benefit of the proposed Switching Tracker. As noted above, this scenario assumes switching increases to of customers by 2013 and to almost by 2017, up from 62% as of August 30, 2012. Morningstar also considers variations in switching rate assumptions as a "key sensitivity" in their valuation analysis. I then made the same pro forma debt adjustments that I discussed previously so that all the alternative scenarios are consistent in that respect.



<sup>&</sup>lt;sup>25</sup> These projections were provided to me in an Excel spreadsheet 'WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING-incr switching DETAIL.xlsx' on September 26, 2012. With approval of the Switching Tracker, additional switching would result in financial projections similar to the Base Case, though there would be a timing difference as I understand true-up payments under the Switching Tracker would be made some time after the additional shopping occurred.

<sup>26</sup> Miller, T., "DPL Incorporated," Morningstar Equity Research, September 27, 2011, at 3.





Q. What effect would the Switching Tracker have if there is increased customer switching activity?

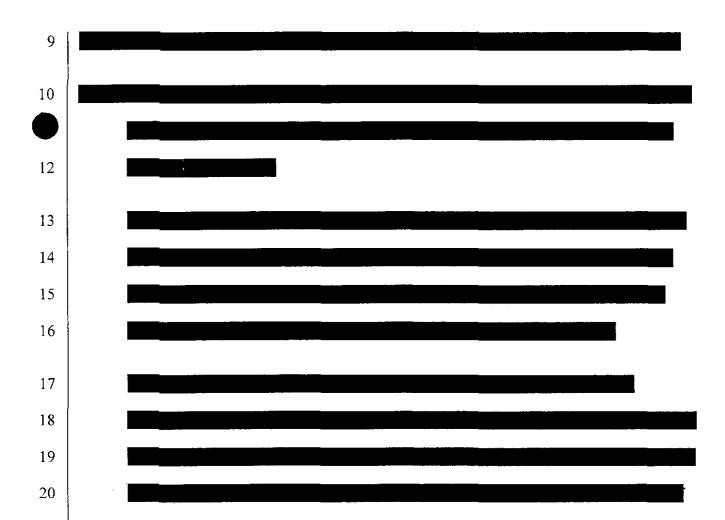
14

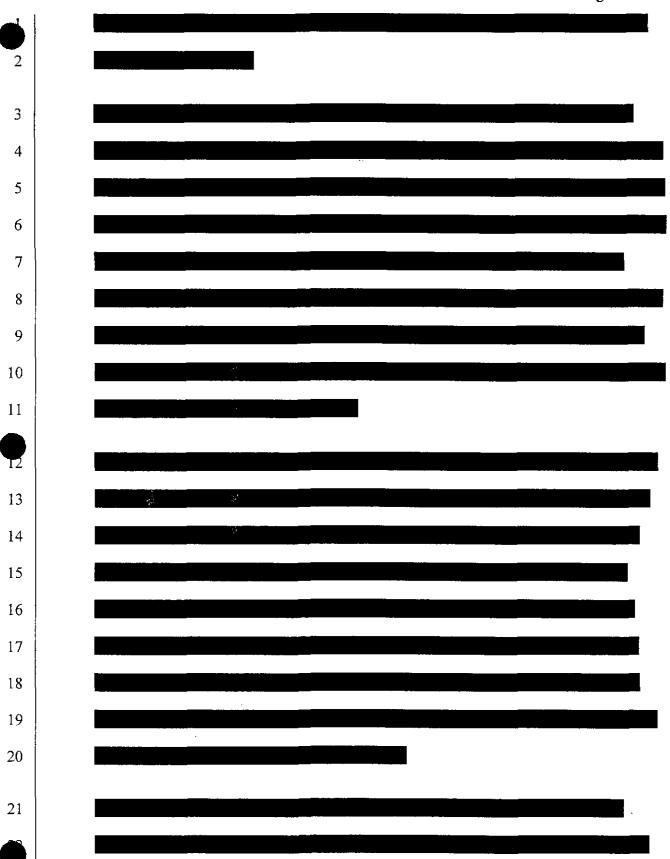
15

As proposed by the Company, the Switching Tracker would moderate, but not completely eliminate, the negative effect of increased customer switching. There would still be a significant negative impact in 2013 since the Switching Tracker would not be implemented until January 2014. In 2014 and following years, the Switching Tracker would provide additional revenue to partially offset that lost to increased switching. The financial results would thus be closer to those described under the Base Case scenario

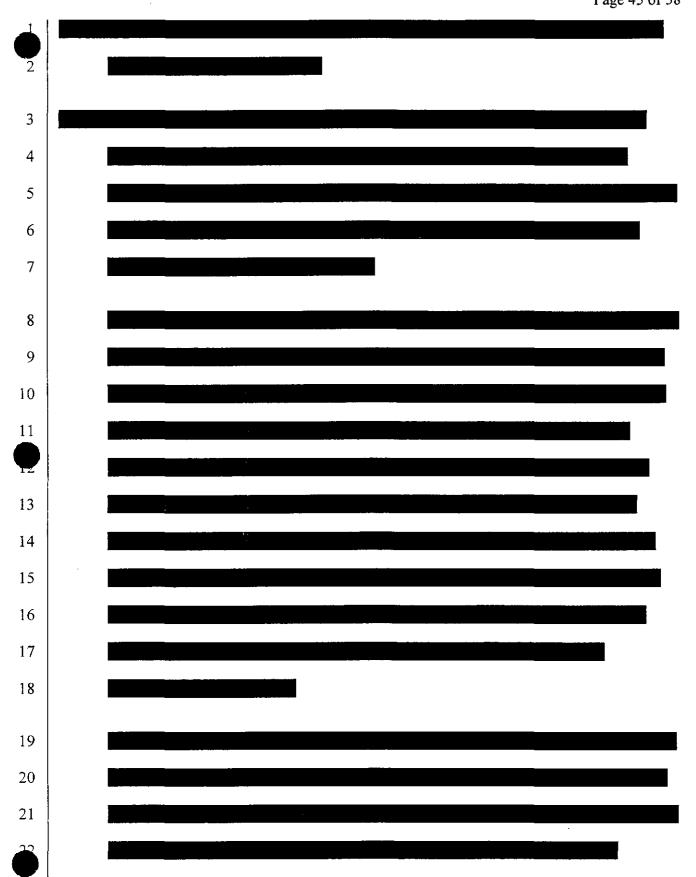
previously. There would still be deterioration in the Company's financial position over time, but the greatest impact would occur in 2016 and 2017.

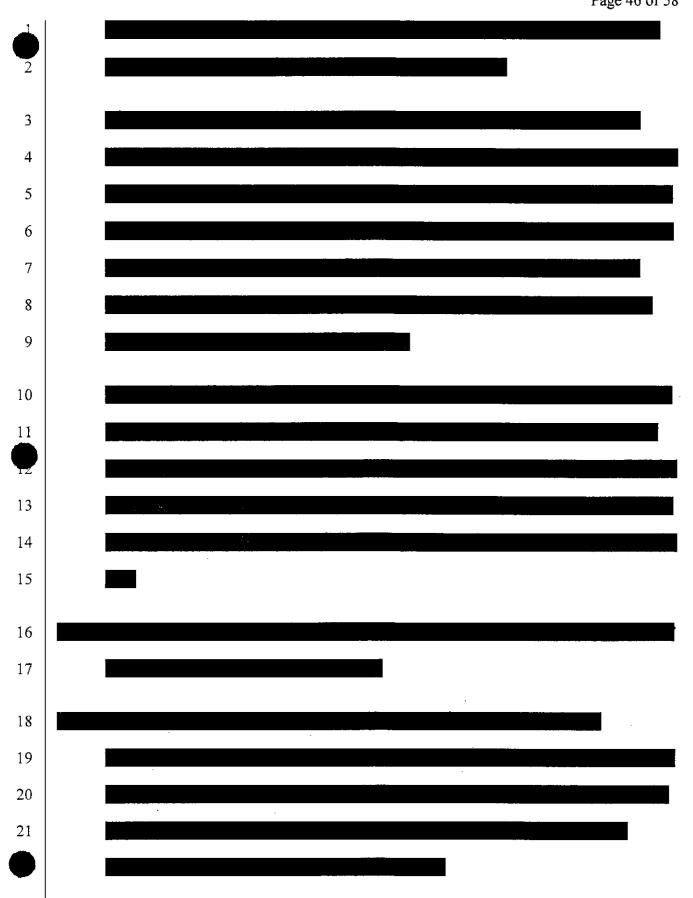
- Q. Does the No Switching Tracker scenario provide insight into the financial impact of faster transition to competitive bidding?
- Yes. From a financial perspective, customer switching absent the Switching Tracker
  carries many of the same implications as a faster transition to 100% competitive bidding.
  In either case, DP&L is likely to receive lower prices per unit for its retail volume and
  overall lower sales volumes.

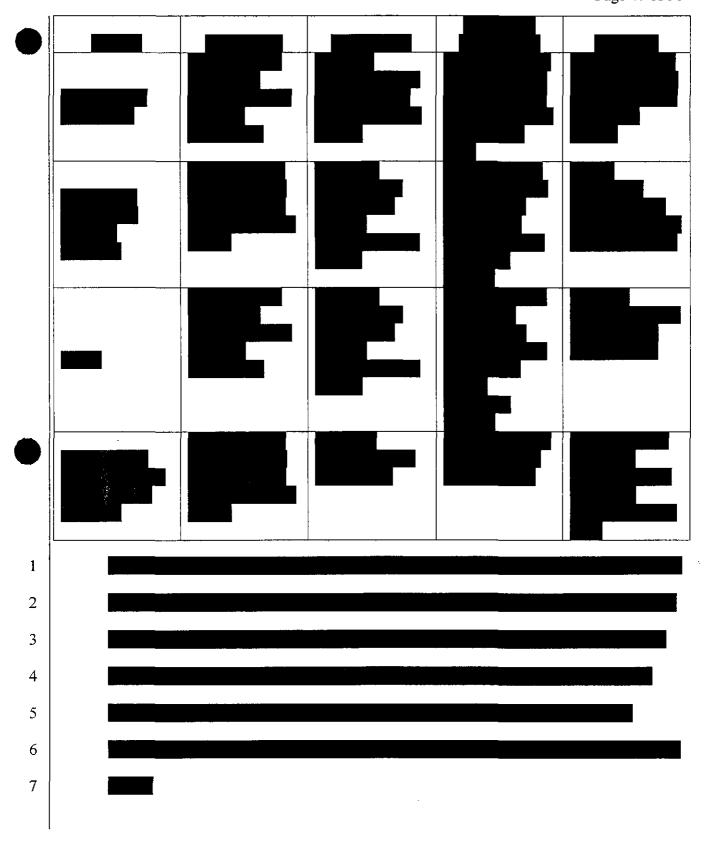


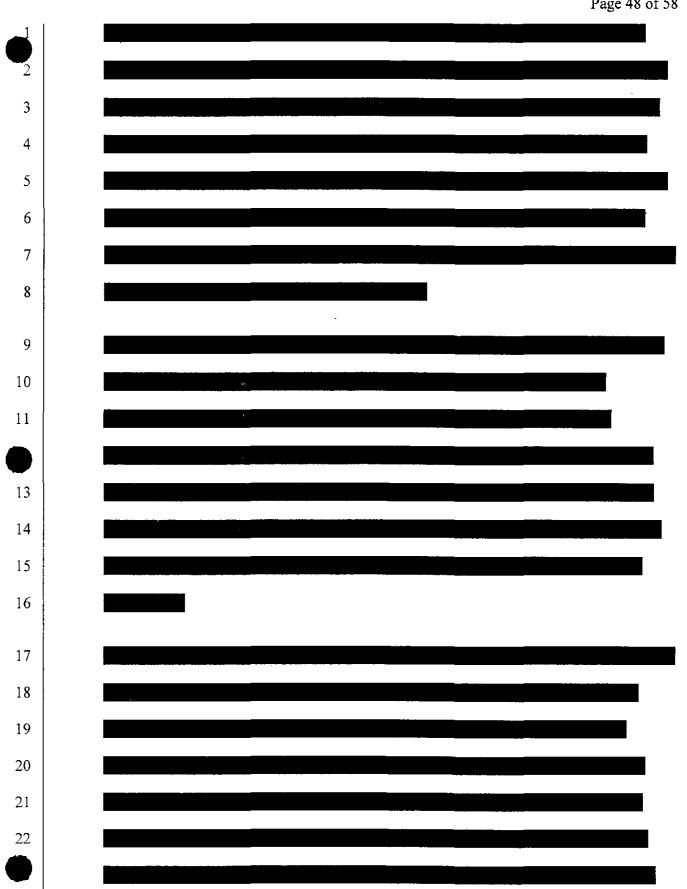


2		
3		
4	Q.	Are there any side effects to eliminating the SSR?
5	A.	It is possible that reduced electricity rates due to the SSR removal could encourage a
6		marginal increase in electricity usage by customers. Any such increase in electricity
7		demand would moderate the impact of the lower rates on DP&L's revenues. Academic
8		research on the price elasticity of demand for electricity indicates that each percent
9		decrease in price would lead to an increase in unit demand of 0.4% or less.
10		
11		
12		
13		
14		
15		
16		
17		Thus, while reduced rates due to the removal of the SSR may increase
18		retail sales volume relative to the Base Case, the small magnitude of the potential net
19		impact of this side effect on revenue or profit does not affect my conclusions.









2		
3	Q.	In your opinion, is the rate relief specified under the Company's proposal necessary
4		to maintain the financial integrity of the Company?
5	A.	Yes. As shown above, the SSR is important to maintain DP&L's financial integrity ever
6		if it does not experience additional switching (or if it does experience switching but the
7		Switching Tracker is approved). The Switching Tracker is also critical to reduce the risk
8		that increased customer switching would cause a deterioration in DP&L's financial
9		integrity.
10		
12		
13		1-
14		
15		
16		
17		
- '		

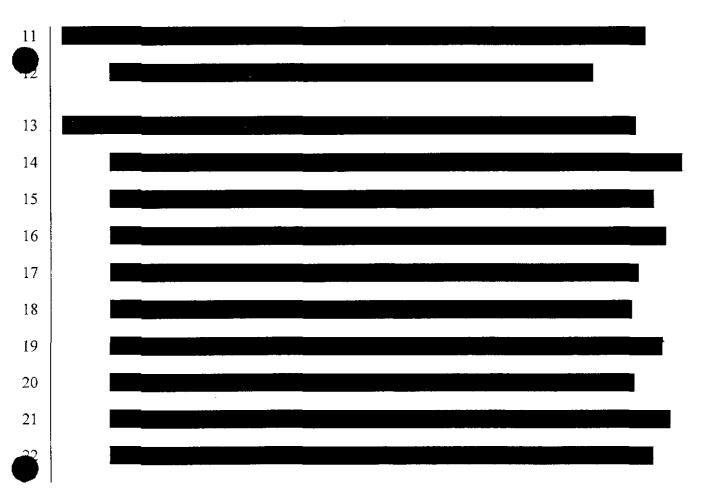
## VI. POTENTIAL CONSEQUENCES OF CHANGES TO DP&L'S **CREDIT RATING** 3 Can you provide a brief discussion on why credit ratings are important for Q. 4 regulated utilities and their customers? 5 A. Yes. Credit ratings are an important source of information for many market participants. 6 An adverse change in credit ratings can result in a downward revision of investors' 7 perceptions about the stock and bonds of the company. Q. 8 Do ratings have an impact on the interest rates that a utility must pay on its debt? 9 A. Yes. Credit ratings have a significant impact on the costs of borrowing. While the absolute interest rates that utilities pay vary over time, as with any other borrower, there 10 is a close, inverse relationship between the company's credit rating and the cost of 11 borrowing. The higher the rating, the lower the cost of borrowing, and the lower the 13 credit rating, the higher the cost of borrowing (see Appendix H). 14 15 16 17 18 19

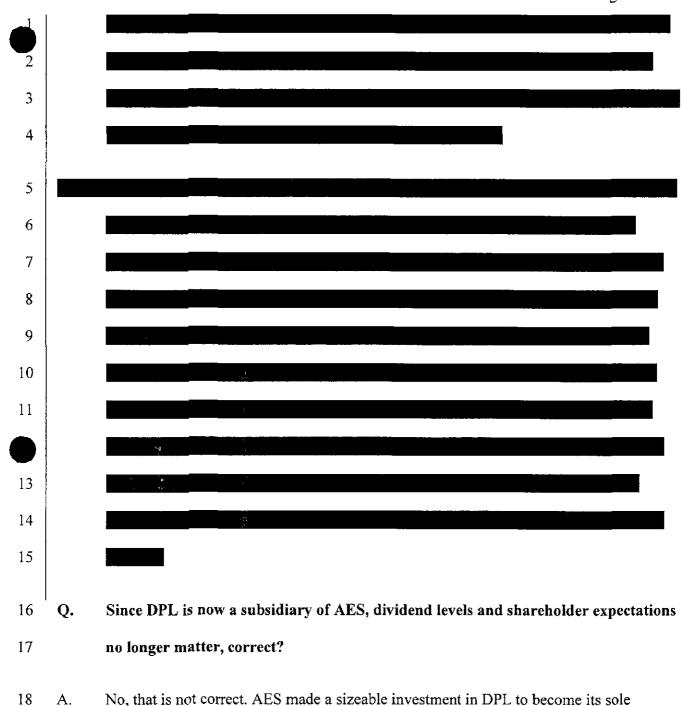
Q. Apart from the interest rate, do credit ratings affect a utility's access to the capital market?

A.

Yes. Many investors have established limitations for their investments and are precluded from investing or can invest only relatively modest amounts in lower-rated securities.

The most severe distinction is that between investment and speculative grade securities, and that is precisely the threshold DP&L is at currently. Many institutions will not even consider investing in speculative grade securities – those rated BB+ and below. That restriction applies to medium- and longer-term borrowing. In the commercial paper market, even entities with long term ratings in the BBB or BBB- categories cannot effectively borrow, regardless of the interest rates offered.





A. No, that is not correct. AES made a sizeable investment in DPL to become its sole shareholder, and looks for and is entitled to a reasonable return on its investment just like any other shareholder in any other entity. If a parent company does not feel it will earn a

19

20

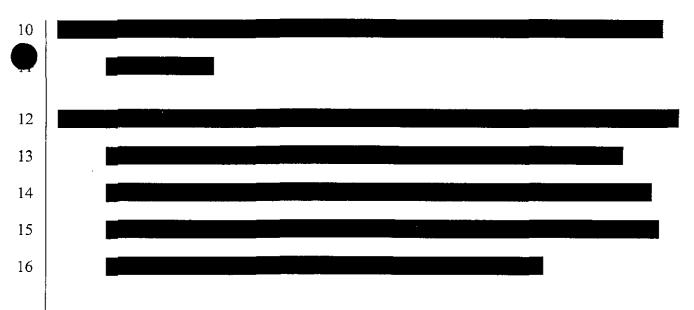
<sup>&</sup>lt;sup>27</sup> Fitch Ratings, "U.S. Utilities: Insatiable Thirst for Financing," September 2012, at 4.

18

reasonable return on its investment, it will be unwilling to make additional capital contributions that may be needed to fund capital expenditures.

- Q. Although the rating agencies rate a utility's debt, do their actions have significance
   for equity investors?
- Yes. A reduced credit rating is an indication that DP&L may not be able to meet its debts as they come due. Firms in such situations have trouble raising equity capital because the new investors are rightly concerned that the money they invest will accrue to the bondholders' benefit.

## 9 VII. OTHER



- Q. Is the rate of return still an important factor to consider in the current rate hearing?
- 19 A. Yes. From the Company's or an investor's perspective, the rate of return remains a key
  20 element in determining the company's financial integrity, along with and in the context of
  many other factors. Being able to achieve an adequate ROE is critical to the Company's

ability to continue to attract capital from outside lenders as well as to provide a reasonable return to the Company's equity investors.

However the focus has changed over time. Historically many utilities and regulators concentrated on determining a specific rate of return for the company and rates were set which could virtually guarantee the company that specified rate of return. The introduction of competition has dramatically changed that situation and utilities cannot be guaranteed a specific rate of return. Nevertheless, the introduction of increased competition must not prevent the utility from having the opportunity to earn an adequate rate of return. To set rates at such levels and in such a way as to make it impossible for the utility to have an opportunity to earn a reasonable rate of return would be economically confiscatory and precluded under the Ohio Constitution and under well-established legal precedents dating back to the *Bluefield* and *Hope* decisions.<sup>28</sup>

Q. How can rates be set to provide a utility with the opportunity to earn a reasonable rate of return without providing such a guaranteed return?

A. This can best be accomplished by focusing on two elements – establishing a range of reasonable rates of return and then concentration on the revenue side of the equation.

This represents a change from the traditional cost-plus orientation under which operating and financing costs were determined and a ROE, calculated by applying a single, specified rate, was added on to determine a total revenue requirement. This total revenue requirement was then allocated to capacity and energy to determine the rates.

<sup>&</sup>lt;sup>28</sup> Bluefield Water Works and Improvement Company v. Public Service Commission of the State of West Virginia (262 U.S. 679); Federal Power Commission *et. al.* v. Hope Natural Gas Company (320 U.S. 591).

•	1

4

6

8

9

10

11

13

14

15

16

17

18

19

A.

A.

Rather than selecting a single value for the ROE, the Commission can indicate a range of possible rates of return which can be viewed as reasonable given current economic and market conditions, an approach the Commission employed in its recent Ohio Power Company decision.<sup>29</sup>

5 If the utility can gen

If the utility can generate reasonable revenues then the burden is placed on the utility to control its costs in order to generate a reasonable rate of return.

## 7 Q. How should the reasonable range of the ROE be set for DP&L?

The three primary methods for determining reasonable ROE levels remain the same as in the past – looking at market comparables, the discounted cash flow (DCF) approach and the Capital Asset Pricing Model (CAPM).<sup>30</sup> In this setting, I believe that among these methods the comparable method is the most resilient and least prone to "assumption" error. While theoretically robust and in wide use, both the DCF and CAPM methods are very reliant on critical assumptions and even relatively small changes in those assumptions can result in substantial changes in the resultant ROE calculation.

Q. In developing a comparable analysis should the other companies examined be limited to other electric utilities?

No, not necessarily. Historically, under a protective regulatory environment utilities were considered something of a special class of companies. Because they were subject to less competition and realized a more stable rate of return over time, investors treated utilities

<sup>&</sup>lt;sup>29</sup> Opinion and Order in the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan. Case No. 11-346-EL-SSO *et. al.*, at 33.

<sup>&</sup>lt;sup>30</sup> David Parcell, *The Cost of Capital - A Practitioner's Guide*, Society of Utility and Regulatory Financial Analysts, 2010.

	<del>-</del>
1	differently than other companies in more competitive sectors. But as utilities have
	become subject to more competition, utilities should be looked at more as other industrial
3	companies, subject to many of the same risks and uncertainties. If utilities are subject to
4	a greater level of competition and hence greater uncertainty and risk, they should have
5	the opportunity to earn a higher rate of return than in the past to compensate investors for
6	this added degree of uncertainty.

9

10

11

13

14

15

16

17

18

19

20

21

A.

A.

#### 7 Q. What criteria should be used for selecting comparable companies?

Comparisons are always easiest among companies within the same industrial sector and subject to similar degrees of risk, as reflected in the credit ratings. While investors will certainly look across the board to balance the various elements that enter into an investment decision and not limit themselves to one single sector, if we're able to identify a reasonably large group of similarly-situated companies, the need for adjustments is reduced.

# Q. Have you identified a group of electric utilities that represent a reasonable basis for comparison?

Yes. I have identified a group of other utilities with a similar risk profile to that of DP&L. These represent companies operating in various parts of the U.S. and vary in size, but overall I believe that they form a reasonable basis for comparison. The sample of companies selected is presented in Exhibit WJC-12.A.

For each of the companies I collected information on their reported net income for the years 2009, 2010 and 2011 and their shareholder's equity for the years 2008 through 2011. I then calculated the ROE based on the company's average equity for each of the

•

A.

three years. I also collected projected ROEs from ValueLine for the years 2012, 2013 and 2014-2016 to the extent that it was available for these companies

#### Q. What were the rates of return for companies which you consider comparable?

The historical ROE's for the entire group of companies identified in Exhibit WJC-12.A are reported below. I believe the most extreme values, either high or low, do not contribute meaningfully to identifying a reasonable range of possible outcomes. By focusing on the 25<sup>th</sup> percentile and 75<sup>th</sup> percentile figures the extreme values are eliminated. While these vary from year to year, the 3 year average captures a reasonable range for the industry. Thus, a range for ROE of 7.7% and 10.4% reflects a rate of return that investors could reasonably expect to receive from similarly situated utility companies and is the one that I recommend to the Commission for consideration.

Historical Return on Average Equity for Selected Utilities

<u> </u>	2009	2010	2011	Average
Minimum	5.1%	4.9%	0.2%	3.4%
25th Percentile	7.4%	8.2%	7.5%	7.7%
Median	8.7%	9.4%	8.9%	9.0%
Average	9.4%	10.0%	8.8%	9.4%
75 <sup>th</sup> Percentile	9.9%	10.9%	10.3%	10.4%
Maximum	20.4%	17.4%	14.4%	17.4%

For firms with available data, I also examined projected ROEs from ValueLine for the years 2012, 2013 and an average rate for 2015-2017. The interquartile range of 8.3% to 10.0% is narrower than the historical data above. The median of 9.3% is very close to the median of 9.0% from the historical data. Given the smaller sample of firms with available projected ROE, I rely more heavily on the historical data for my recommended range of ROEs.

Projected Return on Average Equity for Selected Utilities

	2012	2013	2015-2017	Average
Minimum	7.5%	8.0%	8.5%	8.0%
25th Percentile	8.0%	8.0%	9.0%	8.3%
Median	9.0%	9.5%	9.5%	9.3%
Mean	9.2%	9.5%	10.2%	9.6%
75 <sup>th</sup> Percentile	10.0%	9.5%	10.5%	10.0%
Maximum	13.0%	13.0%	14.0%	13.3%

- 1 Q. What other review did you undertake to assure yourself that this constituted a
- 2 reasonable range for the ROE?
- A. I also examined ROE's for utilities rated BBB- (or Baa3) from each of the three major rating agencies for the same three year time period 2009 through 2011. These results, reported in Exhibit WJC-12.B and summarized in the table below, indicate that a range of 7.7% to 10.4% appears reasonable.

Historical Interquartile Return on Average Equity for BBB- Rated Utilities

	Ģ			
Agency	2009	2010	2011	Average
25th Percentile		<del></del>		
Fitch Ratings	7.0%	7.5%	8.5%	7.7%
Moody's Investors Service (Baa3)	7.1%	7.2%	5.8%	6.7%
Standard & Poor's	7.3%	9.6%	7.5%	8.1%
75 <sup>th</sup> Percentile				
Fitch Ratings	9.7%	9.7%	9.8%	9.7%
Moody's Investors Service (Baa3)	9.9%	10.7%	9.7%	10.1%
Standard & Poor's	8.7%	14.6%	10.4%	11.2%

## 7 VIII. CONCLUSION

- 8 Q. Does this conclude your direct testimony?
- 9 A. Yes, it does.

#### APPENDIX A

## WILLIAM J. CHAMBERS, Ph.D. Curriculum Vitae

3 Albion Place

Charlestown, Massachusetts 02129

Home: 617-242-2046 Summer: 705-286-1742

Mobile: 857-540-9556 E-mail: wchamber@bu.edu

#### **Independent Consultant**

September 2005 - Present

Typical assignments include:

Development and delivery of expert testimony regarding creditworthiness, credit ratings, and the impact of credit ratings on the financial viability of companies, their access to capital markets and cost of capital

Development and improvement of credit evaluation models, templates and scorecards

Evaluation and validation of internal credit evaluation systems

Review of credit evaluations of individual companies

Review or simulation of rating agency ratings

Assessment of economic and capital models

Instruction at professional courses concerning internal credit evaluation systems

#### **Boston University**

September 2005 - Present

Metropolitan College Department of Administrative Sciences Associate Professor

Responsible for teaching graduate and undergraduate courses in corporate finance, investment analysis, portfolio management, multinational finance, international investments and capital markets.

Coordinate on-line instructional program for banking & financial services, project management, international marketing, insurance, business continuity and human resources management.

Standard & Poor's, New York, New York

Consultant to Risk Solutions

September 2005 - September 2006

Managing Director

Risk Solutions Americas Practice Leader

Global Head of Content Development & Quality Assurance

#### Testimony of William J. Chambers

Appendix Page 2 of 13

Responsible for Americas operations of newly formed group covering consulting, credit training, credit modeling, default& recovery information, etc. Coordinated work with other departments of S&P including Structured Finance and Corporate & Government Ratings. A major portion of the work was with banks and other financial institutions, improving their internal rating systems and compliance with Basel II international capital standards.

Developed and co-taught courses on internal credit scoring systems, credit scoring, loss given default and portfolio management.

Oversaw research on default, credit transition, loss given default

Oversaw development of credit risk models

## Managing Director, Corporate Ratings Strategic Planning, Product Development & Marketing

December 1996-December 2000

Headed team responsible for Corporate Ratings Group strategic planning, product research, development and launch and marketing.

Oversaw development of Bank Loan Ratings and Rating Evaluation Service, which provides advice regarding the impact of identified strategic actions such as acquisitions or recapitalization on firm's creditworthiness.

Oversaw acquisition of Portfolio Management Data and Canadian Bond Rating Service Oversaw development of credit risk models and creation of loss given default database

#### Managing Director, International Corporate Ratings

January 1992-December 1996

Responsible for all non-US corporate ratings including developed and emerging markets, including first corporate ratings assigned in Latin America, China and Southeast Asia.

Developed criteria for evaluating corporate entities, parent-subsidiary relationships, sovereign risk impact on corporate creditworthiness, and structured financings.

#### Director, Standard & Poor's Australia

January 1990-December 1991

Oversaw acquisition of Australian Ratings in Melbourne and its integration into the S&P network Reviewed all existing debt ratings and coordinated conversion to international rating scale

#### Director, International Public Sector Ratings

September 1983-December 1989

Responsible for rating of sovereign, municipal and government-owned institutions in Canada, Australia, New Zealand, Sweden and Germany. Responsible for analysis of multi-lateral lending institutions, including the International Bank for Reconstruction & Development (World Bank, IFC), Inter-American Development Bank & Asian Development Bank.

Participated in development of criteria and first assignment of ratings to international structured finance, bond insured transactions, sovereign risk effect on private sector borrowers (sovereign ceiling) and preferred creditor status of multi-lateral lenders.

Researched and developed office plans for Canada and Australia

#### Testimony of William J. Chambers

Appendix Page 3 of 13

## G.M. Stamm Economic Research Associates, Toronto, Ontario

Vice President and Director of Research

March 1979-September 1983

Oversaw all economic and financial research for consultant specializing in real estate and public finance sectors. Developed background analysis, expert testimony and support for hearings before the Ontario Municipal Board and Ontario Energy Board, regarding impact of energy pricing on corporate customers, impact of real estate development on municipalities and existing businesses, etc.

## Regional Municipality of Durham, Whitby, Ontario Senior Economist

March 1976-March 1979

Conducted a wide variety of financial and economic studies for the region concerning fiscal capacity and impact of development, capital works financing, budgets, self insurance, etc.

## Newfields Development Corp., Dayton, Ohio Director of Financial Planning

June 1974-March 1976

Analyzed all financial aspects of large, new town development Taught economics as an Adjunct at Miami University of Ohio

#### **Education:**

#### Columbia University, New York, New York

Department of Economics

M.A., M. Phil, Ph.D. June 1975

Fields of Specialization: Urban Economics, Public Finance, Monetary Theory,

Microeconomic Theory

Dissertation: The Optimal Allocation of Land to Transportation in Urban Areas

William Vickrey, Advisor

#### College of Wooster, Wooster, Ohio

Major in Economics and History

B.A., June 1968

#### Summary of Relevant Expert Witness Experience

1980-1983 Testimony before the Ontario Energy Board on behalf of the Association of Major Power Consumers of Ontario (AMPCO) for Ontario Hydro's annual rate hearings.

2009 Rohm & Haas vs. The Dow Chemical Company

2009 General Electric Capital Canada Inc. vs. Her Majesty The Queen

2009 In The Matter Of The Current And Future Financial Condition Of Baltimore Gas

And Electric Company Before The Public Service Commission Of Maryland

2011 El Fassi Realty Corp. v. 31 West 34th Street LLC

2011 NA General Partnership & Subsidiaries, Iberdrola Renewables Holdings, Inc. & Subsidiaries, Successor in Interest to NA General Partnership & Subsidiaries v.

Commissioner of Internal Revenue, Docket No. 525-10

### APPENDIX B

## **Agency Credit Rating Scale**

S&P Rating /	S&P	Moody's	Fitch
Moody's	Description	Description	Description
Rating /		•	•
Fitch Rating			
Investment	Grade Rating Categories		
AAA	An obligation rated 'AAA' has the highest rating	Obligations rated Aaa are	AAA' ratings denote the lowest
Aaa	assigned by Standard & Poor's. The obligor's	judged to be of the highest	expectation of default risk. They are
AAA	capacity to meet its financial commitment on the obligation is extremely strong.	quality, with minimal credit risk.	assigned only in cases of exceptionally strong capacity for payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.
AA	An obligation rated 'AA' differs from the highest-	Obligations rated Aa are	'AA' ratings denote expectations of very
Aa	rated obligations only to a small degree. The	judged to be of high quality	low default risk. They indicate very strong
AA	obligor's capacity to meet its financial	and	capacity for payment of
	commitment on the obligation is very strong.	are subject to very low credit risk.	financial commitments. This capacity is not significantly vulnerable to foreseeable events.
A	An obligation rated 'A' is somewhat more	Obligations rated A are	'A' ratings denote expectations of low
A	susceptible to the adverse effects of changes in	considered upper-medium	default risk. The capacity for payment of
A	circumstances and economic conditions than	grade and are subject to low credit	financial commitments is considered
	obligations in higher-rated categories. However, the obligor's capacity to meet its financial	risk.	strong. This capacity may, nevertheless, be
	commitment on the obligation is still strong.		more vulnerable to adverse business or
			economic conditions than is the case for higher ratings.
BBB	An obligation rated 'BBB' exhibits adequate	Obligations rated Baa are	'BBB' ratings indicate that expectations of
Baa BBB	protection parameters. However, adverse economic conditions or changing circumstances	subject to moderate credit risk.	default risk are currently low. The capacity for payment of financial commitments is
Dao	are more likely to lead to a weakened capacity of	They are considered medium-	Considered adequate but adverse
	the obligor to meet its financial commitment on	grade and as such may	business or economic conditions are more
	the obligation.	possess certain speculative characteristics.	likely to impair this capacity.
Non-Investr	ment Grade, Sub-Investment Grad	<u> </u>	Rating Categories
BB	An obligation rated 'BB' is less vulnerable to	Obligations rated Ba are	'BB' ratings indicate an elevated
Ba	nonpayment than other speculative issues.	judged to have speculative	vulnerability to default risk, particularly in
BB	However, it faces major ongoing uncertainties or	elements and are subject to	the event of adverse changes in
	exposure to adverse business, financial, or	substantial credit risk.	business or economic conditions over
	economic conditions which could lead to the	1	time; however, business or financial
	obligor's inadequate capacity to meet its financial commitment on the obligation.	}	flexibility exists which supports the servicing of financial commitments.
В	An obligation rated 'B' is more vulnerable to	Obligations rated B are	'8' ratings indicate that material default
В	nonpayment than obligations rated 'BB', but the	considered speculative and	risk is present, but a limited margin of
В	obligor currently has the capacity to meet its	are subject to high credit risk.	safety remains. Financial commitments
	financial commitment on the obligation. Adverse		are currently being met; however,
	business, financial, or economic conditions will likely impair the obligor's capacity or willingness to		capacity for continued payment is vulnerable to deterioration in the
	1		
	meet its financial commitment on the obligation.		1 003thess and economic environment.
ccc	An obligation rated 'CCC' is currently vulnerable to	Obligations rated Caa are	Default is a real possibility.
Caa	An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable	judged to be of poor standing	
	An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business,	judged to be of poor standing and are subject to very high	
Caa	An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor	judged to be of poor standing	
Caa	An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the	judged to be of poor standing and are subject to very high	
Caa	An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor	judged to be of poor standing and are subject to very high	
Саа	An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business,	judged to be of poor standing and are subject to very high	
Caa	An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.	judged to be of poor standing and are subject to very high credit risk.	Default is a real possibility.
Cca	An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.  An obligation rated 'CC' is currently highly	judged to be of poor standing and are subject to very high credit risk.  Obligations rated Ca are	
Caa	An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.	judged to be of poor standing and are subject to very high credit risk.	Default is a real possibility.

## Testimony of William J. Chambers

Appendix Page 5 of 13

		recovery of principal and interest.	
c c	A 'C' rating is assigned to obligations that are currently highly vulnerable to nonpayment, obligations that have payment arrearages allowed by the terms of the documents, or obligations of an issuer that is the subject of a bankruptcy petition or similar action which have not experienced a payment default. Among others, the 'C' rating may be assigned to subordinated debt, preferred stock or other obligations on which cash payments have been suspended in accordance with the instrument's terms.	Obligations rated C are the lowest rated class of bonds and are typically in default, with little prospect for recovery of principal or interest.	Default is imminent or inevitable, or the issuer is in standstill. Conditions that are indicative of a 'C' category rating for an issuer include:  — the issuer has entered into a grace or cure period following non-payment of a material financial obligation;  — the issuer has entered into a temporary negotiated waiver or standstill agreement following a payment default on a material financial obligation; and  — Fitch Ratings otherwise believes a condition of 'RD' or 'D' to be imminent or inevitable, including through the formal announcement of a coercive debt exchange.
D n.a. D	An obligation rated 'D' is in payment default. The 'D' rating category is used when payments on an obligation are not made on the date due even if the applicable grace period has not expired, unless Standard & Poor's believes that such payments will be made during such grace period. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action if payments on an obligation are jeopardized.	Not Applicable	'D' ratings indicate an issuer that in Fitch Ratings' opinion has entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedure, or which has otherwise ceased business

#### Notes

Sources: Standard & Poor's, "Standard & Poor's Ratings Definitions," December 1, 2008; Moody's Investors Service, "Moody's Ratings Symbols and Definitions," June, 2008; Fitch Ratings, "Definitions of Ratings and Other Scales," March, 2009.

- [1] S&P ratings and definitions are for long-term issues. The S&P ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.
- [2] Moody's ratings and definitions are for long-term corporate obligations. "Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the
- obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category."
- [3] Fitch Ratings are long term issuer ratings. The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories. Such suffixes are not added to the 'AAA' Long-term rating category, to categories below 'CCC', or to Long-Term IDR categories below 'B

## Testimony of William J. Chambers Appendix Page 6 of 13

### APPENDIX C

Sample Rating Agency Criteria: S&P



## **RATINGS DIRECT®**

November 26, 2008

### Criteria | Corporates | Utilities:

## Key Credit Factors: Business And Financial Risks In The Investor-Owned Utilities Industry

#### Primary Credit Analyst:

Todd A Shipman, CFA, New York (1) 212-438-7676; todd\_shipman@standardandpoors.com

#### Table Of Contents

Relationship Between Business And Financial Risks

Part 1-Business Risk Analysis

Part 2—Financial Risk Analysis

### Criteria | Corporates | Utilities:

## Key Credit Factors: Business And Financial Risks In The Investor-Owned Utilities Industry

(Editor's Note: Table 1 in this article is no longer current. It has been superseded by the table found in "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," published May 27, 2009, on RatingsDirect.)

Standard & Poor's Ratings Services' analytic framework for companies in all sectors, including investor-owned utilities, is divided into two major segments: The first part is the fundamental business risk analysis. This step forms the basis and provides the industry and business contexts for the second segment of the analysis, an in-depth financial risk analysis of the company.

An integrated utility is often a part of a larger holding company structure that also owns other businesses, including unregulated power generation. This fact does not alter how we analyze the regulated utility, but it may affect the ultimate rating outcome because of any higher risk credit drag that the unregulated activities may have on the utility. Such considerations include the freedom and practice of management with respect to shifting cash resources among subsidiaries and the presence of ring-fencing mechanisms that may protect the utility.

#### Relationship Between Business And Financial Risks

Prior to discussing the specific risk factors we analyze within our framework, it is important to understand how we view the relationship between business and financial risks. Table 1 displays this relationship and its implications for a company's rating.

Table 1

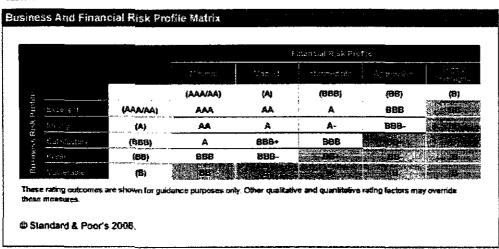
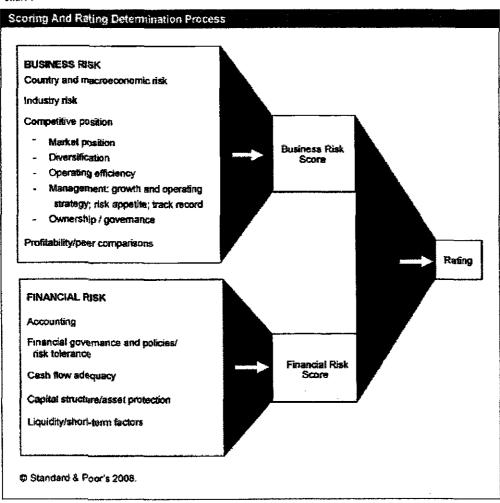


Chart 1 summarizes the ratings process.

Chart 1



### Part 1-Business Risk Analysis

Business risk is analyzed in four categories: country risk, industry risk, competitive position, and profitability. We determine a score for the overall business risk based on the scale shown in table 2.

Table 2

Business Risk Measures			
Description	Rating equivalent		
Excellent	AAA/AA		
Strong	A		
Satisfactory	88B		
Weak	BB		
Vuinerable	B/CCC		

#### www.standardandpoors.com/ratingsdirect

Analysis of business risk factors is supported by factual data, including statistics, but ultimately involves a fair amount of subjective judgment. Understanding business risk provides a context in which to judge financial risk, which covers analysis of cash flow generation, capitalization, and liquidity. In all cases, the analysis uses historical experience to make estimates of future performance and risk.

In the U.S., regulated utilities and holding companies that are utility-focused virtually always fall in the upper range (Excellent or Strong) of business risk profiles. The defining characteristics of most utilities—a legally defined service territory generally free of significant competition, the provision of an essential or near-essential service, and the presence of regulators that have an abiding interest in supporting a healthy utility financial profile—underpin the business risk profiles of the electric, gas, and water utilities.

1. Country risk and macroeconomic factors (economic, political, and social environments)

Country risk plays a critical role in determining all ratings on companies in a given national domicile.

Sovereign-related stress can have an overwhelming effect on company creditworthiness, both directly and indirectly.

Sovereign credit ratings suggest the general risk local entities face, but the ratings may not fully capture the risk applicable to the private sector. As a result, when rating a corporation, we look beyond the sovereign rating to evaluate the specific economic or country risks that may affect the entity's creditworthiness. Such risks pertain to the effect of government policies and other country risk factors on the obligor's business and financial environments, and an entity's ability to insulate itself from these risks.

### 2. Industry business and credit risk characteristics

In establishing a view of the degree of credit risk in a given industry for rating purposes, it is useful to consider how its risk profile compares to that of other industries. Although the industry risk characteristic categories are broadly similar across industries, the effect of these factors on credit risk can vary markedly among industries. Chart 2 illustrates how the effects of these credit-risk factors vary among some major industries. The key industry factors are scored as follows: High risk (H), medium/high risk (M/H), medium risk (M), low/medium risk (L/M), and low risk (L).

Chart 2

	Utilizies regulated	Competitive power	ට්ඩ් & gas ප්රමාන්ත්කාන	Autos	Airlines
ndustry dynamics and competitive environmen	nt				
Programs for the annual statement of the	M	₩.	Ħ	H	Ħ
	L	M/H	<del>} 1</del>	MH	MH
A fire the first transfer of the second	L	ì.	L.	H	L
	L	, * <b>L</b>	<b>₽</b>	Ħ	M
		h-	L	LIM	i.
	LIM	H	- 1 Min - 1	H	H
	M	j-6	Barrier Barrier	H	H
	輔	M/H	L Parties	L#M	P <b>A</b>
	<u>L</u>		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Н	<u> </u>
Growth and profitability Coown autopical		E SM OF	40	Milhe	≟# <b>/</b> I
and a property of the second o	No.	M/H	i de Model	1917 <i>i</i> ms MI73+6	29 <u>4</u> 1
	M	初/計	Haller - Marisa Par	H	14
Operating considerations and costs					
	L	L	L/M	L/M	LIM
	Set.	H	44	H	H
	M/H	H	н	Η	H
	٢	L	L.	H	Ł.
	H	7	Н	Н	H
	Н	<b>}</b> 4	H	F	L.
	M	an Mila	M	H	H
D. H. S. L. C. L. Balletine Breaker	L. Harris Barris Salari	L	Merchill	H	Н
Control of the Contro	10.94 11.22	L	L/M	H	MARI
and consected (unpartition) 1.5 1.5 (2) 1.5 (3)	H	L. L.	H 360mm	H	M/H L/M
Through Independent 1, 12 March 1997	L.		E L	H L	1
	i-i	H	i <del>-</del> H	,	M S
	M	нt	NE V	M.S.	. N
William consequences	N	H	H	M	Mi <b>⊢</b>
EVANO PER GALAKSON POR SONO EN SONO EN EN ESTADO	MJ∺	H	H	M/H	н
Firescal regree vasuaryosasiovical (c. 1.37 - 2.35	M.	<b>W/H</b>	L B		
CONCUMENTATION CONTRACTOR CONTRAC	L	L	L	H	LM
Capital and financing characteristics					
Carpen Pilitaniury	Н	Н	H	Н	Н
Borrolling reguleration	H	14	L/M	Ħ	H
	L/M	L/M	L/M	H	L.FR.T
Government, regulatory, and logal environmen			والمستوالية والمناطقة		
pelitikan perseguakan kanan kana Kanan kanan ka	Н	H	north Maria	(c) / (m)	Ħ
	H	H	H M		M/H
	<u> </u>	(Fil	San	dia sila	gradus de la companya

### Industry strengths:

- · Material barriers to entry because of government-granted franchises, despite deregulatory trends;
- Strategically important to national and regional economies; key pillar of the consumer and commercial economy;
- · Improving management focus industry-wide on operating efficiency in recent years; and
- Cross-border growth opportunities in Europe and industrializing emerging markets.

### Industry challenges/risks:

- Maturity, with a weak growth outlook in developed countries;
- · Highly politicized and burdensome regulatory (i.e., rate setting and investment recovery) process; and
- Risks of "legacy cost drag" as wholesale and retail markets move toward greater deregulation.

### Major global risk issues facing the utilities industry:

- Increased volatility in the regulatory environment and competitive landscape leading to greater uncertainty regarding adequacy of pricing and return on capital;
- Longer-term impact of, and ability to absorb, significant secular upturn in fuel costs, which is the industry's major operating expense;
- Ability to recover massive investment costs that will likely be necessary to replace aging industry infrastructure in a harsher cost and regulatory environment; and
- The debate over global warming will continue far beyond 2008. What the ultimate outcome will be is unclear, but growing legislation addressing carbon emissions and other greenhouse gases is probable in the near future.
   Utilities' ability to recover environmentally mandated costs in authorized rates and consumers' willingness to pay them could impact the industry's future credit strength.

### Industry business model and risk profile in transition

Regulated utilities are in many developed countries transitioning away from quasi-monopolies toward more open competitive environments.

The level of business and credit risk associated with the investor-owned regulated utilities has historically proven in most countries to be lower (risk) than for many other industries. This has been because of the existence of government policy and related regulation that created significant barriers to entry limiting competition, and regulatory rate setting designed to provide an opportunity to achieve a specific level of profitability. The credit quality of most vertically integrated utilities in developed countries has historically been, and remains, solidly investment grade. This, to reiterate, is primarily a function of the existence of protective regulation.

### The risks of, and rationale for, deregulation

The traditional protected and privileged utilities industry business model with its marked monopolistic characteristics is in many countries undergoing transition to a more competitive and open framework. This transition process, known as deregulation or liberalization, is weakening the business and credit risk profile of the industry. While the impact of these changes may prove positive in the longer term for more efficient industry players, it is important to bear in mind that economic history is littered with the vestiges of industries and enterprises that once flourished under the protection of government-created barriers and other protections. The shift is being driven by introduction in many countries of policies to encourage the entrance of new competitors and to reduce the traditional regulatory protections and privileges enjoyed by incumbents. Historically, the regulated investor-owned utilities were usually granted exclusive franchises. Because of the significant risks associated with the capital-intense nature of the utility investment, including massive sunk/fixed costs and long-term break-even horizons, governments in many countries created legal and regulatory frameworks that granted exclusivity to one operator in a given geographic area. To offset the monopolistic pricing power this exclusivity created, a system of heavy regulation was typically developed, which included the setting of pricing. The model often set pricing on a "cost-plus-basis", i.e., the margin over cost allowing for a perceived fair return to shareholders of investor-owned utilities. One major weakness of this system is that it created little incentive for utilities to efficiently manage costs. In recent years as many governments have adopted more liberal open market economic philosophies and related

policies focused on the creation of greater competition—in an effort to foster improved economic growth and pricing efficiency throughout the economy—the traditional utility models in many countries have come under increasing political scrutiny and pressure.

A major public policy and political risk, as well as a credit risk, associated with deregulation of protected industries, is that existing incumbents often experience significant challenges in readjusting their management strategies, cultures, and expense basis to be able to compete effectively in the new environment.

The turmoil and bankruptcies in the U.S. in the nonregulated power marketing and trading arena between 2000 and 2002 arose subsequent to a major government initiative to deregulate the wholesale market. These failures, as well as other high-profile problems arising from deregulation elsewhere in the world, have given governments pause as to the desirability of a headlong rush into deregulation. In the U.S., for example, there is currently little impetus to carry deregulation any further.

### Regulation and deregulation in the U.S.

While considerable attention has been focused on companies in states that deregulated in the late 1990s and the early part of this decade, and the related consequences of disaggregation and nonregulated generation, 27 states (plus four that formally reversed, suspended, or delayed restructuring) have retained the traditional regulated model. For utilities operating in those states, the quality of regulation and management loom considerably larger than markets, operations, and competitiveness in shaping overall financial performance. Policies and practices among state and federal regulatory bodies will be key credit determinants. Likewise, the quality of management, defined by its posture towards creditworthiness, strategic decisions, execution and consistency, and its ability to sustain a good working relationship with regulators, will be key. Importantly, however, it is virtually impossible to completely segregate each of these characteristics from the others; to some extent they are all interrelated.

### Fragmentation of original model emerges in the U.S.

- Traditional regulated, vertically integrated utilities (generation, transmission, and distribution);
- Transmission and distribution;
- · Diversified:
- Transmission; and
- Merchant generation.

We view a company that owns regulated generation, transmission, and distribution operations as positioned between companies with relatively low-risk transmission and distribution operations and companies with higher-risk diversified activities on the business profile spectrum. What typically distinguishes one vertically integrated utility's business profile score from another is the quality of regulation and management, which are the two leading drivers of credit quality.

### Deregulation in the U.S. creates a new volatile industry subsector

The birth of large-scale, nonregulated power generators created the opportunity—and the need—for companies to market and broker power. Power marketers, independent power producers, and unregulated subsidiaries of utility companies offer power-supply alternatives to other utilities in the wholesale market as well as to large industrial customers. Power marketing operations have been formed by energy companies (many with experience in marketing natural gas), utility subsidiaries, and independents. As with the gas industry, electric power marketers expected to develop an efficient market by straddling the gulf between electricity generators and their customers, who have become "free agents" in the newly competitive environment.



### Deregulation creates tiering of industry, business and credit risk profiles in Europe

The regional differences in market liberalization across Western Europe result in material variations in industry and business risk profiles for the utilities industry at the national level. The U.K. and Nordic markets, in particular, are substantially deregulated and open, and consequently present higher risks than other markets that are less open, including France and the Iberian market. Ratings therefore generally are lower in these more deregulated markets. The less-liberalized markets may face more regulatory risk going forward, particularly if efforts by the EU to advance the internal market by increasing the extent of market liberalization across the EU continue.

Legal action against companies that infringe on competition laws should be expected—particularly against those that move to prevent new entry and limit customer choice (for example, through the tying of markets and capacity hoarding) or collude with other incumbents to do so. The European Commission (EC) can fine companies that have violated antitrust laws up to 10% of their global annual turnover and, under certain conditions, impose structural remedies. Particular emphasis would be placed on increasing the effective unbundling of network and supply activities and on diminishing market concentration and barriers to entry.

The EC has publicly stated is intention to pursue, as a priority, abuses of the dominant position of vertically integrated companies (called vertical foreclosure). Behavioral remedies, such as energy release programs, are expected to be imposed by the EC for which such abuses, or collusion, are proved. The commission could also enforce structural measures when behavioral remedies are deemed insufficient.

### 3. Company competitive position and keys to competitive success

In analyzing a company's competitive position, we consider the following:

- · Regulation;
- Markets;
- · Diversification;
- · Operations;
- · Management, including growth strategy;
- Governance; and
- Profitability.

We are most concerned about how these elements contribute individually and in aggregate to the predictability and sustainability of financial performance, particularly cash flow generation relative to fixed obligations.

### Regulation.

Critical success factors include:

- Consistency and predictability of decisions;
- · Support for recovery of fuel and investment costs;
- History of timely and consistent rate treatment, permitting satisfactory profit margins and timely return on investment; and
- · Support for a reasonable cash return on investment.

Regulation is the most critical aspect that underlies regulated integrated utilities' creditworthiness. Regulatory decisions can profoundly affect financial performance. Our assessment of the regulatory environments in which a utility operates is guided by certain principles, most prominently consistency and predictability, as well as efficiency and timeliness. For a regulatory process to be considered supportive of credit quality, it must limit uncertainty in the

recovery of a utility's investment. They must also eliminate, or at least greatly reduce, the issue of rate-case lag, especially when a utility engages in a sizable capital expenditure program.

Our evaluation encompasses the administrative, judicial, and legislative processes involved in state and national government regulation, and includes the political environment in which commissions render decisions. Regulation is assessed in terms of its ability to satisfy the particular needs of individual utilities. Rate-setting actions are reviewed case by case with regard to the potential effect on credit quality.

Evaluation of regulation focuses on the ability of regulation to provide utilities with the opportunity to generate cash flow and earnings quality and stability adequate to:

- Meet investment needs;
- · Service debt and maintain a satisfactory rating profile; and
- Generate a competitive rate of return to investors.

To achieve this, regulation must allow for:

- Timely recognition of volatile cost components such as fuel and satisfactory returns on invested capital and equity;
- Ability to enter into long-term arrangements at negotiated rates without having to seek regulatory approval for each contract; and
- · Ability to recover costs in new investment over a reasonable time frame.

Because the bulk of a utility's operating expenses relate to fuel and purchased power, of primary importance to rating stability is the level of support that state regulators provide to utilities for fuel cost recovery, particularly as gas and coal costs have risen. Utilities that are operating under rate moratoriums, or without access to fuel and purchased-power adjustment clauses, or face significant regulatory lag, also are subject to reduced operating margins, increased cash flow volatility, and greater demand for working capital. Companies that are granted fuel true-ups may be required to spread recovery over many years to ease the pain for the consumer. In addition to fuel cost recovery filings, regulators will have to address significant rate increase requests related to new generating capacity additions, environmental modifications, and reliability upgrades. Current cash recovery and/or return by means of construction work in progress support what would otherwise sometimes be a significant cash flow drain and reduces the utility's need to issue debt during construction.

### Markets/market position.

Critical success factors include:

- A healthy and growing economy;
- · Growth in population and residential and commercial customer base;
- · An attractive business environment;
- · An above-average residential base; and
- · Limited bypass risk.

### The importance of diversification and size.

Critical success factors include:

 Regional and cross-border market diversification (mitigates economic, demographic, and political risk concentration);



- Industrial customer diversification;
- Fuel supplier diversification;
- · Retail, compared with wholesale;
- · Regulatory regime diversification; and
- · Generating facility diversification.

### Operations (operating strategy, capability, and performance efficiency).

Critical success factors include:

- · Low cost structure;
- · Well-maintained assets;
- Solid plant performance;
- · Adequate generating reserves, and compliance with environmental standards; and
- · Limited environmental exposures.

### Management evaluation.

Utilities are complex specialized businesses requiring experienced and successful management teams to have a strong mix of the aforementioned disciplines. Critical elements of management success include:

- · Commitment to credit quality;
- · Operating efficiency and cost control;
- Maintaining a competitive asset base, i.e., power plant construction project management, and plant upkeep and renovation;
- · Regulatory track record, process, and relationship management;
- M&A experience in successfully identifying, executing, and integrating acquisitions;
- Credibility and strong corporate governance;
- · Conservative financial policies, especially regarding non-regulated activities; and
- Ability and track record in repositioning and transforming business to not just survive, but prosper in a more
  open market environment.

Management is assessed for its ability to run and expand the business efficiently, while mitigating inherent business and financial risks. The evaluation also focuses on the credibility of management's strategy and projections, its operating and financial track record, and its appetite for assuming business and financial risk.

The management assessment is based on tenure, turnover, industry experience, financial track record, corporate governance, a grasp of industry issues, and knowledge of regulation, the impact of deregulation, of customers, and their needs. Management's ability and willingness to develop workable strategies to address system needs, and to execute reasonable and effective long-term plans are assessed. Management quality is also indicated by thoughtful balancing of multiple priorities; a record of credibility; and effective communication with the public, regulatory bodies, and the financial community.

We also focus on management's ability to achieve cost-effective operations and commitment to maintaining credit quality. This can be assessed by evaluating accounting and financial practices, capitalization and common dividend objectives, and the company's philosophy regarding growth and risk-taking.

### 4. Profitability/peer comparison Regulated.

Traditionally, the lower levels of risk in utilities because of the highly regulated environment has resulted in lower profitability and return on capital than in many other industrial sectors. In the regulated marketplace the level and margin of profitability has often primarily been a function of regulatory leeway, with the contribution of operating efficiency and revenue growth taking more of a back seat.

### Deregulated/liberalized environments.

In deregulated markets, cost efficiency and flexibility, and internal growth, are the major profitability drivers. The development of a robust risk management culture and infrastructure are also keys to creating stability of earnings, because the company no longer has recourse to the regulator to cover costs or losses—a recourse that usually protects from downside earnings surprises in the regulated sector.

Whether generated by the regulated or deregulated side of the business, profitability is critical for utilities because of the need to fund investment-generating capacity, maintain access to external debt and equity capital, and make acquisitions. Profit potential and stability is a critical determinant of credit protection. A company that generates higher operating margins and returns on capital also has a greater ability to fund growth internally, attract capital externally, and withstand business adversity. Earnings power ultimately attests to the value of the company's assets, as well. In fact, a company's profit performance offers a litmus test of its fundamental health and competitive position. Accordingly, the conclusions about profitability should confirm the assessment of business risk, including the degree of advantage provided by the regulatory environment.

### Part 2—Financial Risk Analysis

Having evaluated a company's competitive position, operating environment, and earnings quality, our analysis proceeds to several financial categories. Financial risk is portrayed largely through quantitative means, particularly by using financial ratios.

We analyze five risk categories: accounting characteristics; financial governance/policies and risk tolcrance; cash flow adequacy; capital structure and leverage; and liquidity/short-term factors. We then determine a score for overall financial risk using the following scale:

Table 3

Financial Risk	Measures
Description	Rating equivalent
Minimat	AAA/AA
Modest	Α
Intermediate	BBB
Aggressive	88
Highly leveraged	В

The major goal of financial risk analysis is to determine the quality of cash resources from operations and other major sources available to service the debt and other financial liabilities, including any new debt. An integral part of this analysis is to form an understanding of the debt structure, including the mix of senior versus subordinated, fixed versus floating debt, as well as its maturity structure. It is also important to analyze and form an opinion of

management's financial policy, accounting elections, and risk appetite. Using cash flow analysis as a building block, it is further necessary to establish the company's liquidity profile and flexibility. While closely interrelated, the analysis of a company's liquidity differs from that of its cash flow as it also incorporates the evaluation of other sources and uses of funds, such as committed undrawn bank facilities, as well as contingent liabilities (e.g., guarantees, triggers, regulatory issues, and legal settlements).

### 1. Accounting characteristics

Financial statements and related footnotes are the primary source of information about a company's financial condition and performance. The analysis begins with a review of accounting characteristics to determine whether ratios and statistics derived from the statements adequately measure a company's performance and position relative to those of both its direct peer group and the universe of industrial companies. This assessment is important in providing a common frame of reference and in helping the analyst determine the quality of disclosure and the reliability of the reported numbers. We focus on the following areas:

- · Analytical adjustments and areas of potential concern;
- Significant transactions and notable events that have accounting implications.
- · Significant accounting and financial reporting policies and the underlying assumptions.
- History of nonoperating results and extraordinary charges or adjustments and underlying accounting treatment, disclosure, and explanation.

### 2. Financial governance/policies and risk tolerance

The robustness of management's financial and accounting strategies and related implementation processes is a key element in credit risk evaluation. We attach great importance to management's philosophies and policies involving financial risk.

Financial policies are also important because companies with more conservative balance sheets and the credit capacity to pursue the necessary investments or acquisitions gain an advantage. Overly aggressive capital structures can leave very little capacity to absorb unexpected negative developments and will certainly leave little capacity to make future strategic investments. Companies with the credit capacity to support strategic investments will be better positioned to both evolve with industry change and to withstand inevitable downturns.

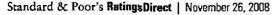
Understanding management's strategy for raising its share price, including its financial performance objectives, e.g., return on equity, can provide invaluable insight about the financial and business risk appetite.

### 3. Cash flow adequacy

Cash-flow analysis is one of the most critical elements of all credit rating decisions. Although there usually is a strong relationship between cash flow and profitability, many transactions and accounting entries affect one and not the other. Analysis of cash-flow patterns can reveal a level of debt-servicing capability that is either stronger or weaker than might be apparent from earnings. Focusing on the source and quality/volatility of cash flow is also important (e.g., regulated/deregulated; generation/transmission/trading).

A review of cash flow historically, as well as needs on a forward-looking basis, should take into account levels of capital expenditures for new generation plants. In periods where elevated new construction occurs in anticipation of a rise in power demand, cash outflows will be high.

It is particularly important to evaluate capital-intensive businesses, such as utility companies, on the basis of how



much cash they generate and absorb. Debt service is an especially important use of cash flow.

### Cash-flow ratios.

Ratios show the relationship of cash flow to debt and debt service, and also to the company's needs. Because there are calls on cash flow other than repaying debt, it is important to know the extent to which those requirements will allow cash to be used for debt service or, alternatively, lead to greater need for borrowing. The most important cash flow ratios we look at for the investor-owned utilities are:

- Funds from operations (FFO)/Total debt;
- FFO/Income;
- Funds from operations/Total debt (adjusted for off-balance-sheet liabilities);
- EBITDA/Interest; and
- Net cash flow/Capital spending requirements.

### 4. Capital structure and leverage

For utilities, the long-term nature of capital commitments and extended breakeven periods on investment, make the type of financing required by these companies to finance these needs to be similar in many ways to the financing needs of other long-term asset-intensive businesses. Our analysts review projections of future CAPEX, debt, and FFO levels to make a determination of the likely level of leverage and debt over the medium term, and the companies' ability to sustain them. The valuation of the debt amortization scheduled is tied into projections of profitability breakeven, and the underlying assets becoming cash-flow-positive, are key components of the combined cash flow and leverage analysis.

### Capitalization ratios.

When analyzing a utility's balance sheet, a key element is analysis of capitalization ratios. The main factors influencing the level of debt are the level of capital expenditures, particularly construction expenditures, and the cost of debt. Companies with strong balance sheets will have more flexibility to further reduce their debt, and/or increase their dividends. The following are useful indicators of leverage:

- Total debt\*/total debt + equity; and
- Total debt\* + off-balance-sheet liabilities/total debt + off-balance-sheet liabilities + equity.
- \*Power purchase agreement-adjusted total debt. Fully adjusted, historically demonstrated, and expected to consistently continue.

Debt leverage, and interest and amortization coverage ratios are the key drivers of the financial risk score.

### 5. Liquidity/working capital/short-term factors:

Our liquidity analysis starts with operating cash flow and cash on hand, and then looks forward at other actual and contingent sources and uses of funds in the short term that could either provide or drain cash under given circumstances.

A key source of liquidity is bank lines. Key factors reviewed are total amount of facilities; whether they are contractually committed; facility expiration date(s); current and expected usage and estimated availability; bank group quality; evidence of support/lack of support of bank group; and covenant and trigger analysis. Financial covenant analysis is critical for speculative-grade credits. We request copies of all bank loan agreements and bond terms and conditions for rated entities, and review supplemental information provided by issuers for listing of

Criteria | Corporates | Utilities: Key Credit Factors: Business And Financial Risks In The Investor-Owned Utilities
Industry

financial covenants and stipulated compliance levels. We review covenant compliance as indicated in compliance certificates, as well as expected future compliance and covenant headroom levels. Entities that have already tripped or are expected to trip financial covenants need to be subject to special scrutiny and are reviewed for their ability to obtain waivers or modifications need to be subject to special scrutiny and are reviewed for their ability to obtain waivers or modifications to covenants. Tripping covenants can have a double negative effect on a company's liquidity. It may preclude it from borrowing further under its credit line, and may also lead to a contractual acceleration of repayment and increased interest rates.

Copyright © 2009 Standard & Poor's, a division of The McGraw-Hill Companies, Inc. (S&P). S&P and/or its third party licensors have exclusive proprietary rights in the data or information provided herein. This data/information may only be used internally for business purposes and shall not be used for any unlawful or unauthorized purposes. Dissemination, distribution or reproduction of this data/information in any form is strictly prohibited except with the prior written permission of S&P. Because of the possibility of human or mechanical error by S&P, its affiliates or its third party licensors, S&P, its affiliates and its third party licensors do not guarantee the accuracy, adequacy, completeness or availability of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. S&P GIVES NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. In no event shall S&P, its affiliates and its third party licensors be liable for any direct, indirect, special or consequential damages in connection with subscriber's or others use of the data/information contained herein. Access to the data or information contained herein is subject to termination in the event arry agreement with a third-party of information or software is terminated.

Analytic services provided by Standard & Poor's Ratings Services (Ratings Services) are the result of separate activities designed to preserve the independence and objectivity of ratings opinions. The credit ratings and observations contained herein are solely statements of opinion and not statements of fact or recommendations to purchase, hold, or sell any securities or make any other investment decisions. Accordingly, any user of the information contained herein should not rely on any credit rating or other opinion contained herein in making any investment decision. Ratings are based on information received by Ratings Services. Other divisions of Standard & Poor's may have information that is not available to Ratings Services. Standard & Poor's has established policies and procedures to maintain the confidentiality of non-public information received during the ratings process.

Ratings Services receives compensation for its ratings. Such compensation is normally paid either by the issuers of such securities or third parties participating in marketing the securities. White Standard & Poor's reserves the right to disseminate the rating, it receives no payment for doing so, except for subscriptions to its publications. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

Any Passwords/user IDs issued by S&P to users are single user-dedicated and may ONLY be used by the individual to whom they have been assigned. No sharing of passwords/user IDs and no simultaneous access via the same password/user ID is permitted. To reprint, translate, or use the data or information other than as provided herein, contact Client Services, 55 Water Street, New York, NY 10041; (1)212.438.7280 or by e-mail to: research\_request@standardandpoors.com.

Copyright © 1994-2009 Standard & Poor's, a division of The McGraw-Hill Companies. All Rights Reserved.

The McGraw-Hill Companies

www.standardandpoors.com/ratingsdirect

Case No. 9173, Phase II Staff Data Request 4 Item No. 2 Attachment 2

### APPENDIX D

	Utilities regulated	Competitive power	Oil & gas downstream	Autos	Airlines
Industry dynamics and competitive environ	ment		<u>-</u>		
January 第4章 1200 1200 1200 1200 1200 1200 1200 120	សា	Ħ	H	Н	Н
其的 医克勒氏性 医克里氏蛋白素 化多位子	<u> </u>	M/H	H	M/H	M/H
	L	L	<u>*_</u>	н	L
	i L	Ŀ	M	H	M
	L UM	t. Hi	L M	L/M H	L
មិនិការមិន « ក្រោយយើងនិង។ ការក្រាស់ ស្រាស់	IM	ři.	M.	Н	H
	1M	M/H	L	L/M	M
	Ö. I	L	M	H	L
Growth and profitability	444				· · · · · · · · · · · · · · · · · · ·
	å) <b>L</b>	M	L	D/I/E4	L/M
Filia de Lair Adriba esta de	M	M/H	M	M/H	Н
Finding the first state of the contract of the	M	M/H	Н	Н	н
Operating considerations and costs					
inanting and the contract of t	) L	1.	L/M	L/M	L/M
Pringle tryp, that you was a second	M	H	M	Η	ŧĸ
ji kun kuci.	∠ M/H	<b>⊮</b> ; L	H	H	Н
The h	L H	н	L H	I I	L
in industrial and in Programme and the programme	Si H	H	H	H	H
	M	M	M	H	
i de la Companya de l	A L	L	W	Н	В
	M	Ĺ	L/M	Н	M/H
Harrie Historia	н	L.	н	H	M/H
itti venite sa vasa	)), L	L	M	н	L/M
Egydy Astronomyticae (a sacsa)	i L	M	L	L	i.
iliji nerigumakak kiyagaya kaw	н	н	H	<b>₩</b>	M
	M	н	M	M	M
engeleingen vir ein debergebis von	M	H	H	M	M/H
ELEMENT CONTRACTOR OF THE STATE	M/H	H M/H	н	M/H	H
Finencial riggregitation of hybranicial rig	∰ M koll	L	<u>t.</u> L	M H	L/M L/M
Fastilonified resigns ensitively Capital and financing characteristics		<del></del>		I-I	1_7 (M
Cauta and maining diagracteristics	И	Jj	H	Н	Н
Borrowling regularment	H	H	L/M	н	H
Smerest rate sensibility	∑ L/M	L/M	L/M	Н	L/M
Government, regulatory, and legal environs					
Regulation/deregulation		H	M:	м/н	Н
Government ari croscondulic and social policies		н	, <del>H</del> ,	H	M/H
i i i i i i i i i i i i i i i i i i i	L	<u> </u>	M	ful .	M

Note:

L = Low

M = Medium H = High

### APPENDIX E

S&P RATING FACTORS	FOR ELECTRIC UTILITIES
Transmission and Distribution Companies	Generation Companies
Regulation  The nature of the rate-making structure, e.g., performance-based vs. cost-of-service  Authorized return on equity  Timely and consistent rate treatment  Status of restructuring, e.g., residual obligation to provide power, which entails the purchase of electricity for resale  FERC's evolving rules for regional transmission of organizations, independent system operators, and for-profit transcos  Incentives to maintain existing delivery assets and invest in new assets  Nature of distributor support that retains the status of provider of last resort	Status of restructuring, e.g., posture toward recovery of stranded costs     Nature of regulatory scheme, e.g., price establishment through power exchange or economic dispatch vs. bilateral contracts     Uncertainty concerning FERC's evolving rules for regional transmission organizations, independent system operators, and for-profit transcos, including independence and equal access
Economic and demographic characteristics, including size and growth rates, customer mix, industrial concentrations, and cyclical volatility     Location	Markets     Generating capacity vs. demand     Economic growth prospects
Cost, reliability, and quality of service (usually measured against various benchmarks)     Capacity utilization     Projected capital improvements     Nature of diversified business operations, if any	Nature of generation, e.g., peaking, intermediate, or baseload     Production inputs, including fuel costs, fuel diversity and labor     Level of physical and financial hedging sophistication     Nature of supply contracts     Efficiency measures, such as plant capacity and availability factors and heat rates     Technology of plants     Asset concentration within portfolio of generating units     Construction risk     Possibility of environmental legislation     Diversity of fuel sources and types     Marketing prowess     Access to transmission
Competitiveness	Competitiveness  Relative costs of production, both total and variable Threat from new, low-cost entrants Alternatives to electricity, such as natural

### **Testimony of William J. Chambers**Appendix Page 9 of 13

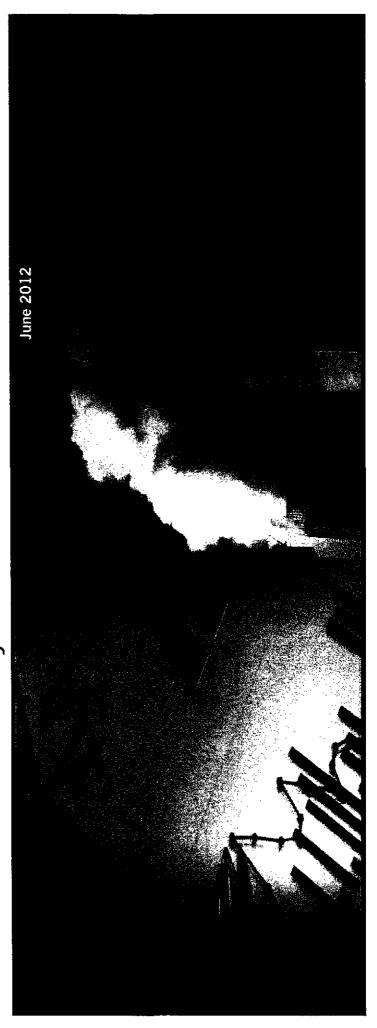
Rate Structure	gas, technological innovations, and remote site applications, including fuel cells and microturbines  Plants' importance to transmission and voltage support
Source: Standard & Poor's, Corporate R	ating Criteria, 2003, ng. 20

### APPENDIX F

FitchRatings
U.S. Utilities, Power & Gas Financial Peer Study
June 2012

### **FitchRatings**

U.S. Utilities, Power & Gas Financial Peer Study





### Analysts

Philippe Beard Cynthia Poiesz +1 212 908-0242 +1 212 908-056 philippe.beard@fitchratings.com cynthia.poiesz@

Danny Lee +1 212 908-0228 danny.lee@fichratings.com Glen Grabelsky +1 212 908-0577 glen.grabelsky@fitchratings.com

+1 212 908-0562
cynthia.poiesz@fitchratings.com
Ronald Hou
+1 212 908-0637

ronald.hou@fitchratings.com

### **Editorial Advisers**

Executive Paul Taylor, President & CEO Editorial Michael Sykes, Editor Carolyn Quaid, Graphics Manager Subscriber Services Madeline O'Connell, Director Stephanie Deshpande, Production Manager

Publisher

John Forde, Managing Director

Inside	9
Overview	N
Analysis	N
Using the Data	m
Peer Group Descriptions	4
Peer Medians by Rating Category 5	D
Alphabetical Company Listing	100
Financial Ratios	
Utility Parent Companies	6
Integrated Utility Companies	Ξ
Utility Distribution Companies1	5
Competitive Generating Companies1	10
Global Power Utilities with Utility Tariff Bonds — Unadjusted Credit Measures 16	9
Corporate Ratio Definitions	7



### Overview

Fitch Ratings presents its annual "U.S. Utilities, Power & Gas Financial Peer Study" report. The report provides comparative financial ratios for the fiscal year ended Dec. 31, 2011, of 143 companies divided into four peer groups (a detailed explanation of the four categories appears in the table on page 4). This report excludes the Midstream peer group (MID). To view comparative financial ratios for the MID group, please refer to Fitch's special report, "Pipelines, Midstream, and MLP Stats Quarterly — Year-End 2011 — Amended", dated April 18, 2012, which is available at www.fitchratings.com.

The peer groups covered in this report are:

- Utility parent companies (UPCs).
- Integrated electric utility operating companies (IUCs).
- Electric and gas utility distribution companies (UDCs).
- Competitive generating companies (CGCs).

The companies within each peer group are sorted by their issuer default rating (IDR), and the ratings are as of Dec. 31, 2011.

The report includes a summary analysis of financial ratios, peer financial tables, and a set of charts with historical coverage and leverage credit metrics for each respective group.

A list of the 143 companies with their respective group and IDR is shown on page 8.

### Analysis

### JPCs

Interest coverage and leverage credit metrics at the consolidated parent company level remained relatively stable in 2011 relative to 2010. Within the 40-company UPC peer group, the 2011 simple averages of EBITDA/interest and (FFO plus interest)/interest were 4.7x and 4.9x, respectively, compared with 4.8x and 4.8x in

2010. The debt/EBJTDA ratio weakened to 4.4x from 3.9x, while FFO/debt was virtually unchanged at 22.5% in 2011 compared with 22.6% in 2010. The steady financial performance of the UPC group largely stems from the stable financial profile of the IUC and UDC operating subsidiaries.

### **UCs and UDCs**

Interest coverage and leverage credit protection measures for the regulated IUC and UDC groups were stable or slightly improved in 2011 compared to 2010.

Within the 43-company IUC peer group, the 2011 simple averages of EBITDA/interest and (FFO plus interest)/interest were 5.6x and 5.7x, respectively, compared with 5.3x and 5.2x in 2010. The ratio of debt to EBITDA was virtually unchanged at 3.7x compared to 3.6x in 2010, while FFO/debt improved to 24.5% from 23.2%.

Within the 42-company UDC peer group, the 2011 EBITDA/interest and (FFO plus interest)/interest mean observations were 5.5x and 5.4x, respectively, compared with 5.3x and 5.4x in 2010. Debt/EBITDA was virtually unchanged at 3.3x compared to 3.4x in 2010, while FFO/debt declined to 25% from 26.3%.

Fitch attributes the solid credit-protection measures of the state-regulated IUC and UDC utilities to the sustained low-interest rate environment that allows utilities to finance capex needs at attractive terms, low commodity prices, and stable earnings power provided by generally balanced jurisdictional rate design mechanisms. Cash flow-based credit measures are supported by tax benefits generated from bonus depreciation, and investment and production tax credits.

Mild weather and the persistently weak U.S. economic environment depressed power demand in 2011. Based on U.S. Energy Information Administration estimates, total consumption of electricity declined 2.3% in 2011, compared to a 4.7% increase in 2010. The decline in sales was primarily driven by a very mild winter, which decreased the use of electric heating. The drop in residential demand was particularly noticeable at 3.5%. Fitch expects power demand to remain weak with customer growth of approximately 1% through 2013.



Timely rate relief to recover the industry's large capital investment related to environmental mandates and infrastructure spending will be critical to maintaining healthy credit measures in 2012–2013. Favorably, Fitch believes utilities will continue to enjoy good access to capital markets and low-cost financing in 2012, which should add further stability to coverage measures.

Both interest coverage and leverage credit measures weakened in 2011 compared to 2010. Within the 18-company CGC peer group, the 2011 average EBITDA/interest and (FFO plus interest)/interest ratios were 3.4x and 3.3x, respectively, compared with 3.5x and 3.8x in 2010. The erosion in the sector's debt/EBITDA and FFO/debt metrics was significant with the former weakening to 6.7x in 2011 from 5.3x in 2010 and the later to 15.7% from 19.9%.

Financial measures continue to be affected by the low commodity price environment and the roll-off of above-market price hedges, which are reset at lower power prices. Fitch expects the low gas and power price environment to persist through 2012, pressuring energy margins for most merchant generators. Fitch believes that independent generators with significant coal-fired generation exposure will experience higher production costs to comply with environmental regulations, further pressuring future credit measures.

### Using the Data

Limitations: This study is intended to be used as an analytical tool to compare the relative financial performance of companies within, and between, rating categories. The peer study is not intended to be predictive of rating changes, since financial ratios in isolation do not determine credit ratings. Fitch's credit criteria incorporate a variety of other quantitative and qualitative factors. In addition, ratings are also materially affected by linkage to affiliates, different levels of business risk, and other qualitative factors.

Median Ratios Are Not Targets: While the peer study includes a table showing median financial ratios for each rating category within the four peer groups, these

should not be construed as target ratios for the rating category. The medians reflect a single point in time, and in many cases are based on a small sampling.

revenue stream (see note on page 18). Of the 143 companies included in the peer study, to exclude nonrecourse debt. Debt equivalents include major power plant leases that are net present value of the lease payments. The rental expense is allocated to interest Principal Adjustments Applied to Credit Ratios: The financial ratios that appear in are calculated on an adjusted basis. Fitch adjusted the financial ratios to exclude nonrecurring items such as restructuring charges, asset impairments, and nonrecurring gains and tosses, as in previous peer studies. Financial ratios have also been adjusted to exclude the effect of issuing utility tariff bonds, sometimes referred to as transition bonds or rate reduction bonds, where the instruments are serviced through a dedicated 30 are affected by tariff bond adjustments. These companies are footnoted. In many instances, debt is also adjusted to include off-balance sheet debt or debt equivalents or treated as operating leases in the financial statements, but in most instances exclude power purchase agreements. The debt equivalent of power plant leases is based on the expense and depreciation and amortization. It is also important to note that Fitch's this report, other than return on average common equity and common dividend payout, definition of EBIT and EBITDA excludes non-operating income. Fitch made several other adjustments in calculating the financial ratios. Interest expense is calculated using gross interest expense before any credit for allowance for borrowed funds used during construction (AFUDC) and/or capitalized interest. Funds from operations (FFO) is defined as cash from operations before changes in working capital. Debt ratios include on-balance sheet leases, including those that may be reported as other liabilities and only detailed in footnotes. For further explanation of the financial ratios in this report, please refer to the definitions on pages 17–18.

Adjustments Affecting Hybrids: Lastly, financial ratios are adjusted to reflect the equity credit attributed to hybrid securities, which may be reported as either debt or preferred stock. The adjustments for hybrid securities are based on Fitch's existing sector-specific criteria for hybrid securities as outlined in the Fitch report "Treatment and Notching of Hybrids in Nonlinancial Corporate and REIT Credit Analysis," dated Dec. 15, 2011, which is available at www.fitchratings.com.



Based on the criteria, cumulative preferred and preference shares with an effective maturity greater than 5 years would receive 50% equity credit, while noncumulative preferred and preference shares would receive 100% equity. For deferrable and junior subordinated debt hybrid instruments and trust preferred securities with effective maturities greater than five years, 50% of the principal is allocated to debt and 50% to equity. Mandatorily convertible securities that are subordinated and will convert to common equity in less than three years will generally be treated as 100% equity. A similar instrument with three to five years until conversion would receive 50% equity credit. Synthetic units with a timing difference between the maturity of a debt instrument and a forward purchase of equity, for example, five-year debt combined with a three-year forward contract, will be treated as two separate instruments.

SU
riptic
Desc
Sroup
Peer G

Peer Group	Acronym	Acronym, Explanation
Utility Parent Companies	oPo o	The utility parent companies pear group includes both pure holding companies and parent operating companies with one or more diversified subsidiaries. The business risk profiles of utility parent companies remain widely disparate, which often accounts for the rating discrepancy among companies with similar ratios. On the low end of the risk spectrum are utility parent companies that own one or more pure distribution companies with no commodity price risk, such as NSTAR and Consolidated Edison, Inc. At the hand of the risk spectrum are parent companies that derive a significant portion of earnings before interest and taxes (EBIT) from nonregulated businesses, which generally have greater earnings volatility.
Integrated Electric Utility Operating Companies	20	Integrated electric utility companies are those that continue to own both electric generation assets and a distribution network within a single legal antity. The distribution network continue to be state regulated, that is not network may provide electric service only or may be a combination of electric and gas. While the distribution networks continue to be state regulated, that is not necessarily the case for generation assets. In some jurisdictions, the generation assets have been deregulated, but have not been transferred to a separate subsidiary.
Utility Distribution Companies	npc	The utility distribution peer group includes a mix of electric, gas, and combined electric and gas delivery systems. The electric distribution companies in this peer group include pure delivery companies with no supply obligation and others that may retain the provider-of-last-resort (POLR) obligation. Within this group, companies that retain the POLR obligation and have fixed fairlis have the highest risk profile. Gas distribution companies that are not pure delivery systems generally have commodify pass-through mechanisms. The pass through will usually reduce the level of business risk.
Competitive Generating Companies	၁၅၁	The competitive generating companies are entities that derive the majority of EBIT from wholesale electric generation, including affiliates of regulated utilities, or other nonregulated businesses.
Source: Fitch Ratings.		



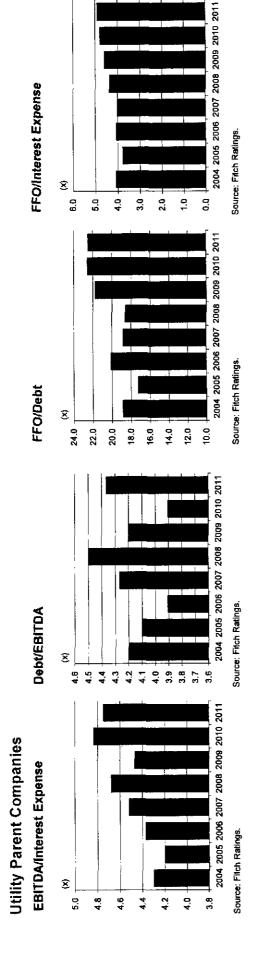
## Peer Medians by Rating Category

(As of Dec. 31, 2011)				,			•		į	:	1	į	3
	Interest	Interest Coverage (x)		Levi	Leverage		ű	Capital Structure (%)	(%)	Liquidity	Profitability (%)	200	Dividends
	Operating	Operating EBITDA/	FFO + Interest/	Debt/	FFO,	Oebt/	Total Debt/	Total Debt/ Total Hybrid	Common Equity/				Common
Paer Medians	EBIT/ Interest	Interest	Interest	Operating EBITDA (x)	jep (%)	G 3	Total	Equity/Total Capital	Total	% Internal Generation	Operating Margin	<b>8</b> 06	Payout Ratio (%)
Utility Parent Companies	ompanies												
¥.	5.8	8.0	8.4	2.1	43.5	2.3	37.1	0.7	62.2	109.9	₫÷	9.9	63.2
∢	4.4	6.3	6.5	3.4	25.8	3.9	52.5	3.4	44.0	73.8	20.3	13.6	57.8
4	3.8	5.6	5.3	3.7	21.5	4.7	54.7	0.5	43.7	95.6	19.4	12.3	57.1
988+	3.0	5.1	6.4	3.7	22.0	4.5	51.5	0.7	46.9	72.6	18.4	10.2	67.0
888	2.9	4.3	4.2	4.1	17.6	5.7	56.7	9.0	42.6	90.4	17.9	89:09	6'09
-888	2.1	3.6	1.4	4.3	18.3	5.6	59.3	t.	40.7	69.4	4.9	7.5	75.9
BB+	3.5	5.1	5.4	5.1	13.5	7.4	62.0	0.3	37.8	88.3	16.8	11.3	86.5
88	1.8	2.8	2.7	5.4	10.9	9.2	61.0	1	39.0	87.2	21.1	<b>4</b> 7	71.2
200	0.1	9.0	<del>1.</del>	19.4	0.7	137.9	126.9	ļ	(27.3)	120.0	5.4	Σ Σ	1
Utility Distribution Companies	ion Companies												
, *	4.7	6.8	6.5	2.7	30.6	3.4	42.1	0.7	57.2	110.0	16.3	9.2	87.8
∢	9,4	10.5	10.8	2.8	39.9	2.5	51.8	1.0	46.7	73.6	12.7	12.6	200
- <b>V</b>	9.6	5.6	8.6	3.3	32.2	3.1	50.6	1.1	48.4	122.2	13.6	12.8	94.3
888+	3.5	5.5	5.4	3.1	25.8	3.9	49.2	0.2	50.4	71.2	16,5	9.6	60.4
888	9,3	5.1	4	3.4	19.3	5.2	51.6	6.5	49.4	649	14.5	9.7	70.6
-888	2.7	4.2	. 4.0	3.5	24.7	4.1	51.2	9.0	48.8	79.4	16.3	9.2	156.3
8B+	1.7	2.6	2.1	5,5	7.4	16.0	60.3	0.4	39.3	<u>\$</u>	20.2	7.3	93.6
Integrated Utility Companies	y Companies												
A	4.6	6.8	7.2	3.1	25.4	9.0	50.1	1.1	47.0	61.0	20.4	1.0	80.9
A-	4.3	6.9	7.3	3.2	29.7	3.4	46.9	2.1	52.6	81.3	16.7	6.6	66.5
BBB+	3,5	5.5	5.8	3.4	26.2	3.8	49.0	0.5	50.4	83.4	19.7	0.6	4.46
888	3.3	5.0	8.4	3.6	20.5	<b>4</b> .	52.0	0.2	48.0	73.7	18.2	8.9	60.3
BB8-	3.0	4.7	4.7	3.6	23.1	<b>4</b> .3	53.1	1.0	46.9	101.9	18.3	6.3	88.2
₽8+	2.4	3.9	3.5	4	14.8	6.B	55.9	I	44.1	75.9	19.8	6.2	75.0
Competitive Ge	Competitive Generation Companies	ies											
88B+	8.6	9.7	7.0	4.1	44.6	2.2	33.6	I	66.4	125.9	28.1	21.0	45.5
888	3,88	<b>4</b> .0	4.7	4.6	23.0	4.7	51.4	1.0	48.4	85.6	14.0	8.2	20.6
-888-	#. 80.	3.2	<b>4</b> .1	5.5	17.7	5.7	38.6	6.	60.1	374.2	8.9	1.0	28.6
+88	2.6	4.1	<b>4</b> .1	3.1	25.0	4.0	44.6	<b>0.4</b>	55.1	152.5	16.3	4.4	1
88	2.5	4.5	4.5	4.9	16.0	6.2	9.99	0.2	33.3	278.8	15.1	19.8	14.6
<b>±</b>	2.0	5.9	2.5	3.9	13.0	7.8	43.6	6.0	55.5	111.0	16.3	1.7	50.0
<b>60</b>	6.0	1.7	<del>4</del> .1	7.3	3.2	35.9	61.1	0.2	38.7	86.2	11,5	(3.9)	1
<b>-</b>	1.9	4	6.2	7.5	38.0	7.6	47.0	ì	53.0	112.4	0.6	Σ. Z	(41.7)
200	0.1	0.5	1.2	16.3	6:	53.7	128.1	0.4	Σ̈́	182.6	6.1	Ž Ž	1
ပ္ပ	(0.6)	0.3	0.7	19.6	(0.1)	(16.4)	62.3	1	37.7	(8.3)	(14.6)	N.Y.	1
N.M. – Not meaningful. Source: Company reports, Fitch	ningful. sy reports, Fitch.												

U.S. Utilities, Power & Gas Financial Peer Study June 22, 2012

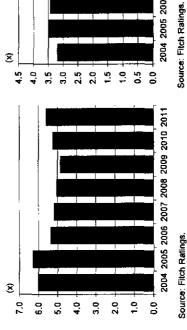
3

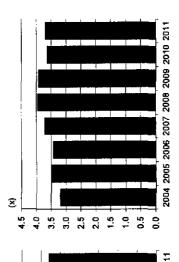


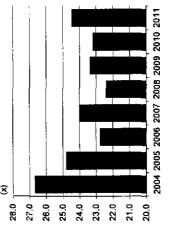


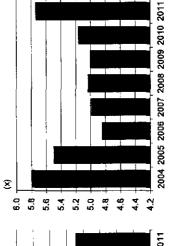


**EBITDA/Interest Expense** 









FFO/Interest Expense

FFO/Debt

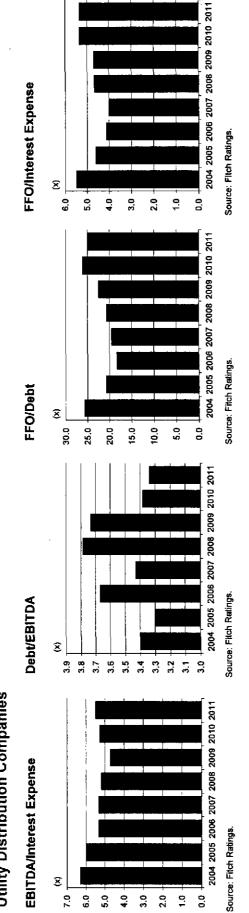
Debt/EBITDA

Source: Fitch Ratings.

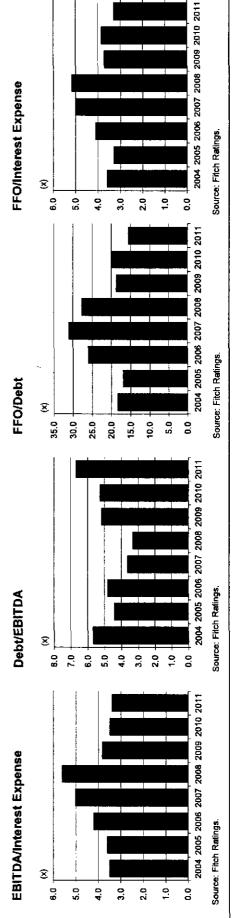
Source: Fitch Ratings.



### **Utility Distribution Companies**



## **Competitive Generating Companies**



U.S. Utilities, Power & Gas Financial Peer Study

June 22, 2012



isting
any L
Somp
tical (
phabe
=

Alphabetical Company Listing	/ Listi	ng									
Company Name	Group IDR		Company Name	Group IDR	품	Company Name	Group	쭚	Company Name	Group	
AEP Texas Central Company	DC	+	Detroit Edison Company	2	888	NRG Energy, Inc.	၁၅၁	<b>#</b>	Public Service Company of Oklahoma	5	988
AEP Texas North Company	ODC B	BBB+ [	Dominion Resources, Inc.	S S	<b>BBB</b> +	NSTAR Electric	ODC	<b>4</b> +	Public Service Company of Colorado	2	888+
AES Corporation	SGC		Dynegy Inc.	290	ខ	NSTAR LLC	OPC	¥	Public Service Company of New Hampshire	2	888
AGL Resources, Inc.		4	Edison International	UPC	888	NV Energy, Inc.	UPC	88	Public Service Company of North Carolina, Incorporated		88B+
Alabama Power Company	IIC	س.	Edison Mission Energy	၁၅၁	4	National Fuel Gas Company	D C	<b>BBB</b>	Public Service Electric & Gas Company	25	<b>BBB</b> +
Alecheny Energy Supply Company	.,	88B- E	Empire District Electric Company	<u>0</u>	-898	Nevada Power Company d/b/a NV Energy	on.	BB+	Public Service Enterprise Group Incorporated	UPC	<b>BBB</b> +
Ameren Corporation			Energy Future Holdings Corporation	2 2	ပ္ပ	New York State Electric & Gas Corp.	20	<b>BBB</b> +	Rochester Gas & Electric Corp.	ODC	BBB-
Ameren Energy Generating Company	CGC		Exelon Corporation	UPC	<b>BBB</b> +	NextEra Energy, Inc.	UPC	¥	SCANA Corporation	UPC	888+
Ameren Illinois Company	ODC	BBB- 1	Exelon Generation Company, LLC	200	B88+	NiSource Inc.	UPC	-888	San Diego Gas & Electric Co.	9	∢
American Electric Power Co., Inc.	UPC	1 888	FirstEnergy Corp.	PC	888	Nicor Gas Company	ogn	⋖	Sempra Energy	OPC	88B
American Transmission Systems, Inc.	200	1989 F	FirstEnergy Solutions Corp.	၁၅၁	888	NorthWestern Corporation	္ခ	888	Sierra Pacific Power Company d/b/ a NV Energy	၌	÷ BB
Appalachian Power Company	<u>S</u>	-889	Florida Power & Light Company	ည	∢	Northeast Utilities	OPC	988	South Carolina Electric & Gas Co.	20	888
Arizona Public Service Company	INC B	B88- F	Florida Power Corporation	2	<b>BBB</b> +	Northern States Power Company — MN	2	¥	Southern California Edison Co.	ე	¥-
Atlantic City Electric Company	a con	888	GenOn Americas Generation, LLC	200	å	Northern States Power Company WI	ဍ	¥-	Southern California Gas Company	S S S	∢
Almos Energy Corp.	200	BBB+ (	GenOn Energy, Inc.	ပ္ပ	œ	OGE Energy Corp.	D S	∢	Southern Company	ည် က	∢
Baltimore Gas and Electric Company	a ogn	888	GenOn Mid-Atlantic, LLC	ပ္ပင္ပ	<b>.</b>	Ohio Edison Company	9	BB8-	Southern Power Company	၁၅	8BB+
Black Hills Corp.	CPC	BBB- (	Georgia Power Company	ည	∢	Ohio Power Company	2	<b>BBB</b> +	Southwest Gas Corporation	ODC O	988+
Black Hills Power, Inc.	£ 20	888	Gulf Power Company	ე	¥	Oklahoma Gas & Electric Company	2	∢	Southwestern Electric Power Company	2	-B88
CMS Energy Corporation	CPC	BB+	IPALCO Enterprises, Inc.	UPC	BBB-	Oncor Electric Delivery Company	S	888	Southwestern Public Service Company	2	888
Calpine Corporation	CGC	 	Iberdrola USA	<u>Б</u>	888	Orange & Rockland Utilities, Inc.	<u>ဗ</u>	888+	TECO Energy, Inc.	S S	888
Carolina Power & Light Company	CCA	<del>ا</del> -	Indiana Michigan Power Company	ည	88B-	Otter Tail Corporation	S S	B8B-	Tampa Electric Company	2	888
CenterPoint Energy Houston Electric LLC	200	888	Indianapolis Power & Light Company	ე	<b>BBB</b>	PECO Energy Company	og G	888+	Texas Competitive Electric Holdings	ပ္ပ	ပ္ပ
CenterPoint Energy, Inc.	UPC B	888	Jersey Central Power & Light Co.	g	888	Pepco Holdings, Inc.	ا ا	888	Toledo Edison Company	ogn O	<del>8</del> 8
Central Hudson Gas & Electric Corp.	UDC	¥	Kentucky Power Company	ე	888	PG&E Corp.	S S	<b>88</b> B+	Tucson Electric Power Company	2	<del>1</del> 88
Central Maine Power Company	a Con	888+ H	Kentucky Utilities Company	ŭ	¥	PPL Corporation	ည ၁	888	UGI Utilities, Inc.	ODO	Ą
Cleveland Electric Illuminating Company	ODC	BB+	Lackede Gas Company	on	Ł	PPL Electric Utilities Corporation	ODC	888	Union Electric Company	Ξ	<b>988</b> +
Commonwealth Edison Company	UDC B	888- T	Laclede Group, Inc. (The)	J.	Ą	PPL Energy Supply LLC	ပ္ပ	<b>BBB</b>	Virginia Electric and Power Company	ဋ	888
Connecticut Light & Power Company	ODC	1 888	Louisville Gas & Electric Company	3	4	PSEG Power LLC	၁၅	<b>BBB</b> +	WGL Holdings, Inc.	S S	ŧ
Consolidated Edison Company of				!		; ;	:				•
New York, Inc.			MDU Resources Group, Inc.	2	Ł	Pacific Gas & Electric Company	<u>ဗ</u>	888+	Washington Gas Light Company	3	ŧ
Consolidated Edison, Inc.		_	Metropolitan Edison Company	<u>2</u>	988	PacifiCom	≌	888	West Penn Power Company	5	888
Consumers Energy Company		Ή.	Michigan Consolidated Gas Company	S S	-888	Pennsylvania Electric Company	20	B88-	Westar Energy, Inc.	⊇ ີ	888
Covanta Energy Corp.	၁၅	88	MidAmerican Energy Company	ဍ	<del>-</del>	Pennsylvania Power Company	<u>S</u>	B88-	Western Massachusetts Electric Company	5	888
DPL Inc.	S S	±88	MidAmerican Energy Holdings Company	D D	<b>988</b>	Pinnacle West Capital Corporation	ပ ရ	88B-	Wisconsin Electric Power Company	ე.	⋖
DTE Energy Company	S B	888	Midwest Generation LLC	၁၉၁	4	Potomac Edison Co.	<u>8</u>	888	Wisconsin Energy Corporation	S S	¥
Dayton Power & Light Company		B88- 1	Mississippi Power Company	2	∢	Potomac Electric Power Company	മ	<b>BBB</b> +	Xcel Energy, Inc.	PC	<b>BBB</b> +
Delmarva Power & Light Company	ODC	BBB+ 1	Monongahela Power Company	2	888	Progress Energy Inc.	S S	888			
		:		Č	ć		4-4-6				

UPC ~ Utility parent company. UDC – Utility distribution company. (UC – Integrated utility company. CGC – Competitive generating company. IDR – Issuer default rating. Source: Fitch Ratings.

8



### **Utility Parent Companies**

(As of Dec. 31, 2011)

	Intere	Interest Coverage (	×	ב ב	SA 10.01		5	Capital Structure ( A)		1			
	Operating	Operating FRITDA/	FFO +	Debt		Debt	Total Debt/ Total	Total Hybrid Equity/	ပ				Common
	Interest	Interest	nterest	EBIT		F	Capital		Total Cap	% Internal	Operating	ROE	Payout
Utility Parent Companies	Expense	Expense	Expense	(X)	%	×	8	(%)	<u>(</u>	Generation	Margin (%)	3	Ratio (%)
A+ IOR		1		,	Š	9	,	r	6	9	¢		ù
WGL Holdings, Inc.	ю. С	O 1	a, i	Z,	0.0	2.4	7	: P			9 6	) C	9 60
A+ Median	10 10	0.0	*	2.1	43.0	Z.3	1.75	-	7.70	8.601	R:O		Ď
A IDR							i			•		;	;
OGE Energy Corp.	4.3	6.3	6.3	3.1	26.5	<b>6</b>	51.7	4.4	43.9	<b>2</b> 2	16.6	7	42.
Southern Company	4.5	6.4	6.7	3.6	25.1	0	53.3		44.2	93.5	24.0		72.7
A Median	4.4	6.3	6.5	3.4	25.8	3.9	52.5		44.0	73.8	20.3	13.6	57.8
A-IDR													
AGI Resources Inc.	3.6	4.9	4.3	7.1	9.7	10.3	59.5	0.3	40.3	72.4	21.7	6.7	96
aclede Group inc (The)		60	6.2	2.6	32.0	3.1	41.7	ı	58.3	192.6	7.4	1.5	56.3
MOLI Resources Group Inc	4	7.7	7.3	6.	42.9	2.3	35.4		64.4	101.4	10.2	7.8	58.0
Nothing Energy Inc.	30	. 4	4.7	(F)	19.8	9	56.9	3.1	39.9	46.7	22.3	13.1	4
NSTAR I C.	4	46	Б	6,63	23.2	4.3	54.7	0.5	44.8	116.3	19.0	13.5	65.4
Wiscobsin Fineray Comorgian	46	4	4	4	19.5	5.1	54.6	2.8	42.6	89.8	19.8	13.5	46.0
A. Madian	oc en	ve ve	10	F.	21.6	4.7	54.7		43.7	96.6	19.4	12.3	57.1
Constituted Chiese Inc	3.7	6.5	ur.	ur.	25.1	4 0	48.3		51.2	128.9	17.3	9.3	65
Combined Edisor, IIIC.		4 6	9 4		17.4	100	613	3.2	35.4	1.64	19.9	12.0	80.2
Collination Associates, Inc.	9 4	4 t			6	, α	48.4	90	- K	7.14	23.8	180	uc.
Exeron Corporation	9 1		- 6	3 6	9 9	9 4	j				2 1 1	2 0	5
Iberdrola USA	2.5	4.	N 1	ונת	5.0	- ·	6.74	C.0	25.1	0.27	0 0	0 t	
MidAmerican Energy Holdings Company	2.2	3.4	6.6 6.6	5.0	17.4	c)	58.4		41.2	120.0	24.0	6	
National Fuel Gas Company	5.3	ю Т.	<b>8</b> 0.	1.7	55.2	<del>_</del> œ	37.1	1	62.9	67.1	24.8	14.2	<b>6.4.6</b>
PG&E Com.	2.7	5.2	6.3	3.6	28.0	3.6	52.6	0.5	46.9	64.6	13.2	7.2	83.4
Public Service Enterprise Group Incorporated	6.0	7.8	9.9	2.1	35.2	2.8	40.9	0.0	59.1	128.2	24.7	15.1	46.1
SCANA Corporation	2.8	4.0	4.6	4,5	19.9	20	56.9	8.0	42.3	63.7	18.4	10.2	64.1
Semora Energy	3.3	5.1	6.4	4.0	19.2	5.2	51.5	2.0	46.4	37.9	17.4	4 4	32.4
Xoel Energy, Inc.	3.0	4.5	4.7	3.7	22.0	4.5	53.3	Ξ	45.6	89.6	16.7	10.1	57.0
BBB+ Median	3.0	5.1	4.9	3.7	22.0	4.5	51.5	7.0	46.9	72.8	18.≠	10.2	57.0
BBB IDR													
Ameren Corporation	3.0	4.7		3.1	24.9	4.0	45.8	0.5	53.6	143.0	18.1	9.9	72.
American Electric Power Co., Inc.	2.8	4.4	3.9	1.4	15.9	6.3	56.7	0.0	43.3	102.0	20.2	13.7	46.3
DTE Energy Company*	3.0	8.4		3.3	25.6	3.9	50.5	1.3	48.2	7.76	15.9	10.4	54.7
Edison International	2.2	3.9	6.7	3.9	37.4	2.7	58.9	3.6	37.5	90.4	17.6	9.4	42.8
FirstEnergy Corp.*	2.0	3.4	3.4	5.0	14.5	6.9	58.0	0.1	42.0	90.3	13.5	8	99.5
Northeast Utilities*	3.1	4.7	4.2	4.5	15.3	6.5	999	9.0	42.7	65.0	17.9	10.1	49
Pepco Holdings, Inc."	2.3	3.8	4.0	4.8	16.6	6,0	52.0	I	48.0	43.3	6.6	6.0	94.9
PPL Corporation	3.3	£.3	4.2	0.4	18.6	5.4	54.6		36.5	70.4	24.3	15.7	.64
Progress Energy Inc.	2.1	3.0	3.7	6.5	15.1	9.9	57.0	8.0	42.2	38.4	17.8	5.7	127.7
TECO Eneray, Inc.	3.0	4.6	4.6	3.2	24.1	4	57.5	0.0	42.4	126.0	18.6	12.3	9
BBB Median	2.9	4.3		Į	17.6	5.7	56.7	9.0	42.6	90.4	17.9	8.6	6.09
*Excludes debt, revenue, amortization, and interest expense associated with the is	expense associa		sue of utility ta	of utility tariff bonds, sometimes referred to	etimes refe	Ted to	as rate-reduct	ion bonds or sex	curifization bone	as rate-reduction bonds or securitization bonds. IDR – Issuer default rating	default rating.		
Continued on next page.	-		•										

U.S. Utilities, Power & Gas Financial Peer Study

June 22, 2012



## Utility Parent Companies (Continued)

(As of Dec. 31, 2011)

(As of Dec. 51, 2011)										:		į	
	Intere	Interest Coverage (x)		Fe.	Leverage	i	S	Capital Structure (%)	<b>⊋</b>	Liquidity	Profitability (%)	3	Dividends
	Operating	Operating	FFO +	1	Č	, in	Total Daha'	Total United					Common
		Inforcet	Interest	Oneration	2 2	3 2	Total	Falify'	Failty	% Internal	Operating		Pavout
Utility Parent Companies	Ехрепве	Expense	Expense	EBITDA (x)	(£)	*	Capital	Total Capital Total Capital	otal Capital	Generation	Margin	ROE	Ratio (%)
89B-1DR													
Black Hills Corp.	1.6	2.8	3.2	5.1	15.7	9.	57.4	1	<b>4</b> 2.6	37.2	<b>4.</b> 6	4.3	118.0
CenterPoint Energy, Inc.*	2.5	3.8	4,0	89. 138	20.9	4.8	61.2	I	38.8	93.8	14.6	36.6	24.8
IPALCO Enterprises, Inc.	6,1	3.3	3.4	6.4	14.9	6.7	98.7	1.6	(0.3)	57.6	18.3	Σ̈́	103.5
NiSource Inc.	2.4	3.8	4.2	5.5	15.3	9.9	61.4	-	38.6	54.4	15.1	6.0	86.3
Offer Tail Corporation	1.6	3.5	4.9	3.8	28.8	3,5	45.5	9.0	53.8	1.18	5.2	Σ	(314.3)
Pinnacle West Capital Corporation	2.9	4.5	8.4	3.0	28.6	3.5	47.1	t.	51.5	100.4	23.0	9.0	65.5
BBB- Median	2.1	3.6	7	£.3	18.3	5.6	59.3	1.5	40.7	4.69	14.9	7.5	75.9
BB+ IDR													
CMS Energy Corporation	2.4	3.7	ю 9	4.7	14.6	8.9	6.69	0.4	29.8	104.4	15.4	14.3	50.8
DPL Inc.	4.5	89.	4.0	5.4	12.4	8.0	54.1	0.2	45.7	72.1	18.3	<b>8</b> 0	122.2
BB+ Median	3.5	5.1	4.5	5.1	13.5	7.4	62.0	0.3	37.8	88.3	16.8	1.3	86.5
BBIDR													
NV Energy, Inc.	E0:	2.8	2.7	5.4	10.9	9.5	61.0	1	39.0	87.2	21.1	<b>4</b> .8	71.2
BB Wedian	æ.	2.8	2.7	4,75 4,75	10.9	9.2	61.0	1	39.0	87.2	24.1	4.8	71.2
CCC IDR													
Energy Future Holdings Corporation	0.1	9.0	1.	19.4	0.7	137.9	126.9	1	(27.3)	120.0	5. 4.	Σ̈́	ŀ
CCC Median	0.1	9.0	₽	19.4	7.0	137.9	126.9	1	(27.3)	120.0	5.4	ž	I
		of and district to the second	A Contract of the Contract of	mile hands on		County to part	and and other	honde or easingly	antion boards at h	Mot manning	And In Contract of the Contrac	dofo	a cite

<sup>\*</sup>Excludes debt, revenue, amortization, and interest expense associated with the issue of utility tariff bonds, sometimes referred to as rate reduction bonds or securitization bonds. N.M. - Not meaningful. IDR - Issuer default rating. Source: Company reports, Fitch.

9



### Integrated Utility Companies (As of Dec. 31, 2011)

(As of Dec. 31, 2011)	:	•					Č	,					1.4
1	Interes	Interest Coverage (x)	0.1	و ا	Leverage		3	Capital Structure (%)		Liquidity	Fromtability (%)	-3   	Dividends
	Operating FBIT/	Operating EBITDA/	interest/	Operating	FF0,	Debt	Debt	i otal Hybrid Equity/Total	Common Equity/ Total	% Internal	Operating	Q u	Dividend
Integrated Utility Companies	Expense	Expense	Expense	(X)	(%)	×	Capital (%)		Capital (%)	Generation	.S		Ratio (%)
AIDR										•			
Alabama Power Company	6.4	7.0	7.1	2.9	30.5	3,3	51.0	5.1	43.9	126.3	26.6	13.2	109.3
Florida Power & Light Company*	5.4	7.4	8.2	2.6	37.1	2.7	40.5		59.5	57.0	19.5	10.3	37.5
Georgía Power Company	5.4	7.3	7.3	3.3	26.5	3.8	49.2	5,5	49.4	81.4	23.3	12.9	95.7
Mississippi Power Company	4.2	6.7	8.0	6.0	17.5	5.7	54.6	7.0	44.7	14.8	12.0	10.5	80.9
Oklahoma Gas & Electric Company	3.9	5.6	5.1	3.0	24.3	4.1	45.0	1	55.0	65.0	21.3	11.3	I
Wisconsin Electric Power Company	0.4	5.8	5.8	7.8	10.5	9.6	62.9	0.2	36.9	42.4	12.7	10.8	71.0
A Madian	6.4	6.9	7.2	 1.2	25.4	3.9	50.1	<del>-</del> -	47.0	61.0	20.4	1.0	80.9
A-IDR													
Carolina Power & Light Company	6.4	8.9	8.0	3.2	32.3	3.1	46.5	0.3	53.2	44.6	19.5	10.0	114.0
Gulf Power Company	3.6	5.7	5.7	3.8	21.7	4	52.5	3.8	43.7	80.2	14.7	9.5	104.8
Kepticky   Hillian Company	5.0	7.7	7.3	9.6	23.8	4.2	40.2	I	8'69	115.0	22.8	6.5	69.7
Louisville Gas & Electric Company	5.5	80	7.3	2.9	25.0	4	38.7	1	61.3	124.0	17.7	7.1	6.99
MidAmerican Energy Company	2.7	4.	7.9	4.1	34.6	2.9	49.0	0.2	50.8	136.1	12.3	10.3	N.Z
Northern States Power Company — MN	3.3	5.2	5.5	3.2	27.1	3.7	47.9	I	52.1	82.4	15.8	8.6	66.0
Northern States Power Combany — Wil	4.	7.3	7.2	2.5	S.45	2.9	45.5	I	54.5	75.7	12.2	10.0	64.7
Southern California Edison Co	4.2	2.0	10.8	2.5	55.7	1.8	47.4	5.2	47.4	63.9	20.1	12.6	47.9
A-Median	4.3	6.9	7.3	3.2	29.7	3.4	46.9	2.1	52.6	81.3	16.7	9.9	66.5
B8B+ (DR													
Florida Power Corporation	2.8	9.6	4.4	5.7	17.6	5.7	51.2	0.2	48.6	31.0	16.0	6.5	163.5
Ohio Power Company	3.8	0.9	5.1	3,0	22.B	4.4	50.5	1	49.5	129.9	17.6	12.2	140.1
Pacific Gas & Electric Company*	2.8	5.4	6.5	3.5	79	3.4	51.9	0.5	47.6	64.5	13.2	7.0	86.2
Public Service Company of Colorado	4.3	6.0	5.8	3.1	25.6	3.9	44.7	ł	55.3	6.76	18.7	4.0	68.0
South Carolina Electric & Gas Co.	3.1	4.5	5.0	4.0	22.3	4.5	49.9	1.4	48.7	57.3	23.2	9.B	67.0
Tampa Electric Company	3.7	5.6	6.0	2.5	35.1	2.9	48.0	1	52.0	125.4	20.9	10.9	102.6
Union Electric Company	3.3	5.3	5.7	3,3	26.9	7	47.9	0.5	51.5	113.8	20.6	7.1	140.4
Virginia Electric and Power Company	4.4	6.4	7.1	3,4	27.7	3.6	48.0	8.0	51.3	68.9	22.3	6.9	69.2
B9B+ Median	3.5	5.5	8,2	3.4	26.2	3.8	49.0	0.5	50.4	83.4	19.7	9.0	94.4
888 IDR													
Black Hills Power, Inc.	3.3	5.0	4.3	3.5	19.2	5,2	45.1	]	54.9	126.8	21.5	8.4	ļ
Detroit Edison Company*	3.9	6.6	6,0	2.7	27.5	3.6	52.0	1	48.0	73.7	19.6	10.7	8,69
Monongahela Power Company	3.4	5.2	4.7	4.3	16.6	6.0	66.7	I	33.3	135.0	13.3	Σ	ł
NorthWestern Corporation	2.9	4.6	5.0	4.2	20.5	4.9	56.3	l	43.7	93.7	14.9	=	55.9
PacifiCorp	2.8	6.4	4.9	4.1	21.9	4.6	48.7	0.1	51.2	72.0	23.6	7.6	99.1
Public Service Company of Oktahoma	4.1	5.8	6.5	2.9	32.4	3.1	52.8	I	47.2	218.6	17.9	14.3	58.1
Public Service Company of New Hampshire	⊕ ⊕	6.1	4.5	3,6	15.8	6.3	48.1	1	51.9	38.4	18.2	10.0	29.0
Southwestern Public Service Company	3.1	4.7	<b>8</b> .	3.2	24.4	4	48.1	I	51.9	54.5	11.8	8.8	71.1
Westar Energy, Inc.	2.8	4.4	4.3	3.9	19.2	5.2	53.5	0.3	46.2	46.2	23.9	8.9	60.3
BBB Median	3,3	9.0	4.8	3.6	20.6	4.9	52.0	0.2	48.0	73.7	18.2	8	60.3
*Excludes debt, revenue, amortization, and interest expense associated with the issue of utility tariff bonds, sometimes referred to as rate-reduction bonds or securitization bonds. IDR — issuer default rating	pense associated	with the issue of	utility tariff bo	nds, sometime	es referred	to as rate	-reduction bong	ls or securitization	bonds. IDR -	Issuer default ratin	cá.		

<sup>&</sup>quot;Excludes debt, revenue, amortization, and intere N.M. - Not meaningful. Continued on next page. Source: Company reports, Fitch.

U.S. Utilities, Power & Gas Financial Peer Study



## Integrated Utility Companies (Continued)

(As of Dec. 31, 2011)

(AS OI DEC. 31, 2011)													
	Interes	Interest Coverage (x)		- Fe	Leverage		Cap	Capital Structure (%)	-	Liquidity	Profitability (%)	8	Dividends
	Operating	Operating	FFO +	Aded			Total		Соттоп				Соптол
	EBIT	EBITDA/		Operating	<u>5</u>	Debt	Debt	Total Hybrid	Equity/				Dividend
	Interest	Interest		EBITDA	Debt	5	Total	Equity/Total	Total	% Internal	Operating		Payout
Integrated Utility Companies	Expense	Expense	Expense	¥	(%	(x)	Capital	Capital	Capital	Generation	Margin	ROE	Ratio (%)
888- IDR		i											
Appalachian Power Company	2.0	3.3	3.1	5.6	11.4	8.8	57.9		42.1	101.9	13.6	5.6	83.9
Anzona Public Service Company	3.0	4.7	4.7	2,0	27.9	3.6	45.4	5.5	53.7	100.4	23.4	8.7	68.2
Consumers Energy Company*	3,8	5.7	5.1	3.0	24.3	4.1	50.0	0.3	49.8	103.9	15.7	11.0	80.4
Dayton Power & Light Company	7.8	10.8	9.4	2.0	38.6	2.6	40.0	0.5	59.5	65.2	19.1	14.0	114.6
Empire District Electric Company	3.2	4.7	5.0	3.6	23.1	4.3	50.4	I	49.6	104.9	22.5	8.1	49.1
Indiana Michigan Power Company	2.2	3.4	4.4	5.5	18.1	5.5	61.5	1	38.5	186.9	14.8	8.6	50.3
Indianapolis Power & Light Company	3.6	6.4	6.0	2.8	28.5	3.5	56.6	1.6	41.8	60.5	18.4	13.2	79.4
Kentucky Power Company	2.7	4.1	හ භ	3.6	18.3	5.5	54.7	I	45.3	109.1	13.6	9.3	2.99
Southwestern Electric Power Company	2.4	3.5	3,5	4.7	15.1	6.6	53.1	!	46.9	69.5	18.3	9.3	2.5
BBB- Median	3.0	4.7	4.7	3.6	23.1	4.3	53.1	<b>1.</b>	46.9	101.9	18.3	9.3	68.2
BB+ IDR													
Nevada Power Company d/b/a NV Energy	<b>e</b> .	3.0	2.8	5.0	12.1	8.3	55.5	1	44.5	0.06	21.9	4.7	75.0
Sierra Pacific Power Company d/b/a NV Energy	2.4	3.9	3.5	4.4	14.8	8.8	55.9	1	44.1	42.7	19.6	8.2	190.0
Tucson Electric Power Company	2.5	4	3.8	4.0	17.3	69. 69.	64.4		35.6	75.9	19.8	1.1	
BB+ Median	2.4	3.8	3.5	4.4	14.8	6.8	6.99	1	14	75.9	19,8	6.2	75.0

<sup>\*</sup>Excludes debt, revenue, amortization, and interest expense associated with the issue of utility tariff bonds, sometimes referred to as rate reduction bonds or securitization bonds. IDR - Issuer default rating. Source: Company reports, Fitch.



### Utility Distribution Companies (As of Dec. 31, 2011)

(As of Dec. 31, 2011)	1	(x) anatomo (x)		-	000000			Conite! Structure (%)	_	Linnidity	Profitability (%)		Dividenda
	Selection	Coverage (A)	1033		D. Balba		T T	tel Ushala	000000	End country		1	
	Operating EBIT/	Operating EBITDA/	Interest	Debt	FF0/		Total Debt/	Equity/	Equity/				Dividend
	Interest	Interest	Interest	Operating	Debt	F10	Total	Total	Total	% Internal	Operating	•	Payout
Utility Distribution Companies	Expense	Expense	Expense	EBITDA (x)	(%	æ	Capital	Capital	Capital	Generation	Margin	2	Ratio (%)
A+ IDR													
NSTAR Electric*	5.3	7.3	5.9	2.6	25.2	4.0	43.9	0.5	55.6	122.3	20.0	1.5	68.3
Washington Gas Light Company	4.1	6.3	7.1	2.7	36.0	2.8	40.3	9.0	58.9	8.76	12.6	6.0	107.4
A+ Median	4.7	5.8	8. 8.	2.7	30.6	3.4	43.1	0.7	57.2	110.0	16.3	9.5	87.8
A IDR													
Nicor Gas Company	4.6	10.5	12.8	2.8	39.9	2.5	8.65	1	40.2	106.6	7.2	7.8	1 <b>5</b>
San Diedo Gas & Flactric Co		1.	7.4	3.5	27.3	3.7	51.6	<del>6</del> ,	48.7	47.7	22.4	12.6	1
Southern California Gas Company	· C	10.8	10.8	91	56.6	8,1	37.9	0.3	61.7	73.6	12.7	<b>4</b> .0	17.4
Countries Camerina Cas Company	9	• -	90	2.8	39.9	2.5	5.	10	48.7	73.6	12.7	12.6	90.7
	?	<u>:</u>	!	ì	!	•	!	!					ļ
	ç	4	¢	36	30 B	0	50.6		48.3	96 A	13.6	66	7.78
Central Hudson Gas & Electric Corp.	9		) u	o e	9.46	9 6	9 4	3	200	400	9 0	4 CT	. 6
Laclede Gas Company	37.	4.0	D (	9 1	0.07	n ,	0; ;	1	† ¢	0.001	9 6	7	3 2
UGI Utilities, Inc.	4.7	5.9	20.0	5.5	32.2	- ·	47.1	1 :	92.9	122.2	- 1	O 6	2.0
A- Median	3.0	5.4	eo vo	e.	32.2	3.1	9.0g	<u>-</u> :	4.84	122.2	13.6	12.8	84.3
888+1DR									;	!	;		į
AEP Texas Central Company*	3.8	6.1	4.6	2.5	23.5	4.3	38.6	1	<del>4</del> .	40.8	28.9	3.5	- 6
AEP Texas North Company	6. 5.5	8. 8.	5.2	1.	23.1	4.3	55.9	l	<b>4</b> 4.1	68.8	27.8	12.6	37.5
American Transmission Systems, Inc.	4.6	5.4	4.2	3.4	17.5	5.7	48.5	1	51.5	(4.6)	36.6	4.6	297.5
Atmos Energy Corp.	3.0	4.4	4.7	3.6	23.6	4.2	53.2	I	46.8	73.6	1.1	9.4	59.6
Central Maine Power Company	5.2	6.4	6.9	2.7	34.6	2.9	36.1	0.2	63.7	42.0	31.8	10.4	1
Consolidated Edison Company of New York Inc	i et	5.4	5.8	4	26.1	60	48.8	5.0	50.6	125.5	19.9	9.7	9.69
Delmarya Power & Light Company	9 65	i ki	d.	(P)	21.4	4.7	51.8		48.2	20,50	11.4	8.4	84.5
New York State Fleeting & Car	3.6	17	6.7	25	29.8	46	6.04	0	50.2	77.5	12.1	9.4	1263
Cronde & Bockland Diffice Inc	) r	- <del>-</del>	4	, ec	25.4	6	53.4	¦	46.6	136.2	13.3	10.0	80.4
DECOMPTON CONTRACT OF CONTRACT	2 7	ď	uc uc	2.0	34.8	ō	43.6	2.5	53.9	96	17.7	33	708
Debense Fleetin Deman Company	t e	9 60	7	77	17.8	140	53.1	}	46.9	53.7	10.2	60	25.3
Distinct Endusing Company of North Compined International	- 6	) 4 ) 4	e e	r et	G 45	0			64.2	97.6	20.8	7.4	63.3
Cubic Cervice Company of 1992 Carolina, incorporated	9	e e	e e		9 6	e i e	47.0	١	52.1	67.5	15.3	1.5	57.6
Configuration Companies	t ut	4	e e	i c	27.6	9	50.5	69	10.00	23.00	481	46	47.9
	) 46 66	i vo			25.8	a c	69	2	50.4	71.2	10.00	60	80.4
988 DR	2	•	i	•		;	!	!					•
Atlantic City Electric Company*	2.3	₹.	4.1	<b>⊕</b>	19.3	5.2	51.6	1	48.4	98.6	10.0	5.2	1
Baltimore Gas and Electric Company*	2.9	<b>8</b> .4	4.3		20.1	5.0	43.0	7.5	49.5	46.6	11.1	5.8	69.7
CenterPoint Energy Houston Electric LLC*	3.2	5.0	4.7	3.0	24.7	4	42.1	1	67.9	100.3	26.2	41.9	l
Connecticut Light & Power Company	3.4	5.0	<b>4</b> .	4.0	17.4	5.7	52.6	=	46.3	62.1	18.2	10.4	97.2
Jersey Central Power & Light Co.	3.3	5.3	3.7	3.1	16.4	6.1	43.2	I	56.8	(69.8)	14.5	5.8	347.2
Metropolitan Edison Company	3.0	9.9	3.4	3.2	12.4	œ 	55.1	I	44.9	(0.66)	12.7	7.2	338.2
Oncor Electric Delivery Company	3.2	5.1		3.3	21.9	4.6	43.3	l	26.7	76.5	35.6	5.2	39.5
Potemac Edison Ca.	4.2	÷.	<del>0</del> .6	3.9	23.9	4.2	62.5	l	37.5	132.5	11.9	11.7	
PPL Electric Utilities Corporation	3.6	9.0	₩.	3.5	17.9	5.6	44.7	6,5	46.8	64.9	18.4	9.7	53.2
West Penn Power Company	5.7	8.3	7.6	3.0	26.2	B.	52.1	1	47.9	86.3	11.4	10.	71.4
Western Massachusetts Electric Company*	3.9	5.4	5.1	4.2	18.2	5.5	6,19		48.1	33.6	21.6	5.5	60.5
BBC Median	3.3	F.9	4.5	3.4	19.3	40 C4	51.6	6.5	4.84	64.9	14.5	9.7	
"Excludes debt, revenue, amortization, and interest expense associated with the issue of utility tariff bonds, sometimes referred to as rate reduction bonds or securitization bonds. IDR - Issuer default rating.	associated with the	s issue of utility t	ariff bonds, sor	netimes referre	d to as rate r	eduction bo	inds or securiti	zation bonds.	IDR – Issue	r default rating	. Continued on next page.	next pag	øj.

Source: Company reports, Fitch.

5

U.S. Utilities, Power & Gas Financial Peer Study

June 22, 2012



## Utility Distribution Companies (Continued) (As of Dec. 31, 2011)

	ladaros	Inferest Coverage (v)		_	average		Canital	Capital Structure (%)	-	Linuidity	Profitability (%)	1%	Dividends
	Operating	Operating	FFO +					Total Hybrid	Common				Соштоп
	EBIT	EBITDA/	Interest	Dabt	FF0.				Equity/				Dividend
	Interest	Interest	Interest	Operating	Debt	E	Total	Total	Total	% Internal	Operating		Payout
Utility Distribution Companies	Expense	Expense	Expense	EBITDA (x)	Š	- 1	Capital	Capital	Capital	Generation	Margin	ROE	Ratio (%)
BBB- IDR													
Ameren Illinois Company	3.3	4.9	4.0	2.5	24.7	4.1	1.14	8'0	58.2	49.6	16.4	7.9	169.4
Commonwealth Edison Company	2.7	4.2	3.5	3,8	15.7	6.4	45.1	0.8	54.1	52.1	16.3	0.0	72.1
Michigan Consolidated Gas Company	3.5	4.9	5.8	3.5	28.2	3.5	51.2	1	48.6	158.3	15.0	10.7	73.4
Ohio Edison Company	2.6	4.1	3.6	3.1	20.7	4.8	0.99	0.2	33.7	37.8	17.7	15.7	209.4
Pennsylvania Electric Company	2.3	3.2	4.0	5,3	17.5	5.7	55.6	1	4.4	130.1	14.7	8.8	111.1
Pennsylvania Power Company	5.6	8.4	5.3	9.1	31.5	3.2	41.2	1	58.8	85.7	18.9	20.8	156.3
Rochester Gas & Electric Corp.	2.1	2.9	4.0	3.7	27.9	3.8	54.0	İ	46.0	79.4	15.5	9.2	163.9
BBB-Median	2.7	4.2	<b>4</b> .0	3.5	24.7	7	51.2	8.0	48.8	79.4	16.3	6. 6.	156.3
BB+ IDR													
Cleveland Electric Illuminating Company	9,1	2.6	2.5	5.5	10.3	9.7	58.9	0.5	40.6	273.2	23.6	, 5	90.1
Toledo Edison Company	1.9	2.6	1.6	5.4	4.5	22.2	61.8	0.3	37.9	(85.0)	16.8	9.5	97.1
BB+ Median	1.7	2.6	2.1	5.5	7.4	16.0	60.3	7.0	39.3	94.1	20.2	7.3	93.6
IDR - Issuer default rating.													
Source: Company rapolis, riter.													



## Competitive Generating Companies

		2											
(As of Dec. 31, 2011)		;		•			Ġ		á	1	D 676 - 1 116 400	:	Observe of the second
,	Operating	interest Coverage (x) Operating Ing EBITDA/		Debt/ Operating	FFO/	Debt	Total Debi	Total Hybrid	Common Faulty/Total	% Internal	Operation		Common
Competitive Generation Companies	Expense	Expense	Expense	(x)	(%)	E	Capitaí	Capital		Generation	Margin	ROE	Ratio (%)
BBB+ IDR							ı						
Exelon Generation Company, LLC	12.3	14.8	15.7	<u>-</u> .	87.5	Ξ	31.2	0.0	68.7	117.0	28.1	22.3	2.6
PSEG Power LLC	8.6	7.6	7.0	4.1	44.6	2.5	33.6	1	66.4	176.3	28.8	21.0	45.5
Southern Power Company	3.5	4.8	5.3	3.2	27.4	3.6	50.3	l	49.7	125.9	27.2	12.0	56.2
BBB+ Median	8.6	9.7	7.0	4.1	44.6	2.2	33.6	1	66.4	126.9	28.1	21.0	45.5
BBBIDR													
FirstEnergy Solutions Corp.	4:1	2.5	3.9	7.0	16.9	5.9	57.0	1	43.0	102.9	8.8	(1.6)	
PPL Energy Supply LLC	6.2	7.3	5.5	2.1	29.0	3.4	45.9	0.2	53.9	68.2	21.2	18.0	41.1
BBB Median	3.8	4.9	4.7	4.6	23.0	4.7	51.4	6.4	48.4	85.8	14.0	8.2	20.6
888-IDR													
Allegheny Energy Supply Company	<b>1</b> .8	3.2	4.1	5,5	17.7	5.7	38.6	1.3	60.1	374.2	6.9	0.	28.6
BBB- Median	1.8	3.2	4.	10 10	17.7	5.7	38.6	1.3	60.1	374.2	<b>8</b> .6	<u>.</u>	28.6
BB+10R													
Ameren Energy Generating Company	2.6	4.4	4.1	3.1	25.0	4.0	44.6	0.4	55.1	152.5	16.3	4.4	1
BB+ Median	2.6	1.4	4.1	3.1	25.0	4.0	44.6	9.4	55.1	152.5	16.3	4.4	1
BB IOR													
Covanta Energy Corp.	2.5	4.5	4.5	4.9	16.0	6.2	9.99	0.2	33.3	278.8	15.1	19.8	14.6
SB Median	2.5	4.5	4.5	6.4	16.0	6.2	9.99	0.7	33.3	278.8	15.1	19.8	14.6
B+IDR													
AES Corporation	2.1	2.8	2.4	4.5	10.7	9.3	69.8	11.8	18.4	118.7	21.7	6.0	1
GenOn Americas Generation, LLC	1.9	3.0	2.4	3.4	14.1	7.1	31.1		689	166.0	11.5	4.0	625.0
GenOn Mid-Atlantic, LLC	3.3	5.0	3.9	2.1	27.9	3.6	18.5		81.5	103.4	21.2	2.7	95.2
NRG Energy, Inc.	1.1	2.3		5.9	11.8	8	56.1	1.7	42.2	48.3	8.8	2.4	4,
B+ Median	2.0	2.9	2.5	3.9	13.0	7.8	43.6	0.0	55.5	111.0	16.3	1.7	60.0
BIDR													
Calpine Corporation	1.0	1.7	1.6	7.8	4.	22.8	70.5	0.4	29.1	113.5	11.5	(4.2)	l
GenOn Energy, Inc.	6.0	1.7	1.2	B.8	5.0	48.9	51.7	1	48.3	58.9	11.5	(3.5)	I
B Median	6.0	1.7	4.4	7.3	3.2	35.9	61.1	0.2	38.7	88.2	11.5	(3.9)	1
B-IOR													
Edison Mission Energy	0.3	1.0	1.9	13.2	7.3	13.7	9.6 <i>L</i>	0.0	20.4	89.9	7.3	N. M.	I
Midwest Generation LLC	3.6	7.4	10.5	1.9	68.6	6.1	14.5	ļ	85.5	135.0	10.7	N.W.	(83.3)
B-Median	1,9	4.2	6.2	7.5	38.0	7.6	47.0	0.0	53.0	112.4	0.6	Ÿ. ¥.	(41.7)
CCC IDR													
Texas Competitive Electric Holdings	0.1	0.5	1.2	16.3	6.	53.7	128.1	0.4	Ä.	182.6	6,1	ž Z	l
CCC Median	0.1	9.0	1.2	16,3	4.9	53.7	128.1	9.0	¥.X	182.8	6.1	Σ. Z	1
CC IDR													
Dynegy Inc.	(0.6)	0.3	7.0	19.6	(6.1)	(16.4)	62.3	1	37.7	(8.3)	(14.6)	Σ	0.0
CC Median	(0.6)	0.3	7.0	19.6	(6.1)	(16.4)	62.3	1	37.7	(8.3)	(14.6)	Σ	I
seiter threath and I begins the M.M.	Seiger #1												

N.M. – Not meaningful. IDR – Issuer default rating. Source: Company reports, Fitch. U.S. Utilities, Power & Gas Financial Peer Study

June 22, 2012



# Global Power Utilities with Utility Tariff Bonds --- Unadjusted Credit Measures

(As of Dec. 31, 2011)				•				***	-		100	á	1
	interest	Interest Coverage (x)	FF0 +		Leverage		Capital Structure (%)	inte (%)	Liguidity	I	Fromaonity		Common
Nomen Memo	Operating EBIT/Interest Expense	EBITDA/ Interest	Interest/ Interest	Debt/ Operating EBITDA (x)	FFO/ Debt (%)	Debt/ FFO (x)	Total Total Hybrid Debt/Total Equity/Total Capital Capital	Hybrid Common ty/Total Equity/Total Capital Capital		% Internal Generation	Operating Margin	ROE	Dividend Payout Ratio
AFP Texas Central Company	2.0	4.0	3.5	4.3	14.4	7.0			33.8	40.8	30.6	73.2	9.1
Ameren Corporation	3.0	4.	4.7	3.3	23.8	4.2	46.9	0.5	52.6	143.0	18.1	6.6	72.3
American Electric Power Co., Inc.	3.1	6.4	4.5	4.0	17.8	5.6	55.3		44.7	102.0	19.3	13.7	46.3
Atlantic City Electric Company	2.0	4.0	3.9	4.3	16.8	0. 0.	29.7	1	40.3	98.6	11.0	5.2	I
Baltimore Gas and Electric Company	2.7	<b>4</b> .9	4.4	3.8	18.2	5.5	49.2	6.7 4.	44.1	46.6	11.5	ις: (3)	69.7
CMS Energy Corporation	2.4	3.7	3.6	4.7	14.8	80.09 80.09	70.4	0.4	29.3	104.4	15.4	14.3	50.8
CenterPoint Energy Houston Electric LLC	2.2	4.4	4.2	4.0	18.3	5.5	60.5	ຄົ 	39.5	100.3	26.7	<b>4</b> 1.9	1
CenterPoint Energy, Inc.	2.2	3.7	3.9	4.2	18.6	5.4	68.5	<del>د</del> ا	31.5	93.8	15.4	36.6	24.8
Consumers Energy Company	3.7	5.8	5.1	3.0	24.2	<b>4</b> .1	50.9	0.2	48.8	103.9	15.8	11.0	4.08
DTE Energy Company	2.9	4.9	5.1	3.4	24.9	0.4	53.1	9.0	46.0	7.76	16.0	10.4	54.7
Detroit Edison Company	3.5	6.3	5.8	2.8	26.9	3.7	55.3		44.7	73.7	19.7	10.7	69.8
Dominion Resources, Inc.	3.3	4.5	5.0	5.3	16.5	6.1	62.5	3.0	34.5	49.1	19.9	12.0	80.2
FirstEnergy Corp.	2.3	3.8	3.9	<b>4</b> .	15.5	6.5	56.6	4	43.4	80.3	13.0	₩.	89.5
Florida Power & Light Company	5.4	7.4	8.2	2.7	35.5	2.8	42.0	<u>.</u>	58.0	57.0	19.6	10.3	37.5
Jersey Central Power & Light Co.	3.0	5.0	3.6	3.3	15.7	6.4	46.8		53.2	(28.8)	4. 6.	9.8	347.2
NSTAR Electric	5.0	7.7	4.0	2.4	28.4	3.5	45.2		54.3	122.3	19.5	1.5	68.3
NSTAR LLC	4.3	6.7	6.2	3.0	25.6	3.9	55.6		43.9	116.3	18.7	13.5	65.4
NextEra Energy, Inc.	3.3	4	5.1	4.6	18.6	5.4	58.8	3.0 3.	38.2	46.7	22.4	13.1	47.8
NorthWestern Corporation	3.1	6.4	5.3	4.2	21.0	4.8	56.4	¥   	43.6	93.7	14.9	=	55.9
Northeast Utilities	3.2	5.1	4.5	4.3	16.2	6.2	57.2	0.6	42.2	65.0	17.8	10.1	4.64
Oncor Electric Delivery Company	3.0	5.0	4.6	3.3	21.6	9.4	45.6	ا ت	54.4	2.97	35.1	5.2	39.5
Pepco Holdings, Inc.	2.4	4.0	4.2	9.4	16.2	6.2	53.7	₹ 	46.3	43.3	10.1	9.0	94.8
PG&E Corp.	2.8	5.9	7.0	3.4	30.0	3.3	53.4		46.1	64.6	13.0	7.2	83.4
Pacific Gas & Electric Company	2.9	6.1	7.3	3.3	31.2	3.2	52.7	0.5	46.8	64.5	13.0	7.0	86.2
Public Service Company of New Hampshire	1.4	7.6	5.8	3.2	19.5	5.1	50.1	1	49.9	38.4	17.8	10.0	59.0
Public Service Electric & Gas Company	3.7	6.0	5.8	2.8	28.6	3.5	52.9		47.1	97.5	15.7	1.5	57.6
Public Service Enterprise Group Incorporated	5.8	7.8	6.7	2.2	33.5	3.0	44.1	iñ 	55.9	128.2	24.7	15.1	46.1
Tucson Electric Power Company	2.6	4	3.9	4	17.0	5.9	64.8		35.2	75.9	19.8	1.1	I
Union Electric Company	3.3	5.3	5.7	3.6	24.8	<b>4</b> .0	20.0	0.5	49.5	113.8	20.6	7.1	140.4
Western Massachusetts Electric Company	3.7	5.7	5.5	B)	20.5	4.9	53.2		46.8	33.6	21.1	10.5	60.5
Source: Company reports, Fitch.													



### Corporate Ratio Definitions

## Earnings Before Interest and Taxes (EBIT) Interest Coverage

Numerator: Operating income before nonrecurring items plus above-the-line state and federal income taxes, if applicable.

Denominator: Gross interest expense including distributions on hybrid securities, before credit for capitalized interest and/or debt component of allowance for funds used during construction (AFUDC). For parent companies, subsidiary preferred dividends are also added to interest expense.

## Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) Interest Coverage

Numerator: Operating income before nonrecurring items plus above-the-line state and federal income taxes, if applicable, plus depreciation and amortization, plus rental expense.

Denominator: Gross interest expense including distributions on hybrid securities, before credit for capitalized interest and/or debt component of AFUDC. For parent companies, subsidiary preferred dividends are also added to interest expense.

## Funds from Operations (FFO) Interest Coverage

Numerator: Net cash flow from operations, as reported, before changes in working capital plus gross interest expense including distributions on hybrid securities, before credit for capitalized interest and/or debt component of AFUDC.

Denominator: Gross interest expense including distributions on hybrid securities, before credit for capitalized interest and/or debt component of AFUDC. For parent companies, subsidiary preferred dividends are added to interest expense.

### Debt/EBITDA

Numerator: Total long- and short-term debt, including the debt component of hybrid securities, off-balance sheet debt or debt equivalents, and capitalized lease

obligations, less utility tariff bond debt plus current portion of long-term debt and capitalized lease obligations, less nonrecourse debt.

Denominator: Operating income before nonrecurring items plus above-the-line state and federal income taxes, if applicable, plus depreciation and amortization, plus rental expense.

### FFO/Debt

Numerator: Net cash flow from operations, as reported, before changes in working

Denominator: Total long- and short-term debt, including the debt component of hybrid securities, off-balance sheet debt or debt equivalents, and capitalized lease obligations, less utility tariff bond debt plus current portion of long-term debt and capitalized lease obligations, less nonrecourse debt.

### Debt/FFO

Numerator: Total long- and short-term debt, including the debt component of hybrid securities, off-balance sheet debt or debt equivalents, and capitalized lease obligations, less utility tariff bond debt plus current portion of long-term debt and capitalized lease obligations, less nonrecourse debt.

Denominator: Net cash flow from operations, as reported, before changes in working capital.

## Debt as Percentage of Total Capitalization

Numerator: Total long- and short-term debt, including the debt component of hybrid securities, off-balance sheet debt or debt equivalents, and capitalized lease obligations, less utility tariff bond debt plus current portion of long-term debt and capitalized lease obligations, less nonrecourse debt.

Denominator: Total long- and short-term debt, including the debt component of hybrid securities, off-balance sheet debt or debt equivalents, and capitalized lease obligations, less utility tariff bond debt plus current portion of long-term debt and capitalized lease obligations, less nonrecourse debt, plus the equity portion of hybrid securities plus common equity, plus minority interest.



## Corporate Ratio Definitions (Continued)

## Hybrid Equity as Percentage of Total Capitalization

Numerator: Equity portion of hybrid securities.

Denominator: Total long- and short-term debt, including the debt component of hybrid securities, off-balance sheet debt or debt equivalents, and capitalized lease obligations, less utility tariff bond debt plus current portion of long-term debt and capitalized lease obligations, less nonrecourse debt, plus equity portion of hybrid securities plus common equity, plus minority interest.

## Common Equity as Percentage of Total Capitalization

Numerator: Total common equity.

Denominator: Total long- and short-term debt, including the debt component of hybrid securities, off-balance sheet debt or debt equivalents, and capitalized lease obligations, less utility tariff bond debt plus current portion of long-term debt and capitalized lease obligations, less nonrecourse debt, plus equity component of hybrid securities plus common equity, plus minority interest.

## Percentage of Internal Cash Generation

Numerator: Cash from operations, as reported before changes in working capital, minus preferred/preference and common dividends.

Denominator: Gross capital expenditures plus investments in nuclear decommissioning funds.

### Operating Margin

Numerator: Operating income before nonrecurring items plus above-the-line state and federal income taxes, if applicable.

Denominator: Total operating revenue.

## Return on Average Common Equity

Numerator: Earnings available for common shareholders.

U.S. Utilities, Power & Gas Financial Peer Study

June 22, 2012

Denominator: Beginning-of-year common equity plus end-of-year common equity divided by two.

### Common Dividend Payout

Numerator: Common dividends paid.

Denominator: Earnings available for common shareholders.

Note: The above ratios are adjusted to exclude the effect of issuing utility tariff bonds, sometimes referred to as rate reduction bonds or transition bonds. The adjustments affect the calculations of EBIT, EBITDA, interest expense, debt, FFO, and internal cash generation. The income statement adjustments have the effect of reducing EBITDA by the amount of payments to the utility tariff bond trust, which is roughly equivalent to the interest and principal payments on the utility tariff bonds. EBIT and interest expense are reduced by the amount of the interest payments on the bonds. The full amount of the utility tariff bonds is also excluded from debt in calculating leverage ratios and the debt amortization is added back to FFO and when calculating ratios using those measures.

ALL FICH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK:
HTTP://FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS. IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCYS PUBLIC WEB SITE AT
WWW.FITCHRATINGS.COM. PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. FITCHS CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF
INTEREST, AFFILIATE FIREWALL, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE CODE OF CONDUCT SECTION OF THIS SITE.

sorbibled except by permission. All rights reserved, in issuing and maintaining its ratings, Firth refles on factual information in reserves from issuers and underwrites and from other sources. Fillich believes to be credible. Fillich conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of the factual information and the sources, to the extent such sources are available for a given security or in a given security is offered and sold endor the issuer is located, the availability of relevant public information, access to the management of the issuer and its advisers and requirements and protections such as audit reports, agricultures eletters, appraiseds, acquarial reports, length of the information procedures letters, appraiseds, acquarial reports, length of the information procedures letters, appraised, and a variety of other factors. Users of Fitch's ratings should understand that availability of independent and competent third-party verification sources with respect to the particular security or in egendent and competent that a security verification sources with respect to the particular security or in connections and predictions anot an articular security or onditions that were not anticipated a Copyright © 2012 by Flich, Inc., Flich Ratings Ltd. and its subsidiaries. One State Street Plaza, NY, NY 10004 Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in par

that Fich is continuously evaluating and udditing. Therefore, ratings are the collective work product of Fich and in individual, is solely responsible for a rating. The rating does not address the risk of loss due to risks other than certain the rating does not address the risk of loss due to risks other than certain the securities. The individuals are named for contact purposes only. A report providing a Fifch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to reversible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fifch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to reversible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fifch rating is neither a prospectus of Fitch. Fifch does not provide investment advice of any security. Fitch receives fees from issuers, insurers, guarantors, offer obligons, and underwriters for rating security. Fitch receives fees from issuers, insurers, guarantors, offer obligons, and underwriters of guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are applicable currercy equivalent) per issue. In certain cases, Fitch will rate all or a number of source of guaranteed by a particular insurer or guaranteed by a particular insurer. The information in this report is provided "as is" without any representation or warranty of any kind. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion is based on established criteria and methodologies expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Flich statement by Flich to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers

# FitchRatings

# Corporate Headquarters

# New York

London

# One State Street Plaza New York, NY 10004

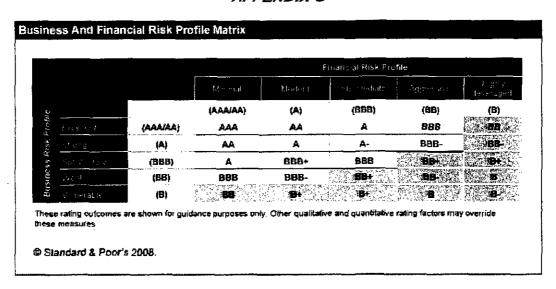
Fitch Ratings www.fitchratings.com Fitch Solutions www.fitchsolutions.com

Fitch Group

USA +1 212 908 0500 +1 800 75 FJTCH

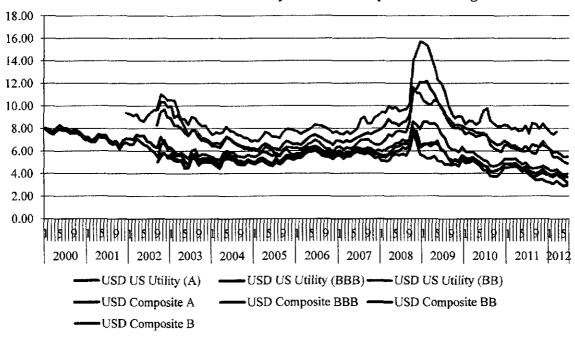
30 North Colonnade Canary Wharf London E14 5GN UK +44 20 3530 1000

### APPENDIX G

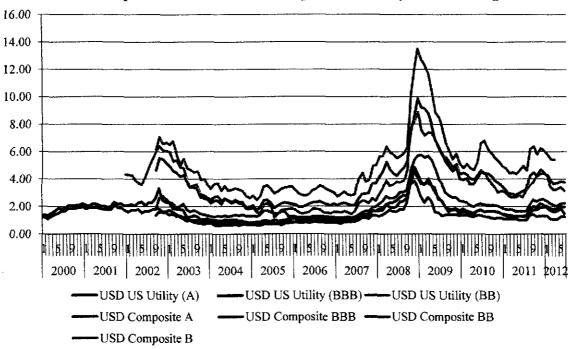


APPENDIX H

Yields on 10-Year U.S. Corporate Bonds by Credit Rating



Yield Spreads on 10-Year U.S. Corporate Bonds by Credit Rating



Source: Bloomberg. Spread is measured against 10-Year Treasury Note.

### APPENDIX I

### Default Rates by S&P Credit Rating

	Years Af	ter Rating Ass	igned
Rating	5	10	15
AAA	0.43	0.90	1.32
AA+	0.33	0.90	1.61
AA	0.50	1.14	1.60
AA-	0.50	1.12	1.41
A+	0.78	1.90	3.35
A	0.76	2.15	3.11
A-	1.01	2.55	3.33
BBB+	1.81	4.08	6.05
BBB	2.12	4.97	7.13
BBB-	3.76	8.19	11.81
BB+	5.77	11.55	15.10
BB	8.75	15.79	18.82
BB-	11.96	21.29	26.09
B+	17.74	27.43	32.53
В	24.56	31.88	35.93
B-	32.42	38.79	41.08
CCC/C	51.09	56.51	60.00

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

The Dayton Power and Light Company Actual and Projected Financial Ratios Case No. 12-426-EL-SSO Scenario: As-Filed 2011 - 2017

Data: Historical and Forecasted

Type of Filing: Original

Work Paper Reference No(s).: WJC-1.A

Witness Responsible: William J. Chambers Page 1 of 1

WJC-1

Dividends	Common Dividend	Payout	Ratio	(M)						
bility			ROE	(T)						
Profitability		Operating	Margin	(K)						
Liquidity		Internal	Generation	(i)						
ructure	Common	Equity/	Fotal Capital	(H)						:
Capital Structure		Total Debt/	Total Capital Total Capital Generation	( <u>G</u> )						
age		Debt/	FFO	(F)						
Leverage	Debt/	Operating	EBITDA	(E)						
overage	FFO + Interest/	Interest	Expense	(Q)						
Interest Coverage	Operating EBITDA/	Interest	Expense	(2)			,			
			Year	(B)	2011	2013	2014	2015	2016	2017
		Line	No.	€	-	7	'n	4	ς.	9

### Notes & Sources:

- Line 8 / (-1 \* Line 4) from WJC-1.A.
- (Line 13 Line 4) / (-1 \* Line 4) from WJC-1.A.
  - Line 22 / Line 8 from WJC-1.A.
- Line 22 / Line 13 from WJC-1.A.
- Line 22 / (Line 20 + Line 26) from WJC-1.A.
- Line 24 / (Line 20 + Line 26) from WJC-1.A.
- Equal to (Funds From Operations Dividends paid to DPL Inc + Issuance of pref. stock) / Capital Expenditures. (Line 13 Line 16 + Line 17) / Line 15 from WJC-1.A.
  - Equal to Operating Income / Total Revenue. Line 3 / Line 2 from WJC-1.A.
- Equal to (Net Income + Issuance of pref. stock) / Average Common Shareholder's Equity. (Line 6 + Line 17) / Line 25 from WJC-1.A.
  - Equal to Dividends paid to DPL Inc / (Net Income + Issuance of pref. stock). Line 16 / (Line 6 + Line 17) from WJC-1.A.

The Dayton Power and Light Company
Case No. 12-426-EL-SSO
Required Data for Financial Ratio Calculations (\$ in millions)
Scenario: As-Filed
2011 - 2017

Witness Responsible: William J. Chambers Data: Historical and Forecasted
Type of Filing: Original
Work Paper Reference No(s).: WJC-1.B; WJC-1.C; WJC-1.D; WJC-11
Line

WJC-LA

Page 1 of 1

Description   2011   2013   2014   2015   2017	William Control of the Control of th	Source	(f)		Line 7 from WJC-1.B.	Line 22 from WJC-1.B.	Line 26 from WJC-1.B.	Line 18 from WJC-1.B.	Line 35 from WJC-1.B.		Line 3 + Line 5.			Line 7 from WJC-1.D.	Line 5 from WJC-1.D.	Line 11 - Line 12.		See Below.	-1 * Line 12 from WJC-1.D.	Line 13 from WJC-1.D.			Line 25 from WJC-L.C.	Line 38 from WJC-1.C.	Line 20 + Line 21.		Line 36 from WJC-1.C.	See Below. Tine 30 from WIC LC
Description   2011   2013   2014   2015					Lin	Lin	Lin	Lin	Lin		Lin			Lin	Lin	Ľ.		See	-1*	Lin			L'in	Ľ.	Lin		Lin	See
Description   2011   2013   2014   2015		2017	(H)																									
Description   2011   2013   2014		2016	(D)																									
Description  (B)  (C) (D)  Statements of Income  Total Revenue  Gross Interest Expense  Gross Interest Expense  Begin BITDA  Statement of Cash Flows  Net Cash Provided by Operating Activities  Capital Expenditures  Bit and Strom Operations  Capital Expenditures  Short-Term Debt  Long-Term Debt  Long-Term Debt  Common Shareholder's Equity  Average Common Shareholder's Equity  Salation  (C) (D) (D) (D) (D) (D) (D) (D) (D) (D) (D		2015	(F)																									
Statements of Income Total Revenue Gross Interest Expense Gross Interest Expense Betweeting Income Gross Interest Expense Gross Interest Expense Betweeting Income Statement of Cash Flows Net Cash Provided by Operating Activities Change in Certain Assets and Liabilities Funds From Operations Statement of Cash Flows Net Cash Provided by Operating Activities Statement of Cash Flows Net Cash Provided by Operating Activities Statement of Cash Flows Net Cash Flows Net Cash Flows Statement of Cash Flows Net Cash Flows Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Change in Certain Assets and Liabilities Statement of Cash Flows Statement of Cash Flow		2014	(Ē)																									
Statements of Income Total Revenue Gross Interest Expense Gross Interest Expense Depreciation and Amortization Net Income Statement of Cash Flows Net Cash Provided by Operating Activities Change in Certain Assets and Liabilities Funds From Operations Siatement of Cash Flows Net Cash Provided by Deprating Activities Statement of Cash Flows Net Cash Provided by Deprating Activities Statement of Cash Flows Statement of Cash Flows Net Cash Provided by Operating Activities Short-Term Dept Inc Issuance of pref. stock Short-Term Debt Conmon Shareholder's Equity Statement Shareholder's Equity Statement Shareholder's Equity Statement Statement Shareholder's Equity Statement St		2013	(D)																									
31 I		2011	(c)		<del>\$</del>	<del>•</del>	€9	<del>•</del>	€9		₩			<del>64</del> 9	<b>€</b>	\$		€4	<del>\$</del>	<del>\$</del>			€	<del>∽</del>	·		₩	₩ ₩
31 I		Description	(B)	atements of Income	yai Revenue	perating Income	ross Interest Expense	epreciation and Amortization	et Income		perating EBITDA		atement of Cash Flows	et Cash Provided by Operating Activities	hange in Certain Assets and Liabilities	unds From Operations		apital Expenditures	ividends paid to DPL Inc	suance of pref. stock		plance Sheet	ort-Term Debt	mg-Term Debt	otal Debt		ommon Shareholder's Equity	Average Common Shareholder's Equity
• 1		Line No.	(A)	- St	2 T	ص ص	4	S D	ž 9	7	్ *	6		ž	12 CI	13 FL	41	15 C		17 Is	81			21 K		23		

Notes & Sources:
2011 data from DP&L Financial Statements from 2011 DPL Inc. Annual Report. All other sources described in column (f).
15 Change in Line 10 from WJC-1.C. 2012 PPE calculated as average 2011 and 2013 PPE.
25 (Line 24, + Line 24<sub>1-1</sub>) / 2. 2013 uses an imputed 2012 value of \$1,434 calculated from Internal Documents. See WJC-11.

The Dayton Power and Light Company
Case No. 12-426-FI.-SSO
Projected Statements of Income (unaudited) (\$ in millions)
Scenario: As-Filed
2013 - 2017

Data: F Type o: Work P Addi	Data: Forecasted  Type of Filing: Original  Work Paper Reference No(s): WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING with Detail xlsx,  Additional detail for financial integrity 9.28.12.xlsx	ls Cost of Debt and Cl	LJ-1- FILJNG with Dk	etail.xlsx,			WJC-1.B Page 1 of 1 Witness Responsible: William J. Chambers
Line No.	Description	2013	2014	2015	2016	2017	Source
€	(B)	(0)	(D)	(E)	(F)	(5)	(H)
- (	Operating Revenues	÷					
7 (1)	Retail Recovery of Non-bynassable Charge	<b>A</b> ₩1					Internal Documents. Internal Documents.
4	Whotesale	¥ <del>5</del>					Internal Documents.
5	RTO Capacity and Other RTO Revenues	₩					Internal Documents.
9	Other Revenues	<del>\$</del>					Internal Documents.
٠ ،	Total Revenues	¥9					Sum(Line 2 - Line 6).
×	-						
φ.	Fuel and Purchased Power						
2	Fuel Costs	<del>69</del>					Internal Documents.
Ξ	Purchased Power	645)					Internal Documents.
7	Total Fuel and Purchased Power	₩					Line 10 + Line 11.
<u>:</u> :		ţ					:
4 7	Gross Margin	<del>-</del> 9					Line 7 - Line 12.
71							
<u>0</u> !	Operating Expenses	•					
	Operation and Maintenance	<b>6</b> ∕3					Internal Documents.
<u>×</u>	Depreciation and Amortization	₩.					Internal Documents.
16	General Taxes	₽4)					Internal Documents.
50	Total Operating Expenses	<del>\$</del>					Sum(Line 17 - Line 19).
21							
22	Operating Income	<del>∨</del>					Line 14 - Line 20.
7 7		•					
* ×	EBILDA	<del>^</del>					Line 18 + Line 22.
2 2	Gross Interest Expense	<b>-</b>					Internal Documents
27	Other Interest Expense	÷4					Internal Documents
28	Total Interest Expense	64					Line 26 + Line 27.
29	Other Income (Deductions)	- 69					Internal Documents.
30							
31	Earnings Before Income Tax	<del></del>					Line $22 + \text{Line } 28 + \text{Line } 29$ .
32	•						
£ 4.	Income lax	<b>:</b> A					Line 31 * 35.8%.
35	Net Income	€4					Line 31 - Line 33.

# The Dayton Power and Light Company Case No. 12-426-EL-SSO Projected Balance Sheet (unaudited) (\$ in millions) Scenario: As-Filed 2013-2017

WJC-1.C Page 1 of 1 Witness Responsible: William J. Chambers Sum of Line 11 from WJC-1.D. Line 7 + Line 12 + Line 17. Sum(Line 29 - Line 31). Sum(Line 14 - Line 16). Sum(Line 23 - Line 26). Sum(Line 36 - Line 38). Line 20 from WJC-1.D. Sum(Line 2 - Line 6). Internal Documents. Source Line 10 + Line 11. Line 27 + Line 32. Line 33 + Line 39. Ξ 2017 ල 2016 **E** Estimated Balance at December 31, Work Paper Reference No(s).: WP-12 Proforma Financials Cost of Debt and CLJ-1-FILING with Detail xlsx; WJC-1.D 2015 2014 <u>a</u> 2013 <u>(</u> Income taxes recoverable through future revenues Accumulated depreciation and amortization Total Liabilities and Shareholder's Equity Total Property, Plant and Equipment Cash and temporary cash investments Current and Non Current Liabilities Taxes applicable to subsequent years Property, Plant and Equipment Liabilities and Shareholder's Equity Common Shareholder's Equity Unamortized investment tax credit Property, Plant and Equipment Total Other Noncurrent Assets Description Total Long Term Debt Inventories, at average cost Non Current Liabilities Total Current Assets Other regulatory assets Total Capitalization Current Liabilities Preferred Stock Accounts receivable Accounts payable Capitalization Short-term debt Deferred taxes Accrued taxes Type of Filing: Original Total Assets Data: Forecasted € 27 28 30 33 33 34 35

Projected Statement of Cash Flows (unaudited) (S in millions) The Dayton Power and Light Company Case No. 12-426-EL-SSO Scenario: As-Filed 2013 - 2017

Type of Filing: Original Data: Forecasted

Work Paper Reference No(s): WP-12 Proforms Financials Cost of Debt and CLJ-1- FILING with Detail.xlsx; WJC-1.B

WJC-1.D

Page 1 of 1

Witness Responsible: William J. Chambers Imputed value from Internal documents. Source Line 7 + Line 9 + Line 15. Ξ Sum(Line 11 - Line 14). Line 35 from WIC-1,B. Line 18 from WJC-1.B. Sum (Line 2 - Line 6). Internal Documents. Internal Documents. Internal Documents. Internal Documents. Internal Documents. Line 18 + Line 19. 2017 9 2016 Estimated Balance at December 31,  $\Xi$ 2014 2013 9 Change in Certain Current Assets and Liabilities Actual Issuance (retirement) of short-term debt Cash and cash equivalents at end of period Net cash provided by operating activities Description Net cash used for financing activities Net cash used for investing activities Actual Dividends paid to DPL Inc Balance at beginning of period Depreciation and Amortization Cash and Cash Equivalents Change in Deferred taxes Issuance of pref. stock Net Change Net Income Line ₹ ž ∞ & ⊖

### Notes & Sources:

Change in Line 29 from WJC-1.C. 2012 value average of 2011 and 2013 value. 4 6

Line 20 from previous year. 2013 value from Internal Documents.

Scenario: Pro Forma Debt Adjustment (Base Case) The Dayton Power and Light Company Actual and Projected Financial Ratios Case No. 12-426-EL-SSO 2011 - 2017

Data: Historical and Forecasted

Type of Filing: Original

Work Paper Reference No(s).: WJC-2.A

Witness Responsible: William J. Chambers

WJC-2

Page 1 of 1

st	д Б									
Dividends	Common Dividend	Payout	Ratio	<u>3</u>						
bility			ROE	(K)						
Profitability		Operating	Margin	Ð						
Liquidity		Internal	Generation	(i)						
tructure	Common	Equity/	Total Capital Total Capital Generation	(H)	3					
Capital Structure		Total Debt/	Total Capital	(O)						
ge		Debt/	FFO	(F)						
Leverage	Deht/	Operating	EBITDA	(E)						
overage	FFO +	Interest	Expense	(D)						
Interest Coverage	Operating FRITDA/	Interest	Expense	(C)						
			Year	(B)	2011	2013	2014	2015	2016	2017
		Line	No.	<b>(</b> ¥)		7	ĸ	4	<b>v</b> 1	9

## Notes & Sources:

- Line 8 / (-1 \* Line 4) from WJC-2.A.
- (Line 13 Line 4) / (-1 \* Line 4) from WJC-2.A.
  - Uine 22 / Line 8 from WJC-2.A.
- Line 22 / Line 13 from WJC-2.A.
- Line 22 / (Line 20 + Line 26) from WJC-2.A.
- Line 24 / (Line 20 + Line 26) from WJC-2.A.
- Equal to (Funds From Operations Dividends paid to DPL Inc + Issuance of pref. stock) / Capital Expenditures. (Line 13 Line 16 + Line 17) / Line 15 from WIC-2.A.
  - Equal to Operating Income / Total Revenue. Line 3 / Line 2 from WJC-2.A.
- Equal to (Net Income + Issuance of pref. stock) / Average Common Shareholder's Equity. (Line 6 + Line 17) / Line 25 from WJC-2.A.
  - Equal to Dividends paid to DPL Inc / (Net Income + Issuance of pref. stock). Line 16 / (Line 6 + Line 17) from WJC-2.A.

Required Data for Financial Ratio Calculations (\$ in millions) Scenario: Pro Forma Debt Adjustment (Base Case) 2011 - 2017 The Dayton Power and Light Company Case No. 12-426-EL-SSO

Data: Type Work	Data: Historical and Forecasted Type of Filing: Original Work Paper Reference No(s):: WIC-2.B; WIC-2.C; WIC-2.D; WIC-11	JC-2.D; WJC-11						WJC-2.A Page 1 of 1 Witness Responsible: William J. Chambers
Line No	Description	2011	2013	2014	2015	2016	2017	Source
€	(B)	<u>(</u> )	(D)	(E)	(F)	<b>(</b> 5)	(H)	(1)
1	Statements of Income							
7	Total Revenue	\$÷						Line 7 from WJC-2.B.
m	Operating Income	<del>69</del>						Line 22 from WJC-2.B.
4	Gross Interest Expense	s.						Line 30 from WJC-2.B.
Ś	Depreciation and Amortization	<del>69</del>						Line 18 from WJC-2.B.
9	Net Income	€9						Line 39 from WJC-2.B.
7								
<b>∞</b>	Operating EBITDA	s <sub>5</sub>						Line 3 + Line 5.
6								
10	Statement of Cash Flows							
=	Net Cash Provided by Operating Activities	<del>69</del>						Line 7 from WJC-2.D.
12	Change in Certain Assets and Liabilities	649						Line 5 from WJC-2.D.
13	Funds From Operations	64						Line 11 - Line 12.
14								
15	Capital Expenditures	<b>€</b> 9						See Below.
91	Dividends paid to DPL Inc	<del>\$</del> 9						-1 * Line 14 from WJC-2.D.
17	Issuance of pref. stock	€9						Line 15 from WJC-2.D.
<u>&amp;</u>								
19	Balance Sheet							
20	Short-Term Debt	€9						Line 25 from WJC-2.C.
21	Long-Term Debt	<del>49</del>						Line 38 from WJC-2.C.
22	Total Debt	<b>⊌</b> 9						Line 20 + Line 21.
23								
24	Common Shareholder's Equity	S						Line 36 from WJC-2.C.
25	Average Common Shareholder's Equity	<del>49</del>						See Below.
56	Total Capitalization	€9						Line 39 from WJC-2.C.

2011 data from DP&L Financial Statements from 2011 DPL Inc. Annual Report, adjusted for the additional \$278M long term debt. See WJC-11. All other sources described in column (I). Change in Line 10 from WJC-2.C. 2012 PPE calculated as average 2011 and 2013 PPE. (Line 24, + previous year Line 24, 1) / 2. 2013 uses an imputed 2012 value of \$1, 156 calculated from Internal Documents. See WJC-11.

23 23

The Dayton Power and Light Company
Case No. 12-426-EL-SSO
Projected Statements of Income (unaudited) (5 in millions)
Scenario: Pro Forma Debt Adjustment (Base Case)
2013 - 2017

Line \$ €

Type of Füing: Original Data: Forecasted

WJC-2.B Page 1 of 1 Witness Responsible: William J. Chambers Source (H) 2017 (G) 2016 (F) Work Paper Reference No(s): WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING with Detail xlsx, WP-12.2, WJC-2.C Additional detail for financial integrity 9.28 12 xlsx 2015 (E) 2014 (D) 2013 (C) Description (B)

Operating	Operating Revenues			
Retail		49	Internal Documents.	
Recovery of Non-bypassable Charge	passable Charge	,	Internal Documents.	
Wholesale		<del></del>	Internal Documents.	
RTO Capacity and C	RTO Capacity and Other RTO Revenues	<del></del>	Internal Documents.	
Other Revenues		4	Internal Documents.	
Total Revenues		<b>5</b> 9	Sum(Line 2 - Line 6).	
Fuel and Purchased Power	<u>ver</u>			
Fuel Costs		×	Internal Documents.	
Purchased Power		49	Internal Documents.	
Total Fuel and Purchased Power	rchased Power	64	Line 10 + Line 11.	
Gross Margin		s,	Luc / - Line 12.	
Operating Expenses				
Operation and Maintenance	tenance	S	Internal Documents.	
Depreciation and Amortization	nortization	ęα	Internal Documents.	
General Taxes		4	Internal Documents.	
Total Operating Expenses	Expenses	69	Sum(Line 17 - Line 19).	<i>خ</i>
	•			
Operating Income		44	Line 14 - Line 20.	
•				
EBITDA		٠,	Line 18 + Line 22.	
S T. Rate			See Below.	
L.T. Rate			From Workpaper 12,2,	
Additional Interest Expense	ense	<b>.</b>	See Below.	
Original Gross Interest Expense	Expense	₩.	Internal Documents.	
Actual Gross Interest Expense	xpense	٠,	Line 28 + Line 29.	
Other Interest Expense		•	Internal Documents.	
Total Interest Expense		<u>م</u>	Line 30 + Line 31.	
Other Income (Deductions)	(suc	₩.	Internal Documents.	
Earnings Before Income Tax	Tax	4	Line 22 + Line 33 + Line 33	ne 33
•				
Income Tax		44	Line 35 * 35.8%.	
Net Income		s	Line 35 - Line 37.	

26 28

Notes & Sources:
Equal to the USD US Utility BBB., 1-year rate (C0401Y Index) as of Sept. 27, 2012. From Bloomberg.
(Prior Year Line 25 from WJC-2.C \* Line 26 + Additional \$278M in LT Debt \* Line 27) \* -1

The Dayton Power and Light Company
Case No. 12-426-FL-SSO
Projected Balance Sheet (unaudited) (\$ in millions)
Scenario: Pro Forma Debt Adjustment (Base Case)
2013 - 2017

WJC-2.C Page 1 of 1 Witness Responsible: William J. Chambers LT Debt from Internal Documents + \$278M. Sum of Line 12 from WJC-2.D. Line 7 + Line 12 + Line 17. Source Sum(Line 23 - Line 26). Sum(Line 29 - Line 31). Sum(Line 14 - Line 16). Sun(Line 36 - Line 38). Line 22 from WJC-2.D.  $\Xi$ Sum(Line 2 - Line 6). Internal Documents. Line 10 + Line 11. Line 27 + Line 32. Line 33 + Line 39. See Below 2017 9 2016 Œ Work Paper Reference No(s).: WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING with Detail xlsx; WJC-2.B; WJC-2.D Estimated Balance at December 31, 2015 Ð ê 2013 9 ús Income taxes recoverable through future revenues Accumulated depreciation and amortization Total Liabilities and Shareholder's Equity Total Property, Plant and Equipment Current and Non Current Liabilities Cash and temporary cash investments Taxes applicable to subsequent years Property, Plant and Equipment Common Shareholder's Equity Liabilities and Shareholder's Equity Unamortized investment tax credit Total Other Noncurrent Assets Property, Plant and Equipment Description Total Long Term Debt Inventories, at average cost Non Current Liabilities Total Current Assets Other regulatory assets Total Capitalization Preferred Stock Current Liabilities Accounts receivable Accounts payable Capitalization Short-term debt Deferred taxes Accrued taxes Lype of Filing: Original Total Assets Data: Forecasted Line ₽€ 13 13 14 15 <u>≋</u> 5 29 30 31 8 2 2 2 2 2 8 28 32

Previous year value + Line 39 from WJC-2.B + (Line 14 and Line 15 from WJC-2.D) 2013 value calculated using an insputed 2012 value from furernal Documents. See WJC-11. Notes & Sources:

36

Projected Statement of Cash Flows (unaudited) (S in millions) Scenario: Pro Forma Debt Adjustment (Base Case) The Dayton Power and Light Company Case No. 12-426-EL-SSO 2013 - 2017 WJC-2.D

Page 1 of 1

Witness Responsible: William J. Chambers

**Type of Filing: Original** Data: Forecasted

Work Paper Reference No(s).: WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING with Detail.xlsx; WJC-2.B; WJC-2.C

Imputed value from Internal documents. Line 12 + Line 14 + Line 15 + Line 16. Source Line 7 + Line 9 + Line 17. Ξ Line 39 from WJC-2.B. Line 18 from WJC-2.B. Sum (Line 2 - Line 6). Internal Documents. Internal Documents. Internal Documents. Internal Documents. Internal Documents. Line 20 + Line 21. See Below. See Below. Sec Below. 2017 9 2016  $\Theta$ Estimated Balance at December 31,  $\overline{\Xi}$ ē 2013 Change in Certain Current Assets and Liabilities Original Issuance (retirement) of short-term debt Actual Issuance (retirement) of short-term debt Cash and cash equivalents at end of period Net cash provided by operating activities Description Net cash used for financing activities Net cash used for investing activities Original Dividends paid to DPL Inc Actual Dividends paid to DPL Inc Balance at beginning of period Depreciation and Amortization Cash and Cash Equivalents Change in Deferred taxes Issuance of pref. stock Net Change Net Income Line € 

Notes & Sources:

Change in Line 29 from WJC-2.C. 2012 value average of 2011 and 2013 value. 4 2 4 12

Line 11 unless Line 22 falls below \$10M and Line 14 equals \$0. Then increased such that Line 22 is equal to \$10M.

Equal to Line 13 unless Line 22 falls below \$10M using the original amount of short-term debt. Dividends then lowered such that Line 22 is equal to \$10M using the original issuance of short-term debt.

Line 22 from previous year, 2013 value from Internal Documents.

## The Dayton Power and Light Company Actual and Projected Financial Ratios Case No. 12-426-EL-SSO

Scenario: Pro Forma Debt Adjustment with No Switching Tracker 2011 - 2017

Data: Historical and Forecasted

Type of Filing: Original

Work Paper Reference No(s).: WJC-3.A

Witness Responsible: William J. Chambers

Page 1 of 1

Dividends	Common	Payout	Ratio	(L)	,	1.20	0.37	0.52	0.00	0.00	0.00
ility			ROE	(K)							
Profitability		Operating	Margin	(E)							
Liquidity		Internal	Generation	Ξ							
tructure	Common		Total Capital Total Capital Generation	(H)							
Capital Structure		Total Debt/	Total Capital	(g)							
age		Debt/	FFO	(F)							
Leverage	Debt/	Operating	EBITDA	(E)							
overage	FFO +	Interest	Expense	( <u>O</u>							
Interest Coverage	Operating FRITDA/	Interest	Expense	(C)							
			Year	(B)		2011	2013	2014	2015	2016	2017
		Line	No.	(A)		_	7	m	4	S	9

## Notes & Sources:

- Line 8 / (-1 \* Line 4) from WJC-3.A.
- Line 13 Line 4) / (-1 \* Line 4) from WJC-3.A.
  - Line 22 / Line 8 from WJC-3.A.
- Line 22 / Line 13 from WJC-3.A.
- Line 22 / (Line 20 + Line 26) from WJC-3.A.
- Line 24 / (Line 20 + Line 26) from WJC-3.A.
- Equal to (Funds From Operations Dividends paid to DPL Inc + Issuance of pref. stock) / Capital Expenditures. (Line 13 Line 16 + Line 17) / Line 15 from WJC-3.A.
  - Equal to Operating Income / Total Revenue. Line 3 / Line 2 from WJC-3.A.
- Equal to (Net Income + Issuance of pref. stock) / Average Common Shareholder's Equity. (Line 6 + Line 17) / Line 25 from WJC-3.A.
  - Equal to Dividends paid to DPL Inc / (Net Income + Issuance of pref. stock). Line 16 / (Line 6 + Line 17) from WJC-3.A.

Required Data for Financial Ratio Calculations (\$ in millions)
Scenario: Pro Forma Debt Adjustment with No Switching Tracker
2011 - 2017 The Dayton Power and Light Company Case No. 12-426-EL-SSO

WJC-3.A Page 1 of 1

Data. Ilistorical and Forecasted Type of Filing: Original

Type of rung, Original Witness Responsible: William J. Chambers 1.	Description 2011 2013 2014 2015 2016 2017 Source	(B) (C) (D) (E) (F) (G) (H) (I)		・ 新一年 1 日本 1 日			4 Amortization \$	\$ Line 39 from WJC-3.B.	DA S. Line 3 + Line 5.	ih Flows	ed by Operating Activities \$	69	stations \$		a DPL Inc. \$ -1 * Line 14 from WJC-3.D.	stock \$ Line 15 from WJC-3.D.		t \$ . Line 25 from WJC-3.C.	t Line 38 from WJC-3.C.	\$ Line 20 + Line 21.		See Below.
Vork Paper Reference No(s).: WJC-3.B; WJC-3-1:	Description	(B)	Statements of Income	Total Revenue	Operating Income	Interest Expense	Depreciation and Amortization	Net Income	Operating EBITDA	Statement of Cash Flows	Net Cash Provided by Operating Activities	Change in Certain Assets and Liabilities	Funds From Operations	Capital Expenditures	Dividends paid to DPL Inc.	Issuance of pref. stock	Balance Sheet	Short-Term Debt	Long-Term Debt	Total Debt	Common Shareholder's Equity	Average Common Shareholder's Equity

Notes & Sources:
2011 data from DP&L Financial Statements from 2011 DPL Inc. Annual Report, adjusted for the additional \$278M long term debt. See WJC-11. All other sources described in column (f).
15 Change in Line 10 from WJC-3.C. 2012 PPE calculated as average 2011 and 2013 PPE.
25 (Line 24, + previous year Line 24<sub>c+1</sub>) / 2. 2013 uses an imputed 2012 value of \$1,156 calculated from Internal Documents. See WJC-11.

Projected Statements of Income (unaudited) (5 in millions) Scenario: Pro Forma Debt Adjustment with No Switching Tracker 2013 - 2017 The Dayton Power and Light Company Case No. 12-426-EL-SSO

Data. Forecasted
Type of Filing: Original
Work Paper Reference Nots): WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING-incr switching DETAIL\_xlxx; WP-12.2; WJC-3.C
Additional detail for financial integrity 9.28.12.xlsx

WJC-3 B Page 1 of l Winess Responsible: William J. Chambers

Addi	Additional detail for financial integrity 9.28.12.xlsx						
Line							:
g	Description	2013	2014	2015	2016	2017	Source
3	(B)	(C)	( <u>Q</u> )	(E)	(F)	9	( <b>H</b> )
_	Operating Revenues	1					
7	Retail	śĄ					Internal Documents.
m	Recovery of Non-bypassable Charge	(A					Internal Documents.
4	Wholesale	<b>5</b> 9					Internal Documents.
S	RTO Capacity and Other RTO Revenues	i,q					Internal Documents.
9	Other Revenues	<b>4</b> 9					Internal Documents.
_	Total Revenues	·					Sum(Line 2 - Line 6).
00							
ο ;	Fuel and Purchased Power	4					1
_	Fuel Costs	×					Internal Documents.
= 9	Purchased Power	es   e					internal Documents.
2 5	Total ruel and rutchased rower	٩					
2 4	Gross Marsin	v					Line 7 - Line 12.
: =	TOTAL TRANSPORT	)					
9	Operating Expenses						
13	Operation and Maintenance	64					Internal Documents.
82	Depreciation and Amortization	4					Internal Documents.
61	General Taxes	44					Internal Documents.
2	Total Operating Expenses	<b>6</b> 4					Sum(Line 17 - Line 19).
33							
77	Operating Income	£9					Line 14 - Line 20.
23							
4 5	ЕВІТДА	64					Line 18 + Line 22.
9							
56	S.T. Rate						See Below.
27	L.T. Rate						From Workpaper 12.2.
78	Additional Interest Expense	€9					See Below.
53	Original Gross Interest Expense	2					Internal Documents.
30	Actual Gross Interest Expense	44					Line 28 + Line 29.
Ξ	Other Interest Expense	<b>\$</b> 9					Internal Documents.
32	Total Interest Expense	<b>€</b>					Line 30 + Line 31.
33	Other Income (Deductions)	\$					Internal Documents.
75							
35	Earnings Before Income Tax	s,					Line 22 + Line 32 + Line 33
9 5	•	4					700 JL # 3C: I
38 7	Income I ax	A					Line 35 7 35.8%.
39	Net Income	49					Line 35 - Line 37.

Notes & Sources. Equal to the USD US Utility BBB., 1-year rate (C0401Y Index) as of Sept. 27, 2012. From Bloomberg (Prior Year Line 25 from WJC-3.C.\* Line 26 + Addatonal \$278M in LT Debt. \* Line 27) \* -1.

26 28

The Dayton Power and Light Company
Case No. 12-426-EL-SSO
Projected Balance Sheet (unaudited) (\$ in millions)
Scenario: Pro Forma Debt Adjustment with No Switching Tracker
2013 - 2017

WJC-3.C Page 1 of 1 Winess Responsible: William J. Chambers				
Witness Responsi		Source	(H)	4 c
·		2017	(Đ)	
VIC-3.B; WJC-3.D	iber 31,	2016	(F)	
uing DETAIL xdsx; V	Estimated Balance at December 31,	2015	(E)	
FILJNG-incr switch	Estimat	2014	<u>(e)</u>	
t ọť Debt and CLJ-f-		2013	(0)	
Data: Forecasted  Type of Filing: Original  Work Paper Reference No(s);: WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING-iner switching DETAIL xlsx; WJC-3.B; WJC-3.D		Description	(B)	Assets
Data: Forecasted Type of Filing: Original Work Paper Reference 2	Line	No.	(A)	l Assets

Line 22 from WJC-3.D. Internal Documents. Internal Documents. Internal Documents. Internal Documents. Internal Documents. SuntLine 2 - Line 6).	Internal Documents.  Internal Documents.  Line 10 + Line 11.	Internal Documents. Internal Documents. Internal Documents. Sunt[Line 14 - Line 16).	Line 7 + Line 12 + Line 17.	Internal Documents. Internal Documents. Sum of Line 12 from WIC-3.D. Internal Documents. Sum(Line 23 - Line 26).	Internal Documents. Internal Documents. Internal Documents. Sum(Line 29 - Line 31). Line 27 + Line 32.	See Below Internal Documents. LT Debt from Internal Documents + \$278M. Sunt(Line 36 – Line 38). Line 33 + Line 39.
~ ~ ~ ~ ~ ~	co co	(N (N (N	٠,	w w w w	64 10 10 10 to	N NNN
Assets Cash and temporary cash investments Accounts receivable Inventories, at average cost Taxes applicable to subsequent years Other Total Current Assets	Property, Plant and Equipment Property, Plant and Equipment Accumulated depreciation and amortization Total Property, Plant and Equipment	Income taxes recoverable through future revenues Other regulatory assets Other Total Other Noncurrent Assets	Total Assets Liabilities and Shareholder's Equity	Accounts payable Accused taxes Short-term debt Other Current Liabilities	Deferred taxes Unamortized investment tax credit Other Non Current Liabilities Current and Non Current Liabilities	Capitalization Common Shareholder's Equity Preferred Stock Total Long Term Debt Total Capitalization Total Liabilities and Shareholder's Equity
- 2 6 4 5 9 6	8 9 15 12 13	51 22 7.88	2 2 2 2	23 24 25 27 28	33 33 34 34 34 34 34 34 34 34 34 34 34 3	35 37 38 39 40 41

36

Notes & Sources:
Previous year value + Lunc 39 from WJC-3.B + (Line 14 and Line 15 from WJC-3.D), 2013 value calculated using an imputed 2012 value from Internal Documents. See WJC-11.

Scenario: Pro Forma Debt Adjustment with No Switching Tracker Projected Statement of Cash Flows (unaudited) (\$ in millions) The Dayton Power and Light Company Case No. 12-426-EL-SSO 2013 - 2017 WJC-3.D Page 1 of 1

Witness Responsible: William J. Chambers Imputed value from internal documents Line 12 + Line 14 + Line 15 + Line 16. Source Line 7 + Line 9 + Line 17.  $\Xi$ Line 39 from WJC-3.B. Line 18 from WJC-3.B. Sum (Line 2 - Line 6). Internal Documents. Internal Documents. Internal Documents. Internal Documents. Internal Documents. Line 20 + Line 21. See Below. See Below. See Below. See Below. 2017 9 2016 Work Paper Reference NO(3): WP-12 Proforma Financials Cost of Debt and CLJ-1- FILNG-incr switching DETAIL xlsx; WJC-3-B; WJC-3-C Estimated Balance at December 31, 2015 Θ 2014 € 2013 Change in Certain Current Assets and Liabilities Original Issuance (retirement) of short-term debt Actual Issuance (retirement) of short-term debt Cash and cash equivalents at end of period Net cash provided by operating activities Description Net cash used for financing activities Net cash used for investing activities Original Dividends paid to DPL Inc Actual Dividends paid to DPL Inc Balance at beginning of period Depreciation and Amortization Cash and Cash Equivalents Change in Deferred taxes Issuance of pref. stock Iype of Filing: Original Net Change Net Income Data: Forecasted € 2 111 112 113 114 114 117 117 119 119 119 120 220 220 221 N 9 F 00 Φ

- Change in Line 29 from WJC-3.C, 2012 value average of 2011 and 2013 value.
- Line 11 unless Line 22 falls below \$10M and Line 14 equals \$0. Then increased such that Line 22 is equal to \$10M.
- Equal to Line 13 unless Line 22 falls below \$10M using the original amount of short-term debt. Dividends then lowered such that Line 22 is equal to \$10M using the original issuance of short-term debt.
  - Line 22 from previous year. 2013 value from Internal Documents.

### Scenario: Pro Forma Debt Adjustment with No SSR The Dayton Power and Light Company Actual and Projected Financial Ratios Case No. 12-426-EL-SSO 2011 - 2017

Data: Historical and Forecasted

Type of Filing: Original

Work Paper Reference No(s).: WJC-4.A

Witness Responsible: William J. Chambers

WJC-4 Page 1 of 1

Dividends	Common	Dividend	Payout	Ratio	(F)						
bility				ROE	(K)						
Profitability			Operating	Margin	(r)						
Liquidity			Internal	Generation	(1)						
tructure		Common	Equity/	Total Capital Total Capital Generation	(H)						
Capital Structure			Total Debt/	Total Capital	(D)						
age			Debt/	FFO	(F)						
Leverage		Debt/	Operating	EBITDA	(E)						
overage	FFO +	Interest/	Interest	Expense	(D)						
Interest Coverage	Operating	EBITDA/	Interest	Expense	(C)						
				Year	(B)	2011	2013	2014	2015	2016	2017
			Line	No.	(A)	=	7	сı	4	2	9

- Line 8 / (-1 \* Line 4) from WJC-4.A.
- (Line 13 Line 4) / (-1 \* Line 4) from WJC-4.A.
  - Line 22 / Line 8 from WJC-4.A.
- Line 22 / Line 13 from WJC-4.A.
- Line 22 / (Line 20 + Line 26) from WJC-4.A.
- Line 24 / (Line 20 + Line 26) from WJC-4.A.
- Equal to (Funds From Operations Dividends paid to DPL Inc + Issuance of pref. stock) / Capital Expenditures. (Line 13 Line 16 + Line 17) / Line 15 from WJC-4.A.
  - Equal to Operating Income / Total Revenue. Line 3 / Line 2 from WJC-4.A.
  - Equal to (Net Income + Issuance of pref. stock) / Average Common Shareholder's Equity. (Line 6 + Line 17) / Line 25 from WJC-4,A.
    - Equal to Dividends paid to DPL Inc / (Net Income + Issuance of pref. stock). Line 16 / (Line 6 + Line 17) from WJC-4.A.

Required Data for Financial Ratio Calculations (\$ in millions) Scenario: Pro Forma Debt Adjustment with No SSR The Dayton Power and Light Company Case No. 12-426-EL-SSO 2011 - 2017

Data: Historical and Forecasted Type of Filing: Original

WJC-4A

Page 1 of 1

Witness Responsible: William J. Chambers -1 \* Line 14 from WJC-4.D. Source Line 22 from WJC-4.B. Line 15 from WJC-4.D. Line 38 from WJC-4.C. Line 39 from WJC-4.C. Line 30 from WJC-4.B. Line 18 from WJC-4.B Line 39 from WJC-4.B. Line 25 from WJC-4.C. Line 36 from WJC-4.C. Line 7 from WJC-4.B. Line 7 from WJC-4.D. Line 5 from WJC-4.D. Line 20 + Line 21. Line 11 - Line 12. Line 3 + Line 5. See Below. See Below. 2017 Ξ 2016 ල 2015  $\widehat{\Xi}$ 2014  $\widehat{\Xi}$ 2013 ê Work Paper Reference No(s).: WJC-4.B; WJC-4.C; WJC-4.D; WJC-11 2011 ତ Net Cash Provided by Operating Activities Change in Certain Assets and Liabilities Average Common Shareholder's Equity Depreciation and Amortization Common Shareholder's Equity Description Dividends paid to DPL Inc Statement of Cash Flows Funds From Operations Issuance of pref. stock Statements of Income Capital Expenditures Operating EBITDA Total Capitalization Operating Income Short-Term Debt Interest Expense Long-Term Debt Total Revenue Balance Sheet Net Income Total Debt Line ₽ € 2 

Notes & Sources:

2011 data from DP&L Financial Statements from 2011 DPL Inc. Annual Report, adjusted for the additional \$278M long term debt. See WJC-11. All other sources described in column (I).

15 Change in Line 10 from WJC-4.C. 2012 PPE calculated as average 2011 and 2013 PPE.
25 (Line 24, + previous year Line 24<sub>c-1</sub>) / 2, 2013 uses an imputed 2012 value of \$1,156 calculated from Internal Documents. See WJC-11.

The Dayton Power and Light Company
Case No. 12-436-EL-SSO
Projected Statements of Income (unaudited) (\$ in millions)
Scenario: Pro Forma Debt Adjustment with No SSR
2013 - 2017

Data: Forecasted

Type of Filing: Original

Work Paper Reference No(s): WP-12 Proforms Financials Cost of Debt and CLJ-1- FILING with Detail xlsx; WP-12.2; WJC-4.C

Additional detail for financial integrity 9.28.12.xlsx

WJC-4.B Page 1 of 1 Witness Responsible: William J. Chambers

Vdd	Additional detail for financial integrity 9.28.12.xlsx						
Line					\.	100	
S.	Description	2013	2014	2015	OT OZ	/107	Some
€	(B)	<u></u>	(Q)	(E)	( <del>.</del> )	<u> </u>	(H)
-	Operating Revenues						
2	Retail	64					Internal Documents.
٣.	Recovery of Non-bypassable Charge	€4					Assumption.
4	Wholesale	₩9					Internal Documents.
S	RTO Capacity and Other RTO Revenues	65					Internal Documents.
9	Other Revenues	<b>69</b>					Internal Documents.
7	Total Revenues	₩.					Sum(1.ine 2 Line 6).
<b>00</b>							
6	Fuel and Purchased Power						
10	Fuel Costs	44					Internal Documents.
=	Purchased Power	64					Internal Documents.
12	Total Fuel and Purchased Power	. <del>4</del> 9					Line 10 + Line 11.
<u>E</u>							
7	Gross Margin	<b>6</b>					Line 7 - Line 12.
15	)						
9	Operating Expenses						
13	Operation and Maintenance	£43					Internal Documents.
<u>••</u>	Depreciation and Amortization	ķ					Internal Documents.
61	General Taxes	49					Internal Documents.
20	Total Operating Expenses	\$49					Sum(Line 17 - Line 19).
21							
22	Operating Income	49					Line 14 - Line 20.
23							
24	EBITDA	<del></del>					Line 18 + Line 22.
25							
26	S.T. Rate						See Below.
27	L.T. Rate						From Workpaper 12.2.
28	Additional Interest Expense	\$9					See Below.
29	Original Gross Interest Expense	64					Internal Documents.
99	Actual Gross Interest Expense	S					Line 28 + Line 29.
31	Other Interest Expense	V9					Internal Documents.
32	Total Interest Expense	₩					Line 30 + Line 31.
1.5	Other Income (Deductions)	<i>V</i>					Internal Documents.
34	ì	•					
35	Earnings Before Income Tax	63					Line 22 + Line 32 + Line 33
36	1						
37	Income Tax	€9					Line 35 * 35.8%.
38							
39	Net Income	cs.					Line 35 - Line 37.

Notes & Sources:
Equal to the USD US Utility BBB., 1-year rate (C0401Y Index) as of Sept. 27, 2012. From Bloomberg.
(Prior Year Line 25 from WJC-4.C.\* Line 26 + Additional \$278M in LT Debt. \* Line 27) \* -1

26 28

The Dayton Power and Light Company
Case No. 12-426-EL-SSO
Projected Balance Sheet (unaudited) (\$ in millions)
Scenario: Pro Forma Debt Adjustment with No SSR
2013 - 2017

Description   2013   2014   2016   2017   2014   2018   2017   2014   2018   2018   2018   2018   2019			Laterator	A December	Time		
Common Shareta   Comm		2013	2014	ed Balance at Decem	oer 51, 2016	2012	Source
Assents Accounts receivable to subsequent years 5  Total Current Assets Total Other regulatory Research Equipment Property, Plant and Equipment Property, Plant and Equipment Accountable degreeation and amortization 5  Total Other regulatory assets Soften regulatory assets Total Assets Total Assets  Total Assets  Soften regulatory assets Soften regulatory Soften Soft		(2)	(Q)	(E)	(F)	(D)	(H)
Acad and tempory cash investments  Acad and tempory cash investments  To an investment sears  Total Current Assets  Total Current Assets  Total Assets  Total Assets  S  Other regulatory assets  Total Assets  S  Other regulatory assets  S  S  Other regulatory assets  S  S  Other regulatory assets  S  Other regulatory assets  S  Other regulatory assets  S  S  Other	1 Assets						
Inventories, at warage cost Taxes applicable to subsequent years \$  Total Current Assets  Froperty, Plant and Equipment \$  Froperty, Plant and Equipment \$  Accumulated depreciation and anorthation \$  Total Current, Plant and Equipment \$  Solver regulatory assets \$  Total Assets recoverable through future revenues \$  Solver regulatory assets \$  Total Assets \$  Listbillities and Shareholder's Equipy \$  Solver current Lisbillities \$  Campan Shareholder's Equipy \$  Solver current Lisbillities \$  Solver current Current Lisbillities \$  Solver current Lisbillities \$  Solver current Curren	2 Cash and temporary cash investments	49					Line 22 from WJC-4.D.
Taxons uplicable to subsequent years \$  Total Current debt of subsequent years \$  Total Assets are overable through future revenues \$  Property, Plant and Equipment \$  Accumulated depreciation and amontization \$  Total Property, Plant and Equipment \$  Accumulated depreciation and amontization \$  Total Property, Plant and Equipment \$  Solver regulatory assets \$  Cheer regulatory assets \$  Solver regulatory assets \$  Total Assets Total Assets \$  Total Assets Assets \$  Solver regulatory assets \$  Solver regulatory assets \$  Current Labilities \$  Solver current Labilities \$  Solver current Labilities \$  Current Labilities \$  Solver current Labilities \$  Solver current Labilities \$  Common Solver Current Labilities \$  Solver Common Solver Gquity \$  Solver Common Solver Gquity \$  Solver Common Solver Gquity \$  Solver Common Current Labilities \$  Common Solver Common Solver Gquity \$  Solver Common Solver Gquity \$  Solver Common Capitalization \$  Solver	3 Accounts receivable	₩,					Internal Documents.
Total Current Assets  Property, Plant and Equipment Property, Plant and Equipment Accumulated deprecision and amorization Total Property, Plant and Equipment Accumulated deprecision and amorization Total Assets  Liabilities and Shareholder's Equity Accumut payable Accum		€9					Internal Documents.
Other Property, Plant and Equipment Property, Plant and Equipment Accumulated depreciation and amortization Total Property, Plant and Equipment Accumulated depreciation and amortization Total Property, Plant and Equipment S Other regulatory assets Other regulatory assets Other regulatory assets S Current Liabilities and Shareholder's Equity S S Current Liabilities S Cur		<del>es</del>					Internal Documents.
Property, Plant and Equipment Property, Plant and Equipment Accountaled depractation and amortization Total Property, Plant and Equipment Accountation and amortization Softer Total Other Vioueral Equipment Total Other Noncurrent Assets Total Assets  Total Assets  Current Liabilities and Shareholder's Equity Softer Short-tran delety Softer Current Liabilities Softer Non Current Liabilities Softer Total Long Term Debt Total Long Term Debt Total Cognitivation		₩					Internal Documents.
Property, Plant and Equipment Property, Plant and Equipment Accumulated depreciation and amortization Total Property, Plant and Equipment Income lases recoverable through future revenues Softer regulatory assets Other regulatory assets Other regulatory assets Softer regulatory assets Cother Noncurrent Assets  Liabilities and Shareholder's Equity Account spabble Accurred Lases Short-cern debt. Softer Cother University Softer Softer Cother University Softer Softer Cother University Softer Softer Cother University Softer Softer Copitalization Common Shareholder's Equity Frederice Stock Capitalization Capitalization Capitalization Softer Total Long Term Debt Total Long Term Debt Total Capitalization	7 Total Current Assets	· 50					Sum(Line 2 - Line 6).
Property, Plant and Equipment Accumulated deprecation and amortization Total Property, Plant and Equipment Accumulated deprecation and amortization Total Assets Total Other Poncurrent Assets Sobter Total Assets Accumuts payable Accumuts payable Current Liabilities Short-term debt Current Liabilities Sobter Current Sarable Sobter Common Sarabolder's Equity Sobter Non Current Liabilities Sobter Common Sarabolder's Equity Sobter Common Sarabolder's Equity Sobter Total Long Term Debt Total Capitalization Sobter Total Capitalization	200						
Property, Plant and Equipment S Accumulated depreciation and amortization Total Property, Plant and Equipment S Income taxes recover able through future revenues S Other regulatory assets S Other regulatory assets S Other regulatory assets S Total Assets S  Liabilities and Shareholder's Equity S Accounts payable S Accounts apayable S Accounts and Shareholder's Equity S Other Current Liabilities S Deferred taxes S Unumerized investment tax credit S Other S Other S Common Shareholder's Equity S Other Current Liabilities S Other S Common Shareholder's Equity S Total Long Term Debt S Total Long Term Debt S Total Capitalization S							
Accumulated depreciation and amortization  Total Property, Plant and Equipment  Income taxes recoverable through future revenues  Other regulatory assets  Total Other Noncurrent Assets  S  Total Assets  Accounts payable  Accounts payable  Accounts payable  Accounts payable  Current Liabilities  Deferred taxes  Unmontrized investment tax credit  S  Current Liabilities  S  Total Long Term Debt  S  Total Congrination  S  Total Capitalization  S  Total Capitalization		ج.					Internal Documents.
Total Property, Plant and Equipment \$ Inscome taxes recoverable through finure revenues \$ Other regulatory assets \$ Other regulatory assets \$ Other regulatory assets \$ S Court and Other Noncurrent Assets \$ S Current Labellities and Shareholder's Equity \$ Accounts payable \$ Accounts payable \$ Accounts payable \$ S Current Labellities \$ S Capitalization Shareholder's Equity \$ S Freferred Stock \$ Total Long Term Debt \$ S Total Capitalization \$ S							Internal Documents.
Deferred taxes  Common Shareholder's Equity  Accounts payable  Accounts payable  Accounts payable  Current Liabilities  Deferred taxes  Unamontized investment tax credit  S  Current Liabilities  Common Shareholder's Equity  S  Common Shareholder's Equity  S  Common Common Shareholder's Equity  S  Total Long Term Debt  Total Long Term Debt  Total Capitalization  S	Ţ	1					Line 10 + Line 11.
Income taxes recoverable through future revenues \$  Other regulatory assets \$  Other regulatory assets \$  Total Assets \$  Total Assets \$  Initialities and Shareholder's Equity \$  Account assets \$  Short-term debt \$  Current Liabilities \$  Deferred taxes \$  Unannitized investment tax credit \$  Other \$  Current Liabilities \$  Current Liabilities \$  Current Liabilities \$  Current Liabilities \$  S  Common Shareholder's Equity \$  S  Common Shareholder's Equity \$  S  Capitalization Common Shareholder's Equity \$  Freferred Stock \$  Total Long Term Debt \$  S							
Other regulatory assets \$  Other Total Other Noncurrent Assets \$  Laidtilities and Shareholder's Equity \$  Accounts payable \$  Account apyable \$  Account debt \$  Other can debt \$  Other can debt \$  Other divestment tax credit \$  Current Liabilities \$  Other Account and Non Current Liabilities \$  Canton Common Shareholder's Equity \$  S  Captulization Common Shareholder's Equity \$  Total Long Term Debt \$  Total Capitalization \$  S  Total Capitalization \$  S							Internal Documents.
Other Total Other Noncurrent Assets  Total Assets  Total Assets  S  Total Assets  Liabilities and Shareholder's Equity Accounts payable Accounts payable Accounts payable Accounts payable Account Liabilities Short-term debt Current Liabilities S  Deferred taxes Unamortized investment tax credit S  Current Liabilities S  Current Dong term Debt S  Total Complexity S  Total Capitalization  Total Capitalization S							Internal Documents.
Total Other Noncurrent Assets  Total Assets  Total Assets  Labbilities and Shareholder's Equity Accounts payable Accounts payable Accounts payable Accounts payable Accounts payable Structured taxes Short-term debt Other  Current Liabilities S Unamortized investment tax credit S Unamortized investment tax credit S Unamortized investment tax credit S Current Liabilities S Total Long Term Debt S Total Long Term Debt S Total Capitalization F Total Capitalization S		<i>ن</i> ,					Internal Documents
Total Other Noncurrent Assets  Total Assets  Liabilities and Shareholder's Equity Accounts payable Accounts payable Accounts payable Accounts payable Account Liabilities Short-term debt Other Current Liabilities Beferred taxes Unamortized investment tax credit S Current Liabilities S Capitalization Common Shareholder's Equity S Preferred Stock S Total Long Term Debt S Total Capitalization S	5	9					
Liabilities and Shareholder's Equity Accounts payable Accrued taxes Short-term debt Other Current Liabilities  Deferred taxes Unamorized investment tax credit Other Non Current Liabilities S Capitalization Common Shareholder's Equity S Total Capitalization S		<u>د</u> م					Sum(Line 14 - Line 15).
Liabilities and Shareholder's Equity Accounts payable Accured taxes Short-tern debt Other Current Liabilities S		,					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Listuitizies and Shareholder's Equity Accounts payable Accured taxes Short-term debt Current Liabilities S Deferred taxes Unamorized investment tax credit Other Current Liabilities S Control Current Liabilities Current Liabilities S Capitalization Common Shareholder's Equity Preferred Stock Total Long Term Debt S Total Capitalization S Total Capitalization S Total Capitalization S Total Capitalization S		9					
Accounts payable							
Accounts payable 5 Accounts payable 5 Short-tern debt 5 Other Current Liabilities 5 Unamortized investment tax credit 5 Other Non Current Liabilities 5 Current and Non Current Liabilities 5 Current and Non Current Liabilities 5 Current Stock 5 Total Long Term Debt 5 Total Capitalization 5		4					
Accured taxes Short-term debt Short-term debt S Other Current Liabilities S Deferred taxes Unamorized investment tax credit S Other Non Current Liabilities S Total Capitalization Common Shareholder's Equity Preferred Stock Total Long Term Debt S Total Capitalization S		Α.					Internal Documents.
Short-term debt \$ \$ \$ Current Liabilities \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		49					Internal Documents.
Other Current Liabilities \$  Deferred taxes Unamortized investment tax credit \$  Other Non Current Liabilities \$  Current and Non Current Liabilities \$  Total Capitalization \$  Total Capitalization \$  Total Capitalization \$  Total Capitalization \$  S		₩					Sum of Line 12 from WJC-4.D.
Current Liabilities \$  Deferred taxes \$  Unamontized investment tax credit \$  Other Non Current Liabilities \$  Current and Non Current Liabilities \$  Capitalization \$  Capitalization \$  Common Shareholder's Equity \$  Preferred Stock \$  Total Long Term Debt \$  \$		<del>50</del>					Internal Documents.
Deferred taxes Unamontized investment tax credit  Other  Other  Non Current Liabilities  S  Current Liabilities  Capitalization  Common Shareholder's Equity  Preferred Stock  Total Long Term Debt  S  Total Capitalization  S		÷n					Sum(Line 23 Line 26).
Unaturatized investment tax credit \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		6					
Unamortized investment tax credit \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		A					Internal Documents.
Other Non Current Liabilities \$  Current and Non Current Liabilities \$  Capitalization Common Shareholder's Equity \$  Preferred Stock \$  Total Long Term Debt \$  Total Capitalization \$  S		<b>S</b>					Internal Documents.
Non Current Liabilities \$  Current and Non Current Liabilities \$  Capitalization Common Shareholder's Equity \$  Preferred Stock \$  Total Long Term Debt \$  Total Capitalization \$		S					Internal Documents.
Current and Non Current Liabilities \$  Capitalization Common Shareholder's Equity \$  Preferred Stock \$  Total Long Term Debt \$  Total Capitalization \$		<b>€</b> A					Sum(Line 29 Line 31).
Capitalization Common Shareholder's Equity \$ Preferred Stock Total Long Term Debt \$ Total Capitalization \$		بن					1 ine 27 + 1 ine 32
Capitalization Common Shareholder's Equity \$ Preferred Stock \$ Total Long Term Debt \$ Total Capitalization \$		•					
Common Shareholder's Equity \$ Preferred Stock \$ Total Long Term Debt \$ \$ Total Capitalization \$							
Preferred Stock \$ Total Long Term Debt \$ Total Capitalization \$		643					See Below
Total Capitalization \$ \$ Total Capitalization							Internal Documents.
Total Capitalization \$		64					LT Debt from Internal Documents + \$278M
	Ę	4					Sum(Line 36 - Line 38).
A COLUMN TO THE PROPERTY OF TH		•					

Nates & SQUICES:
Previous year value + Line 39 from WJC-4.B + (Uine 14 and Line 15 from WJC-4 D), 2013 value calculated using an imputed 2012 value from Internal Documents. See WJC-11.

36

Projected Statement of Cash Flows (unaudited) (5 in millions)
Scenario: Pro Forma Debt Adjustment with No SSR
2013-2017 The Dayton Power and Light Company Case No. 12-426-EL-SSO

Data: Forecasted Type of Filing: Oripinal

WIC4.D	Page 1 of 1	1 Financials Cost of Debt and CLJ-1- FILING with Detail xlsx; WIC-4.B; WIC-4.C	
Data: Forecasted	Type of Filing: Original	Financials	

witness Responsible: William J. Chami		Source	(H)		Line 39 from WJC-4.B.	Line 18 from WJC-4.B.	See Below,	Imputed value from Internal documents.	•	Sum (Line 2 - Line 6).		Internal Documents.		Internal Documents.	See Below.	Internal Documents.	See Below,	Internal Documents.	Internal Documents	Line 12 + Line 14 + Line 15 + Line 16.			Line 7 + Line 9 + Line 17.	See Below.	Line 20 + Line 21.	
		2017	(O)																							
	ber 31,	2016	(F)																							
4.D, WJC-4.C	Estimated Balance at December 31,	2015	( <u>e)</u>																							
III Detail XISX, WJC-	Estimato	2014	(a)																							
I AIN CLA-I - FILING WI		2013	(a)		5	tur?	<del>64</del>	<del>6</del> 47		85		€9		\$	€9	\$	<b>↔</b>	<b>~</b> >	<b>∽</b>	S			649	643	₩	
work 1 aper received reggl. WI-12 redoulla Financia's Cost of Dool and CL3-1- Filling will Defall Max, WIC-4-D, WIC-4-C.		Description	(B)		Net Income	Depreciation and Amortization	Change in Deferred taxes	Change in Certain Current Assets and Liabilities	Other	Net cash provided by operating activities		Net cash used for investing activities		Original Issuance (retirement) of short-term debt	Actual Issuance (retirement) of short-term debt	Original Dividends paid to DPL Inc	Actual Dividends paid to DPL Inc	Issuance of pref. stock	Other	Net cash used for financing activities		Cash and Cash Equivalents	Net Change	Balance at beginning of period	Cash and cash equivalents at end of period	
WOLKLO	Line	No.	€	-	2	٣,	4	'n	9	1	∞	6	01	11	12	13	14	15	16	17	18	61	23	21	77	

### Notes & Sources:

- 4 12 12 21 21
- Change in Linc 29 from WJC-4.C. 2012 value average of 2011 and 2013 value.

  Line 11 unless Line 22 falls below \$10M and Line 14 equals \$0. Then increased such that Line 22 is equal to \$10M.

  Equal to Line 13 unless Line 22 falls below \$10M using the original amount of short-term debt. Dividends then lowered such that Line 22 is equal to \$10M using the original issuance of short-term debt.
  - Line 22 from previous year. 2013 value from Internal Documents.

## The Dayton Power and Light Company Actual and Projected Financial Ratios Case No. 12-426-EL-SSO

Scenario: Pro Forma Debt Adjustment with No Switching Tracker & No SSR 2011 - 2017

Data: Historical and Forecasted

Type of Filing: Original

Work Paper Reference No(s).: WJC-5.A

Witness Responsible: William J. Chambers

WJC-5 Page 1 of 1

Dividends	Common	Dividend	Payout	Ratio	(L)						
ility				ROE	(K)						
Profitability			Operating	Margin	(1)						
Liquidity			Internal	Generation	(I)						
tructure		Common	Equity/	Total Capital Total Capital Generation	(H)						
Capital Structure			Total Debt/	Total Capital	(D)						
age			Debt/	FFO	(F)						
Leverage		Debt/	Operating	EBITDA	(E)						
overage	FFO +	Interest/	Interest	Expense	(D)						
Interest Coverage	Operating	EBITDA/	Interest	Expense	(C)						
				Year	(B)	2011	2013	2014	2015	2016	2017
			Line	No.	(A)	_	2	3	4	S	9

## Notes & Sources:

- Line 8 / (-1 \* Line 4) from WJC-5.A.
- (Line 13 Line 4) / (-1 \* Line 4) from WJC-5.A.
- Line 22 / Line 8 from WJC-5.A.
- Line 22 / Line 13 from WJC-5.A.
- Line 22 / (Line 20 + Line 26) from WJC-5.A.
- Line 24 / (Line 20 + Line 26) from WJC-5.A.
- Equal to (Funds From Operations Dividends paid to DPL Inc + Issuance of pref. stock) / Capital Expenditures. (Line 13 Line 16 + Line 17) / Line 15 from WIC-5.A. 0995986589
  - Equal to Operating Income / Total Revenue. Line 3 / Line 2 from WJC-5.A.
- Equal to (Net Income + Issuance of pref. stock) / Average Common Shareholder's Equity. (Line 6 + Line 17) / Line 25 from WJC-5.A.
  - Equal to Dividends paid to DPL Inc / (Net Income + Issuance of pref. stock). Line 16 / (Line 6 + Line 17) from WJC-5.A.

The Dayton Power and Light Company Case No. 12-426-EL-SSO

Required Data for Financial Ratio Calculations (5 in millions) Scenario: Pro Forma Debt Adjustment with No Switching Tracker & No SSR 2011 - 2017

WJC-5.A Page 1 of 1

Data: Historical and Forecasted

Type of Filing: Original Work Paper Reference No(s):: WJC-5.B; WJC-5.C; WJC-5.D; WJC-11

Work	Work Paper Reference No(s).: WJC-5.B; WJC-5.C; WJC-5.D; WJC-11	/IC-5.D; WJC-			1			Witness Responsible: William J. Chambers
Linc No.	: Description	2011	2013	2014	2015	2016	2017	Source
€	(B)	(D)	(D)	(E)	(F)	(9)	(H)	(1)
-	Statements of Income							
7	Total Revenue	649						Line 7 from WJC-5.B.
3	Operating Income	<del>-</del> 91						Line 22 from WJC-5.B.
4	Interest Expense	₩						Line 30 from WJC-5.B.
2	Depreciation and Amortization	<del>5</del> 9						Line 18 from WJC-5.B.
9	Net Income	÷						Line 39 from WJC-5.B.
7								
∞	Operating EBITDA	€4						Line 3 + Line 5.
6								
10	Statement of Cash Flows							
=	Net Cash Provided by Operating Activities	s						Line 7 from WJC-5.D.
12	Change in Certain Assets and Liabilities	<b>69</b>						Line 5 from WJC-5.D.
13	Funds From Operations	64						Line 11 - Line 12.
14								
15	Capital Expenditures	53						See Below.
91	Dividends paid to DPL Inc	€9						-1 * Line 14 from WJC-5.D.
17	Issuance of pref. stock	<b>6</b> A						Line 15 from WJC-5.D.
<u>«</u>								
61	Balance Sheet							
20	Short-Term Debt	64:						Line 25 from WJC-5.C.
21	Long-Term Debt	€^						Line 38 from WJC-5,C.
22	Total Debt	49						Line 20 + Line 21,
23								
24	Common Shareholder's Equity	₩						Line 36 from WJC-5.C.
25	Average Common Shareholder's Equity	<b>6</b> 4						See Below.
58	Total Capitalization	<del>\$</del>						Line 39 from WIC-5.C.

### Notes & Sources:

2011 data from DP&L Financial Statements from 2011 DPL Inc. Annual Report, adjusted for the additional \$278M long term debt. See WJC-11. All other sources described in column (I).

15 Change in Line 10 from WJC-5.C. 2012 PPE calculated as average 2011 and 2013 PPE.

25 (Line 24, 4 previous year Line 24, 1) / 2. 2013 uses an imputed 2012 value of \$1, 156 calculated from Internal Documents. See WJC-11.

The Dayton Power and Light Company
Case No. 12-426-EL-SSO
Projected Statements of Income (unaudited) (\$ in millions)
Scenario: Pro Forma Debt Adjustment with No Switching Tracker & No SSR
2013 - 2017

Data: Forecasted

Type of Filing: Original

Work Paper Reference No(s):: WP-12 Proforms Financials Cost of Debt and CLL-1- FILING-incr switching DETAIL.xlsx: WP-12.2; WJC-5.C Additional detail for financial integrity 9.28-12.xlsx

Page 1 of 1 Witness Responsible: William J. Chambers

Source (H)

(6)

2016 (F)

2015 (E)

2014 (D)

(C)

Description (B)

No.

WJC-5.B

Internal Documents. Assumption. Internal Documents. Internal Documents. Internal Documents. Sumf(Line 2 - Line 6).	Internal Documents.  Internal Documents.  Line 7 - Line 12.  Internal Documents.  Internal Documents.  Internal Documents.  Internal Documents.  Line 14 - Line 19).  Line 14 - Line 20.  Line 18 + Line 22.  See Below.  From Workpaper 12.2.  See Below.  Internal Documents.  Line 28 + Line 29.  Internal Documents.  Line 30 + Line 31.  Internal Documents.  Line 30 + Line 31.  Internal Documents.  Line 35 + 35.8%.	Line 35 - Line 37.
mes so so		٠
1 Operating Revenues 2 Retail 3 Recovery of Non-hypussable Charge 4 Wholesale 5 RTO Capacity and Other RTO Revenues 6 Other Revenues 7 Total Revenues 8	9 Figel and Purchased Power 10 Fuel Costs 11 Total Fuel and Purchased Power 13 Gross Margin 14 Gross Margin 15 Operating Expenses 20 Departing Expenses 20 Total Operating Expenses 21 Cherating Income 22 Total Operating Expense 23 Additional Interest Expense 24 EBITDA 25 S. T. Rate 27 Additional Interest Expense 28 Additional Interest Expense 39 Original Gross Interest Expense 31 Other Interest Expense 32 Other Interest Expense 33 Other Interest Expense 34 Other Interest Expense 35 Granings Before Income Tax 36 Income Tax	88 Net Income

Notes & SOWCES:

Equal to the USD US Utility BBB-, 1-year rate (CO401Y Index) as of Sept. 27, 2012. From Bloomberg.

(Prior Year Line 25 from WIC-5.C.\* Line 26 + Additional \$278M in LT Debt. \* Line 27) \* -1 28 28

Scenario: Pro Forma Debt Adjustment No Switching Tracker & No SSR Projected Balance Sheet (unaudited) (5 in millions) The Dayton Power and Light Company Case No. 12-426-EL-SSO 2013 - 2017

> Type of Filing: Original Data: Forecasted

Work Paper Reference No(s): WP-12 Proforma Financials Cost of Debt and CLJ-1-FILING-incr switching DETAIL.xlsx; WIC-3.B; WIC-5.D.

WJC-5.C

Page I of I

Witness Responsible: William J. Chambers LT Debt from Internal Documents + \$278M. Sum of Line 12 from WJC-5.D. Source (H) Line 7 + Line 12 + Line 17. Sum(Line 14 - Line 16). Sum(Line 36 - Line 38). Sum(Line 23 - Line 26). Sum(Line 29 - Line 31). Line 22 from WJC-5.D. Surd(Line 2 - Line 6). Internal Documents. Line 10 + Line 11. Line 27 + Line 32. Line 33 + Line 39. See Below 2017 9 2016 Estimated Balance at December 31, 2014 9 ତ୍ର M Income taxes recoverable through future revenues Accumulated depreciation and amortization Total Liabilities and Shareholder's Equity Total Property, Plant and Equipment Current and Non Current Liabilities Cash and temporary cash investments Faxes applicable to subsequent years Property, Plant and Equipment Liabilities and Shareholder's Equity Common Shareholder's Equity Unamortized investment tax credit Total Other Noncurrent Assets Property, Plant and Equipment Description Total Long Term Debt Inventories, at average cost Non Current Liabilities Total Current Assets Other regulatory assets Total Capitalization Preferred Stock Current Liabilities Accounts receivable Accounts payable Capitalization Short-term debt Deferred taxes Accrued taxes Total Assets ₹ \$ 2 Z Z S

### Notes & Sources:

36

Previous year value + Line 39 from WJC-5.B + (Line 14 and Line 15 from WJC-5.D), 2013 value calculated using an imputed 2012 value from Internal Documents. See WJC-11.

The Dayton Power and Light Company Case No. 12-426-EL-SSO

Scenario: Pro Forma Debt Adjustment with No Switching Tracker & No SSR Projected Statement of Cash Flows (unaudited) (S in millions) 2013 - 2017 WJC-5.D

Page 1 of 1

Data: Forecasted

Type of Filing: Original

Witness Responsible: William J. Chambers Imputed value from Internal documents. Line 12 + Line 14 + Line 15 + Line 16. Source Line 7 + Line 9 + Line 17. Line 39 from WJC-5.B. Line 18 from WJC-5.B. Sum (Line 2 - Line 6). Internal Documents. Internal Documents. Internal Documents. Internal Documents. Internal Documents. Line 20 + Line 21. See Below. See Below. 2017 9 2016 Ξ Work Paper Reference No(s).: WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING-incr switching DETAIL.xlsx, WJC-5.B; WJC-5.C Estimated Balance at December 31,  $\widehat{\mathbf{E}}$ 2014 9 2013 9 Change in Certain Current Assets and Liabilities Original Issuance (retirement) of short-term debt Actual Issuance (retirement) of short-term debt Cash and cash equivalents at end of period Net cash provided by operating activities Description Net cash used for financing activities Net cash used for investing activities Original Dividends paid to DPL Inc Actual Dividends paid to DPL Inc Balance at beginning of period Depreciation and Amortization Cash and Cash Equivalents Change in Deferred taxes Issuance of pref. stock Net Change Net Income Line  $\exists$ 9 11 12 13 14 15 16 17 92 9 20

### Notes & Sources:

- Change in Line 29 from WJC-5.C. 2012 average of 2011 and 2013 value. 4 12 14 17
- Line 11 unless Line 22 falls below \$10M and Line 14 equals \$0. Then increased such that Line 22 is equal to \$10M.
- Equal to Line 13 unless Line 22 falls below \$10M using the original amount of short-term debt. Dividends then lowered such that Line 22 is equal to \$10M using the original issuance of short-term debt.
  - Line 22 from previous year, 2013 value from Internal Documents

The Dayton Power And Light Company
Case No. 12-426-EL-SSO
Operating EBITDA / Interest Expense Ratio
By Scenario

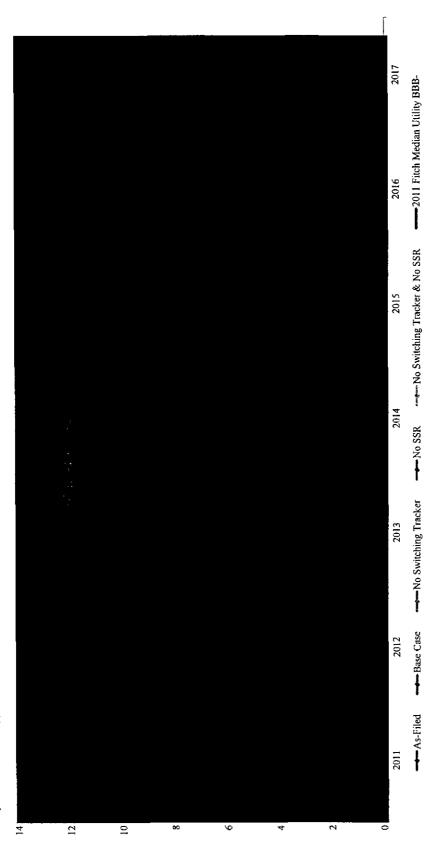
Data: Historical and Forecasted

Type of Filing: Original

Work Paper Reference No(s).: WJC-1; WJC-2; WJC-3; WJC-4; WJC-5

Witness Responsible: William J. Chambers

WJC-6.A Page 1 of 1



Notes & Sources:

2011 Firch Median Utility BBB- from Fitch Ratings, U.S. Utilities, Power & Gas Financial Pecr Study, June 2012, at 12. Excludes Dayton Power and Light Company. The Dayton Power and Light Company ratios from WJC-1, WJC-2, WJC-3, WJC-4, and WJC-5.

(FFO + Interest Expense) / Interest Expense The Dayton Power And Light Company Case No. 12-426-EL-SSO By Scenario

WJC-6.B

Data: Historical and Forecasted

Type of Filing: Original

2

10

œ

9

4

7

0

Witness Responsible: William J. Chambers Page 1 of 1 2017 2016 ---No Switching Tracker & No SSR ----No Switching Tracker & No SSR 2014 Work Paper Reference No(s).: WJC-1; WJC-2; WJC-3; WJC-4; WJC-5 2013 -Base Case 2012 As-Filed 2011

Notes & Sources:

The Dayton Power and Light Company ratios from WJC-1, WJC-2, WJC-3, WJC-4, and WJC-5.

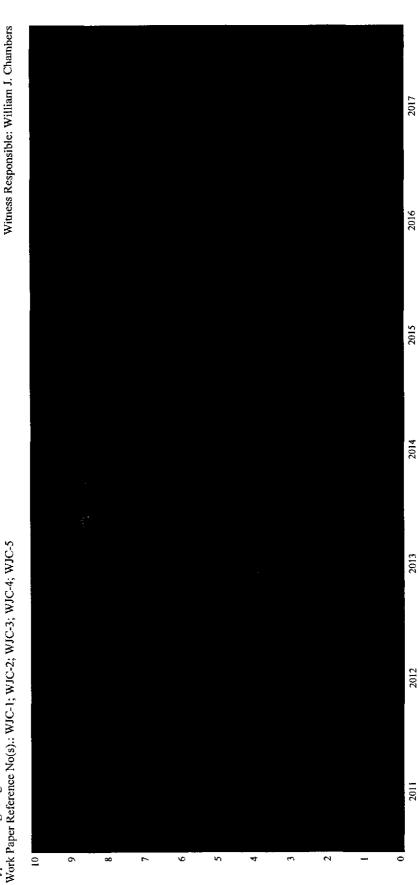
2011 Fitch Median Utility BBB- from Fitch Ratings, U.S. Utilities, Power & Gas Financial Peer Study, June 2012, at 12. Excludes Dayton Power and Light Company.

The Dayton Power And Light Company Debt / Operating EBITDA Case No. 12-426-EL-SSO By Scenario

WJC-6.C Page 1 of 1

Data: Historical and Forecasted

Type of Filing: Original



The Dayton Power and Light Company ratios from WIC-1, WIC-2, WIC-4, and WIC-5.

2011 Fitch Median Utility BBB- from Fitch Ratings, U.S. Utilities, Power & Gas Financial Peer Study, June 2012, at 12. Excludes Dayton Power and Light Company.

-2011 Fitch Median Utility BBB-

---No Switching Tracker ---No SSR ----No Switching Tracker & No SSR

-Base Case

As-Filed

The Dayton Power And Light Company Case No. 12-426-EL-SSO Debt / FFO By Scenario

Data: Historical and Forecasted

Type of Filing: Original

14

12

10

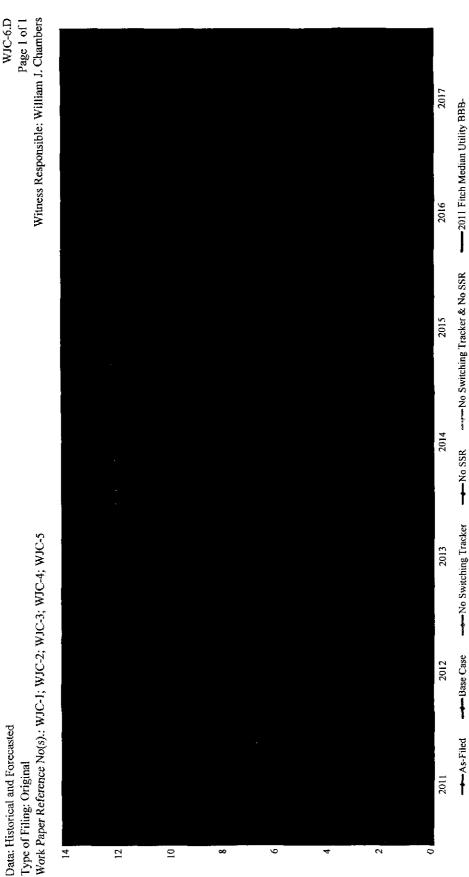
8

9

4

7

٥



Notes & Sources:

The Dayton Power and Light Company ratios from WJC-1, WJC-3, WJC-4, and WJC-5.

2011 Fitch Median Utility BBB- from Fitch Ratings, U.S. Utilities, Power & Gas Financial Peer Study, June 2012, at 12. Excludes Dayton Power and Light Company.

The Dayton Power And Light Company Case No. 12-426-EL-SSO Operating Margin By Scenario

Data: Historical and Forecasted

Type of Filing: Original

Work Paper Reference No(s).: WJC-1; WJC-2; WJC-3; WJC-4; WJC-5

Witness Responsible: William J. Chambers

WJC-6.E Page 1 of 1 -2011 Fitch Median Utility BBB-Memory No Switching Tracker & No SSR -- As-Filed -- Base Case -- No Switching Tracker -- No SSR

The Dayton Power and Light Company ratios from WJC-1, WJC-2, WJC-3, WJC-4, and WJC-5.

2011 Fitch Median Utility BBB- from Fitch Ratings, U.S. Utilities, Power & Gas Financial Peer Study, June 2012, at 12. Excludes Dayton Power and Light Company.

### The Dayton Power And Light Company Case No. 12-426-EL-SSO Return on Equity By Scenario

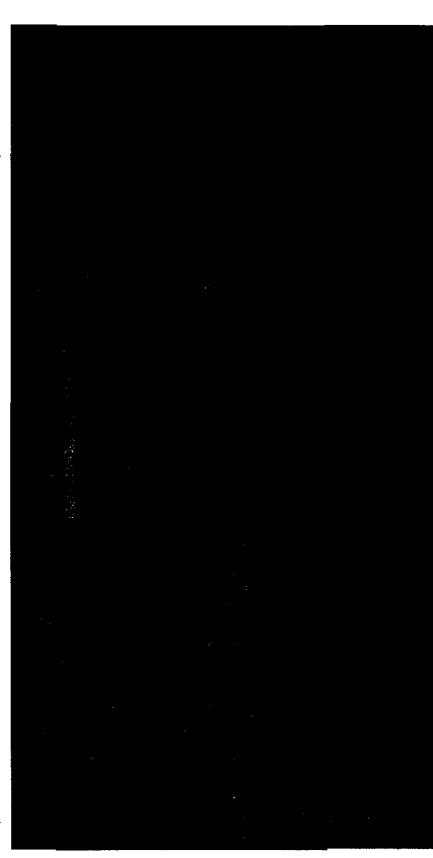
Data: Historical and Forecasted

Type of Filing: Original

Work Paper Reference No(s).: WJC-1; WJC-2; WJC-3; WJC-4; WJC-5

Page 1 of 1 Witness Responsible: William J. Chambers

WJC-6.F



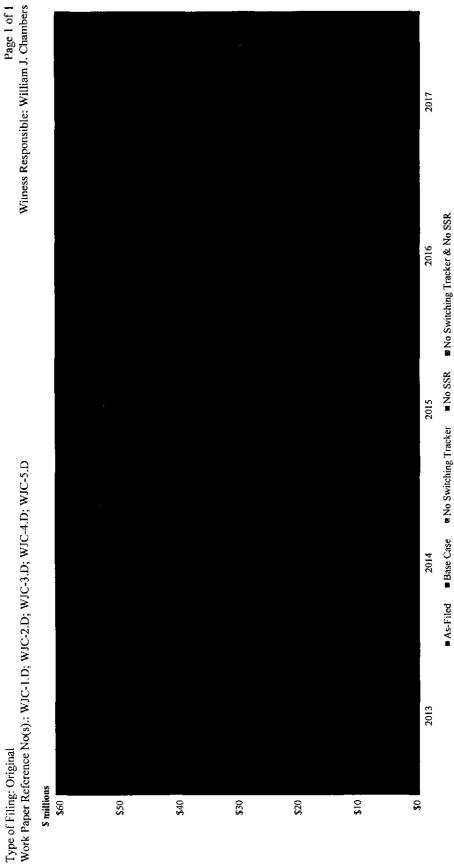
Notes & Sources

The Dayton Power and Light Company ratios from WJC-1, WJC-2, WJC-3, WJC-4, and WJC-5 2011 Fitch Median Utility BBB- from Fitch Ratings, U.S. Utilitios, Power & Gas Financial Peer Study, June 2012, at 12. Excludes Dayton Power and Light Company.

The Dayton Power And Light Company Annual Dividends Paid to DPL Inc Case No. 12-426-EL-SSO By Scenario

WJC-7.A

Type of Filing: Original Data: Forecasted



Notes & Sources:
The Dayton Power and Light Company Dividends equal to Line 12 from WJC-1.D, and Line 14 from WJC-2.D, WJC-3.D, WJC-4.D, and WJC-5.D.

The Dayton Power And Light Company
Case No. 12-426-EL-SSO
Short Term Debt Outstanding
By Scenario

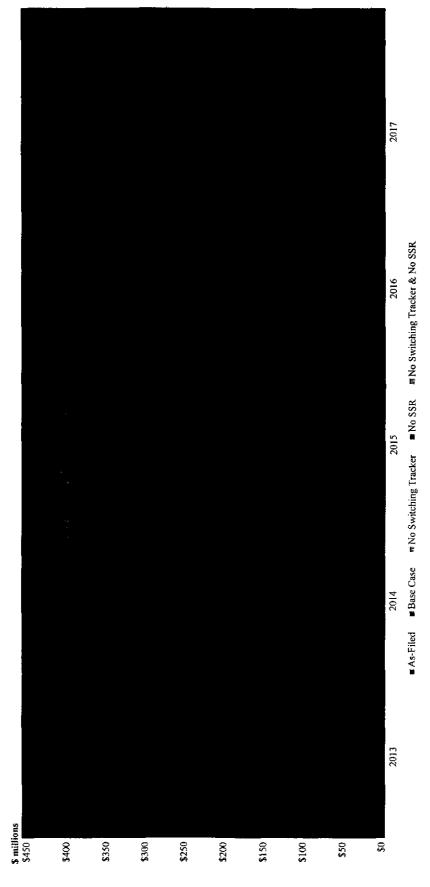
St Data: Forecasted

Work Paper Reference No(s): WJC-1.C; WJC-2.C; WJC-3.C; WJC-4.C; WJC-5.C

Type of Filing: Original

Page 1 of 1 Witness Responsible: William J. Chambers

WJC-7,B



Notes & Sources:
The Dayton Power and Light Company Short Term Debt equal to Line 25 from WJC-1.C, WJC-2.C, WJC-3.C, WJC-4.C, and WJC-5.C.

# The Dayton Power And Light Company Case No. 12-426-EL-SSO Summary of Scenarios

Data: Forecasted

Type of Filing: Original

Work Paper Reference No(s).: None

Page 1 of 1

WJC-8

Witness Responsible: William J. Chambers

2017 Likely Credit Rating 2013 No Switching Tracker No SSR No Switching Tracker & No SSR Scenario Base Case

### Capital Structure of Comparable Firms to DP&L The Dayton Power And Light Company Case No. 12-426-EL-SSO

Type of Filing: Original Data: Historical

Work Paper Reference No(s).: JDM-6

Witness Responsible: William J. Chambers

WJC-9 Page 1 of 1

				Stock	Market		Book Value	2.5		Total Capi	talization	Debt to C	apital
Company	Ticker	Credit Rating	Shares	Price	Cap	Common Equity	Min. Interest	Pref. Equity	Total Debt	t Book Market	Market	rket Book Market	Market
<u> </u>	<u>B</u>		=	囯	E	[9]	E E	Ξ	Ξ	$ \Xi $		'  ∑	Ξ
ALLETE	ALE	888+	38.142	\$41.34	\$1,576.6	\$1,119.7	\$0.0		\$875.	\$1,995.5	\$2,452.4	43.9%	35.7%
Alliant Energy	LNT	BBB+	110.962	\$45.13	\$5,008.1	\$3,014.4	\$146.9		\$2,977	\$6,138.3	\$8,132.0	48.5%	36.6%
Avista Corp.	AVA	BBB	58.675	\$26.41	\$1,549.3	\$1,216.8	\$53.0		\$1,398.	\$2,668.2	\$3,000.7	52.4%	46.6%
Cen. VT Pub Serv.	C.		13.479	\$34.97	\$471.4	\$276.3	\$0.0		\$228	\$512.8	\$707.9	44.6%	32.3%
СІесо Сотр.	ĆNÍ,	BBB	60.920	\$41.50	\$2,528.3	\$1,456.3	\$0.0		\$1,337.	\$2,794.1	\$3,866.2	47.9%	34.6%
Empire Dist. Elec.	EDE	BBB-	42.158	\$20.85	\$879.2	\$6695	\$0.0		\$714	\$1,413.7	\$1,593.4	80.5%	44:8%
IdaCorp	IDA	BBB	50.096	\$41.74	\$2,091.2	\$1,692.3	\$4.1	\$0.0	\$1,602.	\$3,298.7	\$3,697.6	48.6%	43.3%
MGE Energy	MGEE		23.114	\$46.93	\$1,084.7	\$563.6	\$0.0		\$362	\$926.5	\$1,447.5	39.2%	25.1%
Northeast Utilities	ΩN	A-	313.604	\$38.46	\$12,061.2	\$9,067.6	\$155.6		\$9,028.	\$18,251.5	\$21,245.1	49.5%	42.5%
UII. Holdings	UIL	BBB	50.650	\$35.43	\$1,794.4	\$1,114.8	\$0.8		\$1,753.	\$2,869.4	\$3,549.0	61.1%	49.4%
UniSource Energy	CINS		40.260	\$38.00	\$1,530.0	\$1,038.5	\$0.0		\$1,900.	\$2,939.0	\$3,430.5	64.7%	55.4%
Westar Energy	WR	BBB	126.180	\$29.62	\$3,736.8	\$2,783.8	\$10.3		\$3,436.	\$6,230.8	\$7,183.8	55.2%	47.8%
Wisconsin Energy	WEC	A-	230.455	\$39.27	\$9,049.6	\$4,081.1	\$30.4		\$5,191.	\$9,303.3	\$14,271.8	55.8%	36.4%
			Median:		\$1,794.4	\$1,216.8	8.08		\$1,602.3	\$2,869.4	\$3,549.0	49.5%	42.5%
			Mean:		\$3,335.4	\$2,163.4	\$30.8	\$0.6	\$2,369.8	\$4,564.8	\$5,736.8	20.9%	40.8%
DPL Inc.¹ DP&L'						\$2,187.3 \$1,355.3	\$0.0	\$0.0 \$22.9	\$2,677.5 \$903.2	\$4,864.8 \$2,281.4		55.0% 39.6%	

No Bloomberg data for DPL or DP&L, DPL Acquired by AES in 2011.

[A] Company list from JDM-6.

[B] Tickers from JDM-6.

[C] Long-term S&P Credit Ratings from Thomson One, as of Oct. 1, 2012.

[C] Long-term S&P Credit Ratings from Thomson One, as of Oct. 1, 2012.

[C] Long-term S&P Credit Ratings from Thomson One, as of Oct. 1, 2012.

[C] Long-term S&P Credit Ratings from Thomson One, as of Oct. 1, 2012.

[C] Long-term S&P Credit Ratings from Thomson One, as of Oct. 1, 2012.

[E] Data from Bloomberg on 6/29/2012, except for CV which is from Bloomberg on 3/30/2012. Data from Capital IQ. Data for CV from SEC-Edgar, 10Q, on 3/31/2012 (dollars in millions).

[G] Book Value of Minority Interest for 6/30/2012. Data from Capital IQ. Data for CV from SEC-Edgar, 10Q, on 3/31/2012 (dollars in millions).

[J] Book Value of Preferred Equity for 6/30/2012. Data from Capital IQ. Data for CV from SEC-Edgar, 10Q, on 3/31/2012 (dollars in millions).

[K] = [G] + [H] + [H] + [H] + [H] + [H] (dollars in millions).

[M] = [H] / [K].

[M] = [H] / [K].

The Dayton Power and Light Company
Case No. 12-426-EL-SSO
Fitch 2011 BBB- Integrated Utility Company Financial Ratios

WJC-10 Page 1 of 1 Witness Responsible: William J. Chambers

Data: Historical Type of Filing: Original Work Paper Reference No(s).: WJC-1; WJC-2

	Inte	Interest Coverage (x)	(x)		Leverage		O	Capital Structure	5)	Liquidity	Profitability	sility	Dividends
	- Operating	Operating	FFO +					:	(				Common
	EBIT/	EBITDA/	Interest/	Debt/				Total Hybrid	Common				Dividend
Line	Interest	Interest	Interest	Operating		Debt/	Total Debt/	Equity/Total		Internal	Operating		Payout
No. Integrated Utility Company	Expense	Expense	Expense	EBITIDA	FFO/Debt	FFO	Total Capital	Capital	Total Capital	Generation	Margin	ROE	Ratio
(A) (B)	(2)	ê	( <del>1</del> )	E	(5)	Œ	<b>(</b> )	<b>(5)</b>	(K)	(T)	(M)	(N)	(0)
1 Appalachian Power Company	2.00	3.30	3.10	5.60	0.11	8.80	27.9%		42.1%	1.02	13.6%	2.6%	0.84
2 Arizona Public Service Company	3.00	4.70	4.70	2.80	0.28	3.60	45.4%	1.5%	23.1%	1.00	23.4%	8.7%	89.0
3 Consumers Energy Company	3.80	5.70	5.10	3.00	0.24	4.10	20.0%	0.3%	49.8%	1.04	15.7%	11.0%	08.0
4 Empire District Electric Company	3.20	4.70	5.00	3.60	0.23	4.30	50.4%		49.6%	1.05	22.5%	8.1%	0.49
5 Indiana Michigan Power Company	2.20	3.40	4.40	5.50	0.18	5.50	61.5%	,	38.5%	1.87	14.8%	8.6%	0.50
6 Indianapolis Power & Light Company	3.60	6.40	00.9	2.80	0.29	3.50	26.6%	%9'I	41.8%	19.0	18.4%	13.2%	6.79
7 Kentucky Power Company	2.70	4.10	3.80	3.60	0.18	5.50	54.7%		45.3%	60'1	13.6%	9.3%	19'0
8 Southwestern Electric Power Company	2.40	3.50	3.50	4.70	0.15	9.60	53.1%	,	46.9%	0.70	18.3%	9.3%	0.03
9								;	:	;	;	,	;
10 Non-DP&L Median	2.85	4.40	4.55	3.60	0.21	4.90	53.9%	1.5%	46.1%	1.03	17.0%	%0.6	0.67
<ol> <li>DP&amp;L Pro Forma Debt Adjustment</li> </ol>	ı	8.73	8.19	2.60	ſ	3.16	51.7%	1	0.47	0.75	19.1%	14.9%	1.20

Notes & Sources:

1 - 8 From Fitch Ratings, U.S. Utilities, Power & Gas Financial Peer Study, June 2012, at 12. Includes all firms from BBB-IDR list except Dayton Power & Light Company.

10 Median of Line 1 Line 8.

12 2011 values from WJC-2. Without the Pro-Forma adjustment, Total Debt/Total Capital is 40%. See Fitch Ratings, U.S. Utilities, Power & Gas Financial Peer Study, June 2012, at 12 and WJC-1.

# The Dayton Power and Light Company Case No. 12-426-EL-SSO

# Calculation of Additional Debt to Set Pro Forma Debt Ratio Equal to 50 Percent as of 12/31/2012

Data: Historical and Forecasted

Type of Filing: Original

WJC-11 Page 1 of 1

Work Paper Reference No(s):: WJC-2.B; WJC-2.D;

Witness Responsible: William J. Chambers

WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING with Detail.xlsx

		12/31	12/31/2012	12/31	12/31/2013
Line					
No.	Line Item	As-Filed	Pro Forma	As-Filed	Pro Forma
(A)	(B)	(C)	(D)	(E)	
-	Short Term Debt	0	0	0	0
2					
m	Common Shareholder's Equity	1,434	1,156	1,522	1,236
4	Preferred Stock	23	23	23	23
5	Long Term Debt	904	1,182	904	1,182
9	Total Capitalization	2,361	2,361	2,449	2,440
7	Debt Ratio	38%	20%	37%	48%

Dollars in millions.

- Equal to (E), except Common Shareholder's Equity. Common Shareholder's Equity for (C) equal to Common Shareholder's Equity for (E) less 2013 retained earnings of \$88.0 calculated as \$139.0 net income less \$51.0 dividend. 9
- See WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING with Detail.xlsx
- Equal to (C), except Long Term Debt increases by \$277.9 million and Common Shareholder's Equity decreases by a like amount so that the Debt Ratio equals 50%. **a**
- WP-12 Proforma Financials Cost of Debt and CLJ-1- FILING with Detail.xlsx
- Equal to (D), except Common Shareholder's Equity, which also includes 2013 retained earnings of \$79.4, calculated as \$130.4 net income (WJC-2.B) less \$51.0 dividend (WJC-2.D), Debt Ratio equal to (Short Term Debt + Long Term Debt) / Total Capitalization. <u>a</u> E

The Dayton Power and Light Company Case No. 12-426-EL-SSO ROE Ratios of Comparable Firms

Data: Historical and Forecasted Type of Filing: Original Work Paper Reference No(s).: WJC-12.C

WJC-12.A Page 1 of I Witness Responsible: Wiltiam J. Chambers

	σ	Credit Rating			Actual			Projected	
Company Name	Fitch	38.	Moodvs	2002	2010	707	2012	2013	2015-2017
Florida Power Corporation	BBB	BBB	Baal	11 7%	9.7%	%9'9			
Ohio Power Company	BBB+	BBB	Baal	20.4%	13.7%	10.2%	0.0%	%5.6	%5.6
Pacific Gas & Electric Company	BBB⁴	999	Α3	12.2%	10.0%	7.2%	7.5%	%0.6	10.5%
Public Service Co. of Colorado	BBB	¥	Baai	R.8%	10.1%	9.4%			
South Carolina Electric & Gas Company	BBB₁	889	Baa2	9 6%	%S 8	8.6%			
Tampa Electric Company	88B	888	Ε¥	9.2%	11.4%	10.9%			
Union Electric Company	BBB₁	BBB-	Baa2	7.2%	9.2%	7.2%			
Virginia Electric and Power Company	BBB+	¥	A3	5.3%	10.9%	%5 6			
Black Hills Power fre.	888	BBB.	Baa2	8.7%	10.6%	8.4%			
The Detroit Edison Company	888	BBB	Bas	10.1%	11.2%	10 7%			
Monongahela Power Company	999	888-	Baal	٠	17 4%	0.2%			
NorthWestern Corporation	BBB	BBB	Baal	9.5%	%96	%0:II	6.5%	%5.6	10.0%
PacifiCorp	BBB	Α.	Baal	8.6%	8 2%	7.6%			
Public Service Company of Oklahoma	RRR	888	Bas!	6 7%	%8 8	14.4%			
Public Service Company of New Hampshire	888	Υ-	Baal	%96	%6 01	10.0%			
Southwestern Public Service Company	BRB	¥	Baal	7.2%	8.2%	8.8%			
Wester Entrgy, Inc.	BBB	888	Baa2	26.7	8.8%	8.9%	8 5%	8 0%	8.5%
A served are by an energy of servers of	aaa	ď	Han?	6 192	4 00%	4 T*			
Appendent lower company		200	170			) F	/90 0	/83 (	20.0
Anzona Public Service Company	RHR.	929	Baal	×4.1	9.7 K	e/ / 4	¥.0.X	4.5%	4.0.4
Consumers Energy Company	BBB-	98B-	Baa2	78	10.9%	11.0%	30%	13.0%	12.5%
Empire District Electric Company	BBB-	BBB.	Baa2	7.3%	7.5%	8.1%	7 5%	8.0%	%0.6
Indiana Michigan Power Company	BBB.	BBB	B382	%6 EI	7.5%	8.7%			
Indianspolis Power & Light Company	BBB-	BBB-	Bas2	15 0%	15.8%	13,7%			
Kentucky Power Company	BBB-	BBB	Bas2	5.8%	8.0%	93%			
Southwestern Electric Power Company	BBB-	988	Baa3	8.2%	8.9%	93%			
Nevada Power Company	±88	BB+	Baa3	5.1%	%63%	4 7%	8 0%	8.0%	%0.6
Sterra Pacific Power Company	BB+	## ##	Ban3	Ž.	7 3%	6 1%			
Tucson Electric Power Company	± 89 8	83+	Baa3	14.8%	16.0%	111%	10.0%	11.0%	14.0%
			Minimum:	5.1%	4 9%	0.2%	7.5%	8.0%	8 5%
		25th	25th Percentile:	7.4%	8 2%	7.5%	8.0%	8.0%	400
			Median:	8.7%	9.4%	8 9%	%0.6	9.5%	%5.6
			Average	9.4%	%0.01	8.8%	%Z 6	%5 6	10.2%
		75th	75th Percentile:	%66	%6 O1	10.3%	10.0%	9.8%	10.5%
			Maximum:	20.4%	17.4%	14.4%	13.0%	13.0%	14.0%
The Dayton Power and Light Company	BBB-	BBB.	Baa2	18.0%	20 0%	14 1%			
•									

Notes & Squees
Credit ratings from WIC-12.C.

Gredit ratings from WIC-12.C.

Gredit ratings from WIC-12.C.

ROE = Net Income ((Book Equity year, + Book Equity year,<sub>1</sub>) / 2) from WIC-12.C.

Projections from ValueLaine. ROE = Return on Common Equity.

Companies without projections are not substantial subsidiaries of their parent company. A subsidiary company are from the parent of their parent company is 2013 operating revenue to be considered substantial.

Projections for Ohio Power Company, Kentucky Power Company, Kentucky Power Company, And Southwestern Electric Power Company, Appalachian Power Company.

The Projection for 2015-2017 is for each year 2015, 2017 separately, it is not a sum.

# The Dayton Power and Light Company Case No. 12-426-EL-SSO ROE By Credit Rating

Data: Historical

Type of Filing: Original

Work Paper Reference No(s).: WJC-12.A

Page 1 of 1

WJC-12.B

Witness Responsible: William J. Chambers

Credit Rating         25th Percentile ROE         75th Percentile ROE         75th Percentile ROE           BBB+         8.4%         9.5%         7.2%         8.4%         11.8%         11.0%         9.7%         10.4%           BBB-         7.0%         7.5%         8.4%         8.5%         11.3%         11.0%         9.7%         10.4%           BBB-         7.0%         7.5%         8.4%         8.5%         11.3%         11.7%         8.6%         10.5%           BBB-         7.0%         7.2%         8.4%         6.3%         11.3%         11.7%         8.6%         10.5%           A-         5.4%         7.1%         8.4%         6.3%         11.3%         11.7%         8.6%         10.5%           BBB-         7.2%         8.2%         8.1%         9.7%         9.7%         9.7%           BBB-         7.2%         8.2%         8.1%         11.6%         9.5%         10.4%           BBB-         7.5%         8.2%         8.1%         8.8%         10.8%         10.4%           BBB-         7.5%         8.2%         8.1%         8.1%         11.6%         9.5%         10.4%           BBB-         7.5%				Fitch					
2009         2010         2011         Average         2009         2010         2011           8.4%         9.5%         7.2%         8.4%         11.8%         11.0%         9.7%           8.5%         8.8%         8.4%         8.5%         9.6%         10.9%         10.7%           7.0%         7.5%         8.5%         7.7%         9.7%         9.7%         9.8%           6.4%         7.1%         5.4%         6.3%         11.3%         11.7%         9.8%           6.4%         7.1%         8.5%         7.7%         9.7%         9.7%         9.8%           6.4%         7.1%         5.4%         6.3%         11.3%         11.7%         8.6%           2009         2010         2011         Average         2009         2010         2011           7.2%         8.2%         8.1%         8.1%         9.6%         10.4%         8.6%           7.3%         9.6%         7.5%         8.1%         8.1%         9.5%         10.4%         8.6%           7.2%         8.2%         8.1%         8.1%         8.1%         11.3%         11.7%         8.6%           6.4%         7.1%         8.3%			25th Perc	entile ROE			75th Perce	entile ROE	
8.4% 9.5% 7.2% 8.4% 11.8% 11.0% 9.7% 8.5% 8.5% 9.6% 10.9% 10.7% 10.7% 7.2% 8.5% 7.7% 9.7% 9.7% 9.7% 9.8% 10.7% 9.8% 7.1% 5.4% 6.3% 11.3% 11.7% 8.6% 10.9% 10.7% 8.6% 7.1% 8.2% 8.8% 8.1% 8.1% 8.1% 10.5% 11.2% 11.2% 10.0% 7.3% 8.2% 8.1% 8.1% 8.1% 10.5% 11.2% 10.0% 7.3% 8.2% 8.1% 8.1% 8.1% 11.5% 11.2% 10.0% 7.3% 8.2% 8.1% 6.3% 11.3% 11.3% 11.1% 8.6% 8.6% 7.1% 5.4% 6.3% 10.7% 11.1% 10.2% 8.6% 8.3% 8.3% 8.7% 10.1% 10.0% 10.2% 8.6% 8.3% 8.3% 8.5% 10.1% 10.0% 10.2% 8.6% 8.3% 8.3% 8.5% 10.1% 10.9% 10.6% 8.6% 8.9% 7.9% 8.3% 8.5% 10.1% 10.9% 10.6% 7.2% 8.3% 8.3% 8.5% 10.1% 10.9% 10.6% 7.2% 7.2% 8.3% 8.3% 7.8% 9.6% 10.1% 10.9% 9.7% 7.2% 7.2% 8.3% 7.3% 8.5% 10.1% 10.9% 9.7% 7.2% 7.2% 8.3% 7.3% 8.5% 10.1% 10.9% 9.7% 7.2% 7.2% 8.3% 6.7% 9.9% 10.7% 9.7% 7.2% 7.2% 8.3% 6.7% 9.9% 10.7% 9.7% 7.2% 7.2% 5.8% 6.7% 9.9% 10.7% 9.7% 9.7%	Credit Rating	2009	2010	2011	Average	2009	2010	2011	Average
8.5% 8.8% 8.4% 8.5% 9.6% 10.9% 10.7% 1.0% 7.5% 8.5% 7.7% 9.7% 9.7% 9.7% 9.8% 7.0% 9.7% 9.7% 9.8% 8.5% 7.1% 9.7% 9.7% 9.7% 9.8% 9.8% 11.3% 11.7% 8.6% 8.2% 8.2% 8.1% 8.1% 10.5% 11.2% 10.0% 7.5% 8.2% 8.1% 8.1% 11.6% 9.5% 10.0% 7.5% 8.2% 8.1% 8.1% 11.6% 9.5% 10.0% 7.5% 8.2% 8.1% 6.3% 11.3% 11.7% 8.6% 10.4% 7.1% 5.4% 6.3% 11.3% 11.3% 11.7% 8.6% 8.6% 11.3% 11.3% 11.1% 10.2% 10.2% 10.2% 10.4% 8.3% 8.5% 10.1% 10.9% 10.2% 10.2% 8.6% 8.9% 7.9% 8.5% 10.1% 10.9% 10.2% 10.6% 10.5% 10.1% 10.6% 10.2% 10.1% 10.6% 10.2% 10.1% 10.2% 10.1% 10.1% 10.6% 10.1% 10.7% 9.7% 10.7% 9.7%	BBB+	8.4%	9.5%	7.2%	8.4%	11.8%	11.0%	9.7%	10.8%
7.0%       7.5%       8.5%       7.7%       9.7%       9.7%       9.8%         6.4%       7.1%       5.4%       6.3%       11.3%       11.7%       8.6%         6.4%       7.1%       5.4%       6.3%       11.3%       11.7%       8.6%         2009       2010       2011       Average       2009       2010       2011         7.2%       8.2%       8.1%       8.1%       11.2%       10.8%         9.5%       9.4%       8.1%       8.1%       11.2%       10.8%         7.5%       8.2%       8.7%       11.6%       9.5%       10.0%         7.3%       9.6%       7.5%       8.1%       8.7%       11.46%       10.4%         6.4%       7.1%       5.4%       6.3%       11.3%       11.7%       8.6%         6.4%       7.1%       5.4%       6.3%       11.3%       11.7%       8.6%         7.2%       10.4%       8.3%       11.3%       11.1%       10.2%       10.4%         8.6%       2009       2010       2011       Average       2009       2010       2011       2010       2011       2010       2011       2010       2010       2010 <t< td=""><td>888</td><td>8.5%</td><td>8.8%</td><td>8.4%</td><td>8.5%</td><td>%9.6</td><td>10.9%</td><td>10.7%</td><td>10.4%</td></t<>	888	8.5%	8.8%	8.4%	8.5%	%9.6	10.9%	10.7%	10.4%
6.4%       7.1%       5.4%       6.3%       11.3%       11.7%       8.6%         S&P       S&P       11.3%       11.7%       8.6%         2009       2010       2011       Average       2009       2010       2011         7.2%       8.2%       8.1%       9.0%       10.5%       10.9%       9.5%         9.5%       9.4%       8.1%       9.0%       10.5%       11.2%       10.8%         7.3%       9.6%       7.5%       8.1%       9.0%       10.5%       9.5%       10.0%         7.3%       9.6%       7.1%       8.1%       8.1%       11.5%       10.4%       10.4%         6.4%       7.1%       5.4%       6.3%       11.3%       11.7%       8.6%         5.4%       7.1%       8.3%       8.7%       11.3%       11.7%       8.6%         5.4%       6.3%       11.3%       11.1%       8.6%         5.4%       6.3%       11.3%       11.7%       8.6%         5.5%       2010       2010       2010       2011       7.1%         7.2%       10.4%       8.3%       8.7%       10.9%       10.9%       9.7% <t< td=""><td>BBB-</td><td>7.0%</td><td>7.5%</td><td>8.5%</td><td>7.7%</td><td>9.7%</td><td>9.7%</td><td>9.8%</td><td>9.7%</td></t<>	BBB-	7.0%	7.5%	8.5%	7.7%	9.7%	9.7%	9.8%	9.7%
S&P         2009       2010       2011       Average       2009       2010       2011         7.2%       8.2%       8.8%       8.1%       8.8%       10.9%       9.5%         9.5%       9.4%       8.1%       8.1%       10.5%       11.2%       9.5%         7.2%       8.2%       8.1%       8.1%       11.6%       9.5%       10.8%         7.3%       9.6%       7.5%       8.1%       11.6%       9.5%       10.0%         7.3%       9.6%       7.5%       8.1%       11.3%       11.0%       8.6%         6.4%       7.1%       5.4%       6.3%       11.3%       11.7%       8.6%         6.4%       7.1%       8.3%       8.7%       11.3%       11.7%       8.6%         7.2%       10.4%       8.3%       8.7%       10.7%       10.2%         8.6%       8.9%       7.9%       9.6%       10.9%       10.6%         7.2%       10.4%       8.3%       10.1%       9.6%       10.6%         7.2%       10.4%       8.5%       10.1%       9.7%         7.2%       7.8%       8.3%       10.1%       9.6%       9.7%	BB÷	6.4%	7.1%	5.4%	6.3%	11.3%	11.7%	8.6%	10.5%
25th Percentile ROE           2009         2010         2011         Average         2009         2010         2011           7.2%         8.2%         8.8%         8.1%         8.8%         10.9%         9.5%           9.5%         9.4%         8.1%         9.0%         10.5%         11.2%         10.8%           7.5%         8.2%         8.7%         8.1%         11.6%         9.5%         10.0%           7.3%         9.6%         7.5%         8.1%         11.6%         9.5%         10.0%           6.4%         7.1%         5.4%         6.3%         11.3%         11.7%         8.6%           6.4%         7.1%         5.4%         6.3%         11.3%         11.7%         8.6%           6.4%         7.1%         5.4%         6.3%         11.3%         11.7%         8.6%           6.4%         7.1%         5.4%         6.3%         11.3%         11.7%         8.6%           7.2%         8.3%         8.7%         10.7%         10.4%         8.5%           8.6%         7.9%         8.5%         10.1%         10.2%         10.2%           8.6%         7.2%         8.3%         7.8% </td <td></td> <td></td> <td></td> <td>S&amp;P</td> <td></td> <td></td> <td></td> <td></td> <td></td>				S&P					
2009         2010         2011         Average         2009         2010         2011           7.2%         8.2%         8.8%         8.1%         8.1%         9.5%         9.5%           9.5%         9.4%         8.1%         9.0%         10.5%         10.8%         9.5%           7.5%         8.2%         8.7%         8.1%         9.0%         10.5%         10.8%           7.3%         8.2%         8.7%         8.1%         11.6%         9.5%         10.0%           7.3%         9.6%         7.5%         8.1%         11.3%         14.6%         10.4%           6.4%         7.1%         5.4%         6.3%         11.3%         11.7%         8.6%           5.4%         7.1%         5.4%         6.3%         11.3%         11.7%         8.6%           5.4%         7.1%         8.7%         6.3%         11.3%         11.7%         8.6%           5.4%         7.1%         8.3%         8.7%         10.7%         10.2%         10.2%           5.5%         10.4%         8.3%         8.7%         10.7%         10.2%         10.2%           7.2%         7.8%         8.3%         7.8%         9.6% <td></td> <td></td> <td>25th Perc</td> <td>entile ROE</td> <td></td> <td></td> <td>75th Perce</td> <td>entile ROE</td> <td></td>			25th Perc	entile ROE			75th Perce	entile ROE	
7.2% 8.2% 8.8% 8.1% 9.0% 10.5% 10.9% 9.5% 7.5% 8.2% 8.1% 9.0% 10.5% 11.2% 10.8% 10.8% 7.5% 8.2% 8.7% 8.1% 11.6% 9.5% 10.0% 9.6% 7.3% 9.6% 7.5% 6.3% 11.13% 11.7% 8.6% 10.4% 6.3% 11.3% 11.1% 10.2% 8.6% 10.4% 7.1% 8.3% 8.7% 10.1% 10.1% 10.2% 8.6% 10.6% 8.3% 8.5% 10.1% 10.1% 10.2% 8.6% 10.6% 7.2% 8.9% 7.9% 8.3% 7.8% 8.3% 6.7% 9.6% 10.1% 9.7% 9.7% 7.2% 7.8% 8.3% 6.7% 9.6% 10.1% 9.7% 9.7% 7.2% 7.2% 5.8% 6.7% 9.6% 10.1% 9.7% 9.7% 9.7% 9.7% 9.7% 9.7% 9.7% 9.7	Credit Rating	2009	2010	2011	Average	2009	2010	2011	Average
9.5% 9.4% 8.1% 9.0% 10.5% 11.2% 10.8% 7.5% 8.2% 8.7% 8.1% 11.6% 9.5% 10.0% 7.3% 9.6% 7.5% 8.1% 8.7% 14.6% 10.4% 10.4% 6.4% 7.1% 5.4% 6.3% 11.3% 11.7% 8.6% 10.4% 8.5% 11.3% 11.1% 10.2% 8.6% 2009 2010 2011 7.2% 10.4% 8.3% 8.5% 10.1% 10.1% 10.5% 9.7% 7.2% 8.9% 7.9% 8.5% 6.7% 9.6% 10.1% 9.7% 9.7% 7.2% 5.8% 6.7% 9.9% 10.1% 9.7% 9.7% 9.7% 9.7% 9.7% 9.7% 9.7% 9.7	A-	7.2%	8.2%	8.8%	8.1%	8.8%	10.9%	9.5%	9.7%
7.5% 8.2% 8.7% 8.1% 11.6% 9.5% 10.0% 7.3% 9.6% 7.5% 8.1% 11.3% 14.6% 10.4% 6.4% 7.1% 5.4% 6.3% 11.3% 11.7% 8.6%  Moody's  Amoody's  25th Percentile ROE  2009 2010 2011 Average 2009 2010 2011 7.2% 10.4% 8.3% 8.7% 10.1% 10.2% 10.6% 8.5% 10.1% 10.9% 10.6% 7.2% 8.8% 8.3% 7.8% 8.5% 10.1% 10.1% 10.9% 10.6% 7.2% 5.8% 6.7% 9.9% 10.7% 9.7% 9.7%	BBB+	9.5%	9.4%	8.1%	%0.6	10.5%	11.2%	10.8%	10.8%
7.3% 9.6% 7.5% 8.1% 14.6% 10.4% 10.4% 5.4% 6.3% 11.3% 11.7% 8.6% 8.6% 10.4% 5.4% 6.3% 11.3% 11.7% 8.6% 8.6% 10.4% 8.3% 8.7% 10.1% 10.1% 10.2% 8.5% 10.1% 10.1% 10.0% 9.7% 7.2% 8.3% 8.3% 8.5% 10.1% 10.1% 10.9% 10.6% 8.5% 6.7% 9.6% 10.1% 9.7% 9.7% 9.7% 9.7% 9.9% 10.7% 9.7% 9.7% 9.7% 9.7% 9.7% 9.7% 9.7% 9	BBB	7.5%	8.2%	8.7%	8.1%	11.6%	9.5%	10.0%	10.4%
6.4%       7.1%       5.4%       6.3%       11.3%       11.7%       8.6%         Moody's	BBB-	7.3%	%9.6	7.5%	8.1%	8.7%	14.6%	10.4%	11.2%
Moody's         2009       2010       2011       Average       2009       2010       2011       4         7.2%       10.4%       8.3%       8.7%       10.7%       11.1%       10.2%         8.6%       8.9%       7.9%       8.5%       10.1%       10.9%       10.6%         7.2%       7.8%       8.3%       7.8%       9.6%       10.8%       9.7%         7.1%       7.2%       5.8%       6.7%       9.9%       10.7%       9.7%	88+	6.4%	7.1%	5.4%	6.3%	11.3%	11.7%	8.6%	10.5%
25th Percentile ROE       75th Percentile ROE         2009       2010       2011       Average       2009       2010       2011       4         7.2%       10.4%       8.3%       8.7%       10.7%       11.1%       10.2%       10.2%         8.6%       8.9%       7.9%       8.5%       10.1%       10.9%       10.6%       9.7%         7.2%       7.8%       8.3%       6.7%       9.6%       10.7%       9.7%         7.1%       7.2%       5.8%       6.7%       9.9%       10.7%       9.7%				Moody's					,
2009         2010         2011         Average         2009         2010         2011         .           7.2%         10.4%         8.3%         8.7%         10.7%         11.1%         10.2%           8.6%         8.9%         7.9%         8.5%         10.1%         10.9%         10.6%           7.2%         7.8%         8.3%         7.8%         9.6%         10.8%         9.7%           7.1%         7.2%         5.8%         6.7%         9.9%         10.7%         9.7%			25th Perce	entile ROE			75th Perce	entile ROE	
7.2%     10.4%     8.3%     8.7%     10.7%     11.1%     10.2%       8.6%     8.9%     7.9%     8.5%     10.1%     10.9%     10.6%       7.2%     7.8%     8.3%     7.8%     9.6%     10.8%     9.7%       7.1%     7.2%     5.8%     6.7%     9.9%     10.7%     9.7%	Credit Rating	2009	2010	2011	Average	2009	2010	2011	Average
8.6% 8.9% 7.9% 8.5% 10.1% 10.9% 10.6% 7.2% 7.8% 8.3% 7.8% 9.6% 10.8% 9.7% 7.1% 7.2% 5.8% 6.7% 9.9% 10.7% 9.7%	A3	7.2%	10.4%	8.3%	8.7%	10.7%	11.1%	10.2%	10.7%
7.2% 7.8% 8.3% 7.8% 9.6% 10.8% 9.7% 7.1% 7.2% 5.8% 6.7% 9.9% 10.7% 9.7%	Baal	8.6%	8.9%	7.9%	8.5%	10.1%	10.9%	10.6%	10.6%
7.1% 7.2% 5.8% 6.7% 9.9% 10.7% 9.7%	Baa2	7.2%	7.8%	8.3%	7.8%	9.6%	10.8%	9.7%	10.0%
	Baa3	7.1%	7.2%	5.8%	6.7%	%6.6	10.7%	9.7%	%1:01

## Notes & Sources:

'Average' calculated as the average of the 2009, 2010, and 2011 ROEs, by Credit Rating. Data excludes DP&L.

The Dayton Power and Light Company Case No. 12-426-EL-SSO
Net Income and Book Equity of Comparable Firms

Data: Historical Type of Filing: Original Work Paper Reference No(s).:

WJC-12.C Page 1 of 1 Witness Responsible: William J. Chambers

	·	į		•						
	5	Credit Kating	- 1		Net Income			Book Equity	dılık	
Company Name	Fitch	S&P	Moodys	5003	<u>2010</u>	2011	2008	2003	2010	2011
Florida Power Corporation	BBB+	BBB+	Baal	\$462	\$453	\$314	\$3,399	\$4,490	\$4,890	\$4 675
Ohio Power Company	BBB	BBB	Baal	\$578	\$542	5465	\$2,422	\$3,235	\$4,655	\$4,450
Pacific Gas & Electric Company	BBB	BBB	₽	\$1,250	\$1,121	\$845	\$9,529	\$10,927	\$11,463	\$12,126
Public Service Co. of Colorado	BBB+	÷	Baat	1323	\$400	26E\$	\$3,578	\$3,746	\$4,138	\$4,306
South Carolina Electric & Gas Company	BBD+	BBB+	Baa2	1281	\$290	\$306	\$2,704	\$3,162	\$3,437	\$3,665
Tampa Electric Company	BBB+	3BB+	A3	261\$	\$243	\$235	\$2,091	\$2,104	\$2,158	\$2,154
Union Electric Company	BBB+	BBB	Baa2	\$265	\$369	\$290	\$3 449	\$3,944	\$4,073	\$3,957
Virginia Electric and Power Company	BBB+	Ý	<b>6</b> 3	\$356	\$852	\$822	\$6.274	\$7,173	\$8,507	\$8,750
Black Kills Power Inc.	BBB	BBB.	Baa2	\$23	\$31	\$27	\$255	\$278	\$309	\$336
The Detroit Edison Company	B8B	BBB+	Basl	\$376	5441	\$437	\$3,556	\$3,873	\$4,009	\$4,136
Monongahela Power Company	HBB	BBB-	Baal	20	\$51	3	O.	\$0	165\$	\$550
North Western Corporation	BBB	BBB	Baal	\$73	\$77	\$93	\$764	5787	\$820	\$859
PacifiCorp	BBB	¥	Baal	\$542	\$566	\$555	\$5,946	\$6,607	\$7,270	\$7,271
Public Service Company of Oktahoma	BBB	HBB	Baal	\$76	\$73	\$125	\$748	\$812	\$842	\$893
Public Service Company of New Hampshire	BBB	¥	Baa2	\$68	\$30	\$100	\$634	7272	\$926	\$1,078
Southwestern Public Service Company	BBB	Ÿ	Baa]	\$68	\$78	065	\$930	\$950	\$962	\$1,077
Westar Energy, Inc.	888	888	Baa2	\$175	\$204	\$230	\$2,186	\$2,245	\$2,383	\$2,769
Appalachian Power Company	BBB	BBB	Bna2	951\$	\$137	\$163	\$2,377	\$2,772	\$2,822	\$2,936
Arizona Public Service Company	BBB-	BBB	Baal	\$25	\$336	\$336	\$3,339	\$3,445	\$3,825	\$3,943
Consumers Energy Company	BBB-	BBB-	Baa2	\$293	\$434	\$467	\$3,705	\$3,814	\$4,136	\$4,350
Empire District Electric Company	BBB-	BBB.	Baa2	\$4]	\$47	\$55	\$529	\$600	\$658	\$698
Indiana Michigan Power Company	BBB.	BBB	Baa2	\$216	\$136	\$150	\$1,435	\$1,673	\$1,694	192,38
Indianapolis Power & Light Company	BBB.	BBB.	B322	\$113	\$120	\$105	\$750	\$753	\$759	\$782
Kentucky Power Company	BBB-	BBB	Baaz	\$74	\$33	\$42	\$398	\$432	\$446	2460
Southwestern Electric Power Company	BBB-	BBB	Baa3	\$114	\$143	191\$	\$1,249	\$1,524	\$1,667	\$1,813
Nevada Power Company	BB+	BB+	Baa3	\$134	\$186	\$133	\$2,628	\$2,650	\$2,762	\$2,849
Sierra Pacific Power Company	BB+	BB÷	Baa3	573	\$72	\$60	\$878	\$1,009	\$973	\$16\$
Tucson Electric Power Company	BB+	BB+	Baa3	165	8015	\$85	\$584	\$643	\$710	\$825
			Minimum	30	\$31	s	ğ	\$0	\$309	\$336
		25th	25th Percentile.	\$73	\$78	\$37	\$750	\$779	£83.	\$884
			Median:	\$165	\$164	\$162	\$2,138	\$2,175	\$2,271	\$2,461
			Average	\$236	\$272	<b>\$</b> 253	\$2,369	\$2,656	\$2,925	\$3,016
		754	75th Percentile Maximum:	\$301	\$408 \$1,121	\$351 \$845	53,412 59,529	\$3,763 \$10,927	\$11,463	\$4,178 \$12,126
The Dayton Power and Light Company	BBB-	ввв-	BaaZ	\$259	\$278	\$193	\$1,475	\$1,403	\$1,380	\$1,358

Notes & Sources:
Numbers in milions.
First Credit Raings from First Ratings, U.S. Utilities, Power & Gas Financial Peer Study, June 2012, at 11–12
S&P Credit Raings from Thomson One and StandardAndPoors com, as of June 22, 2012.
Motody's Credit Raings from Moodys com, as of June 22, 2012.
Financials from Capital 1Q.

### **BEFORE THE**

### PUBLIC UTILITIES COMMISSION OF OHIO

### THE DAYTON POWER AND LIGHT COMPANY

CASE NO. 12-426-EL-SSO

**CASE NO. 12-427-EL-ATA** 

CASE NO. 12-428-EL-AAM

**CASE NO. 12-429-EL-WVR** 

**CASE NO. 12-672-EL-RDR** 

ELECTRIC SECURITY PLAN (ESP)
DIRECT TESTIMONY
OF CLAIRE E. HALE

- □ MANAGEMENT POLICIES, PRACTICES, AND ORGANIZATION
- □ OPERATING INCOME
- □ RATE BASE
- **D** ALLOCATIONS
- **RATE OF RETURN**
- **RATES AND TARIFFS**
- □ OTHER

### **BEFORE THE**

### **PUBLIC UTILITIES COMMISSION OF OHIO**

### ELECTRIC SECURITY PLAN (ESP) TESTIMONY OF CLAIRE E. HALE

### ON BEHALF OF THE DAYTON POWER AND LIGHT COMPANY

### **TABLE OF CONTENTS**

L	INTRODUCTION	1
<i>II</i> .	TRANSMISSION COST RECOVERY	3
111.	RELIABILITY PRICING MODEL	. 12
IV.	SCHEDULES AND WORKPAPERS	. 14
V	CONCLUSION	17

### I. <u>INTRODUCTION</u>

- 2 Q. Please state your name and business address.
- 3 A. My name is Claire E. Hale. My business address is 1065 Woodman Drive, Dayton, OH
- 4 45432.
- 5 Q. By whom and in what capacity are you employed?
- 6 A. I am employed by The Dayton Power and Light Company ("DP&L" or "Company") as a
- 7 Rate Analyst.
- 8 Q. How long have you been in your present position?
- 9 A. I assumed my present position in January 2011.
- 10 Q. What are your responsibilities in your current position and to whom do you report?
- 11 A. In my current position, I am responsible for assisting in the development, analyses,
- revision, and administration of the Company's tariff schedules, rate designs, and policies.
- 13 I have responsibility for the Transmission Cost Recovery Rider and the Reliability
- Pricing Model Rider. I report to the Supervisor of Regulatory Operations.
- 15 Q. Will you describe briefly your educational and business background?
- 16 A. I received a Bachelor of Science degree in Mathematics from The Ohio State University
- in June 2008. Prior to my position at DP&L, I was a Technical Analyst at Accenture.
- There I worked on the Service Oriented Architecture Team providing client support on
- 19 middleware applications.

1	Q.	What is the purpose of your testimony?
2	A.	The purpose of my testimony is to support and explain the Company's Transmission Cost
3		Recovery Rider (TCRR) and its Reliability Pricing Model (RPM) Rider. Specifically, I
4		will describe the separation of market-based and non-market-based transmission-related
5		costs into two TCRR riders, the bypassable TCRR-B and the non-bypassable TCRR-N. I
6		will also explain how these riders will be implemented during the ESP.
7	Q.	What is Case No. 12-672-EL-RDR?
8	A.	Case No. 12-672-EL-RDR is the complete TCRR filing for the proposed TCRR-N rates.
9		This filing is intended to provide all schedules and workpapers that are required by OAC
10		§4901:1-36-03 for developing and implementing a TCRR rate.
1	Q.	What Schedules and Workpapers are you supporting?
12	A.	I am supporting the following Schedules and Tariffs in Case No. 12-426-EL-SSO:
13		Schedule 2A, 2A-1, 2A-2 – TCRR Rate Adjustments
14		Schedule 2C - RPM Rate Adjustments
15		Schedule 7C – TCRR-N Rates
16		Tariff Sheet No. T14 Transmission Cost Recovery Rider - Non-Bypassable
17		(TCRR-N)
18		Tariff Sheet No. T15 Transmission Cost Recovery Rider – Bypassable (TCRR-B)
19		Tariff Sheet No. G27 PJM RPM Rider
20		Additionally, I am supporting all of the Schedules, Workpapers, and Tariffs in Case
21		No. 12-672-EL-RDR,

### II. TRANSMISSION COST RECOVERY

2	Q.	Please describe the Company's current methodology for cost recovery of
3		transmission and transmission-related costs.

- The Company currently has Tariff Sheet No. T15 Transmission Cost Recovery Rider 4 A. (TCRR), which was originally approved by the Commission on May 27, 2009 in Case 5 No. 09-256-EL-UNC. This rider recovers all transmission and transmission-related costs, 6 net of certain transmission-related revenues, charged to the Company by PJM, the 7 approved regional transmission organization (RTO) of which DP&L is a member. This 8 rider is bypassable and reconciled annually, with filings made in February for rates 9 10 effective in May. The current TCRR rates in effect were approved by the Commission in Case No. 12-524-EL-RDR on April 25, 2012 for rates effective May 2012 – April 2013. 11
- Q. Please describe how the Company proposes to continue cost recovery of
   transmission and transmission-related costs.
- The Company plans to separate the cost components of the TCRR into market-based and 14 A. non-market-based subsets and to recover these costs separately. A similar construct was 15 approved by the Commission for FirstEnergy Corporation and Duke Energy Ohio in Case 16 17 Nos. 10-388-EL-SSO and 11-2641-EL-RDR, respectively. A new rider, TCRR-N, will be established that will recover network integration transmission services (NITS), 18 Regional Transmission Expansion Plan (RTEP), and other non-market-based FERC/RTO 19 20 charges. The current TCRR will become TCRR-B and will include the remaining ancillary and market-based charges from PJM that are billed directly to the load-serving 21 entity (LSE) in proportion to the load being served.

- Q. Why is it reasonable to implement NITS through a non-bypassable charge?
- 2 A. Currently the Company charges NITS costs to standard service offer (SSO) customers,
- while CRES providers pay DP&L (through PJM) for NITS to deliver energy to the retail
- 4 customers that they serve. NITS, therefore, already functions as a non-bypassable
- 5 charge. With the proposed TCRR-N, these charges will be paid by the Company to PJM
- for all shopping and SSO load, and therefore will be recovered from all customers in the
- 7 Company's non-bypassable rider.

1

- 8 Q. What other charges will be included in the TCRR-N?
- 9 A. As stated above, the Company also proposes to recover RTEP and other non-market-
- based costs via this rider. These costs are billed to the Company under tariffs approved
- by FERC and recover operational costs for various services provided through PJM.
- Therefore it is reasonable that these costs should be billed to DP&L for all shopping and
- SSO load and recovered on a non-bypassable basis. I have reviewed each PJM bill line
- item and determined that, in addition to NITS and RTEP, the following charges are non-
- market-based and should be included in the TCRR-N: PJM Scheduling, System Control,
- and Dispatch Service; Transmission Owner Scheduling, System Control, and Dispatch
- 17 Service; Reactive Supply and Voltage Control; Black Start Service; NERC and RFC;
- 18 Expansion Cost Recovery; Load Response Charge Allocation; Generation Deactivation;
- and Michigan-Ontario Interface Phase Angle Regulators, Additionally, Firm Point-To-
- 20 Point credits to customers in the AEP zone, Non-Firm Point-To-Point credits, and
- 21 Incremental Capacity Transfer Rights credits are non-market-based and should be
- included in the TCRR-N. Since the PJM environment changes frequently, there may be

new non-market-based costs that are billed to the Company by FERC or PJM. To the 1 2 extent that these new fees or charges are appropriate for inclusion in the TCRR-N, DP&L 3 will seek approval from the PUCO for recovery of these charges. 4 Q. How will the non-bypassable charge TCRR-N benefit customers? 5 When the Company becomes responsible for these costs for all customers, DP&L A. 6 removes the requirement for wholesale or retail suppliers to include them in their product. 7 Excluding these costs should lower the generation price that suppliers charge to their

customers. Additionally, moving these costs to a non-bypassable charge should cause

less variation in the price to compare, making it easier for customers to compare offers

from alternative retail electric generation suppliers.

### Is TCRR-N supported by statute? Q.

8

9

10

1

13

14

15

16

17

18

19

20

12 Yes. TCRR-N is founded in ORC §4928.05(A)(2): A.

> "[C]ommission authority under this chapter shall include the authority to provide for the recovery, through a reconcilable rider on an electric distribution utility's distribution rates, of all transmission and transmission-related costs, including ancillary and congestion costs, imposed on or charged to the utility by the federal energy regulatory commission or a regional transmission organization, independent transmission operator, or similar organization approved by the federal energy regulatory commission."

In addition, it is authorized by ORC §4928.143(B)(2)(g).

Can you please expand on why Rider TCRR-B is reasonable within the ESP Q. environment?

1

2

3

4

5

6

7

11

2

15

16

17

18

19

20

21

22

A.

As explained in Witness Seger-Lawson's testimony, DP&L will employ a Competitive A. Bidding Process (CBP) to supply an increasing portion of the Company's SSO load throughout the blending period. For purposes of this testimony, unless otherwise modified, the term "SSO load" refers to only DP&L's retail load obligation. All marketbased services from PJM will be included in the CBP and wholesale suppliers will 8 become the LSE for their portion of the competitively bid load. DP&L will also continue 9 to provide ancillary and market-based services through PJM for the remaining SSO load that it serves through the TCRR-B. Because responsibility for these services will shift 10 from DP&L to winning bidders as more of DP&L's SSO load is included in the CBP, DP&L proposes to include TCRR-B in the rate blending process. This appropriately phases out DP&L's market-based tariff during the ESP, and more importantly, guarantees 13 14 that the total blended SSO rate is a reasonable blend of comparable products.

### Q. When and how will the new riders TCRR-B and TCRR-N initially be implemented?

The separation of TCRR costs will begin January 1, 2013, at which point TCRR-N and TCRR-B will supersede the current TCRR. At that time, the current TCRR rate will be adjusted down to remove the non-market-based costs. In order to calculate the level of these non-market-based costs, the market-based charges shown in Case No. 12-524-EL-RDR are set to zero, which creates a non-market-based rate that can then be removed from the total proposed TCRR rate. The remaining rate, TCRR-B, will be included in the rate blending process. With regard to the non-market-based costs, DP&L

1	includes in this application the appropriate schedules and workpapers, pursuant to OAC
2	§4901:1-36-03, to set new rates for TCRR-N for the period January 1, 2013 - May 31,
3	2013. These rates were reset for January 1, 2013 to reflect the applicable forecasted costs
4	and sales for all distribution load.

- Will the sum of the TCRR-B rates and the TCRR-N rates be equal to the current TCRR rate? Why or why not?
- No. While the TCRR-B rate is created directly off of the TCRR rate, the TCRR-N rate

  must now be calculated on all distribution load. The cost for each customer class per

  kWh or kW can vary depending on the type of customers included in the calculation.

  Therefore the non-market-based charges included in the TCRR-N must be forecasted and

  allocated across classes and energy/demand differently than when these same charges

  were forecasted and allocated on a bypassable basis in the TCRR.

### 13 Q. When and how will TCRR-N be trued-up?

14 A. DP&L plans to place all PJM-related riders on the same annual audit schedule, which will match up with the RPM June 1<sup>st</sup> – May 31<sup>st</sup> delivery year. Therefore DP&L 15 16 proposes to file a true-up application on March 15 each year with rates effective on a 17 bills-rendered basis beginning June 1. As before, the annual true-up process for Rider 18 TCRR-N will be subject to audit by the PUCO. This annual filing, beginning March 15, 19 2013 for rates effective June 1, 2013, is intended to meet all of the requirements in OAC 20 §4901:1-36-03 and will reconcile the applicable jurisdictional costs and revenues from 21 PJM with the rider revenue received from customers. Projected costs for each true-up 22 period will be categorized based on energy, demand, or reactive demand. An adjustment for previous under- or over-collection will be applied proportionately to the energy and demand costs. Total energy costs will be allocated to each tariff class based on forecasted energy components, while demand and reactive demand costs will be allocated to tariff classes based on the Company's 1 or 12 Coincident Peak (CP) as applicable. Finally, these costs will be divided by the applicable projected distribution billing determinants (kWh, kW, kVar) per tariff class to create TCRR-N rates for each class.

### Q. When and how will TCRR-B be trued-up?

A.

Because TCRR-B recovers prudently incurred ancillary service costs, this rate will continue to be adjusted throughout the blending period to account for known and measurable changes in costs. DP&L will continue to employ its existing true-up methodology but on a seasonal quarterly basis.

### Q. Can you describe the TCRR-B true-up process in more detail?

Yes. DP&L will forecast allocated charges from PJM as well as its share of projected SSO sales for each quarterly period. Additionally, DP&L will calculate any over- or under-recovery from the previous periods. The PJM charges and over- or under-recovery will be classified as demand or energy components and then allocated across tariff classes by the Company's 1 or 12 CP or by projected sales. These allocated costs will be divided by the DP&L-supplied portion of the forecasted SSO billing determinants to result in TCRR-B demand and energy rates per tariff class. Lastly, these rates will be multiplied by the applicable ESP blend percent. This calculation ensures that SSO customers are appropriately charged the blended amount for this legacy ESP rate. Finally, the TCRR-B will be implemented on a bills-rendered basis and will be subject to an annual audit by

the PUCO.

2	Q.	How will the charges and credits that DP&L receives from PJM change with a CBP,
3		and what impact will that have on the TCRR-B calculations?

DP&L classifies its market-based charges from PJM in two categories: load-based and generator-based. These categories describe how and why these charges are billed to DP&L and consequently how DP&L assigns these costs to customers. The winning bidders of the CBP will be billed directly by PJM for any load-based costs in proportion to the amount of load that they serve. As an increasing percentage of SSO load is served via CBP, the amount of load-based costs billed to DP&L for the remaining SSO load should decrease proportionately. Because DP&L acts as the LSE for SSO load that it continues to serve and for DPL Energy Resources (DPLER) customers, any load-based charges will continue to be allocated to SSO customers using a Retail/DPLER ratio. The Retail/DPLER energy ratio is calculated by SSO MWh / (SSO MWh + DPLER MWh), while the Retail/DPLER demand ratio is determined by SSO MW / (SSO MW + DPLER MW). As more SSO load is included in the CBP, this ratio will be adjusted, assigning fewer and fewer costs to SSO load.

A.

Conversely, DP&L's generator-based charges from PJM will not decrease inherently with the blending percent. These charges are billed to DP&L based on the Company's monthly generation levels, which will not change with the implementation of a CBP (all else being equal). This is because DP&L currently bids in all its generation to the PJM market and buys back what is required to serve its SSO and DPLER load. The difference either becomes wholesale sales or purchased power. With the implementation of a CBP,

DP&L will purchase 10% less from the market for SSO load and should therefore increase its wholesale sales by the same amount. Generator-based charges are currently allocated to SSO customers using a Retail/Wholesale ratio that is calculated by SSO MWh / (SSO MWh + DPLER MWh + Wholesale MWh). As explained above, as more SSO load is included in the CBP, retail sales will decrease and wholesale sales should increase. This formula effectively reduces the Retail/Wholesale allocator by the same percent as the CBP load. Applying this reduced allocator to the generator-based charges properly assigns costs to SSO customers based on a diminishing proportion of SSO load served by the utility.

### Q. Do any charges in the TCRR-B require a different or additional allocator?

A.

Yes. The charges related to the purchase of Financial Transmission Rights (FTR), including FTR Auction charges/credits as well as Transmission Congestion credits, will additionally be allocated based on a new LSE allocator for the period January – May 2013. DP&L purchased FTRs in April 2012 for the June 2012 – May 2013 delivery year based on the Company's total SSO and DPLER load. These charges remain with the FTR holder and will not reduce with a CBP. Currently DP&L allocates these charges/credits using the Retail/DPLER energy split, and then shares this FTR risk/reward with SSO customers at a Shareholder/Customer split of 25/75. Although the level of FTR charges/revenues will not change until the 2013 FTR Auction, a lower proportion of these charges/revenues will be applicable to SSO customers after the implementation of the CBP. Therefore, for the period of January – May 2013, DP&L will use a LSE/SSO allocator to determine the level of SSO FTR charges/revenues to pass through to customers. This allocator is calculated by [SSO MWh + DPLER MWh] /

[(SSO MWh / 90%) + DPLER MWh]. The SSO FTR charges/revenues will then be 2 calculated by multiplying the total FTR charges/revenues by the Retail/DPLER energy 3 allocator, the 75% share, and the LSE/SSO allocator to provide the appropriate level of 4 FTR risk and reward that will be shared with customers. Beginning June 2013, DP&L 5 will purchase FTRs at a reduced level to correspond with DP&L's reduced SSO load. 6 For each period thereafter, the amount of SSO load that DP&L serves will reduce at the 7 start of each PJM delivery year and therefore with the FTR holding period as well. Consequently, the LSE/SSO allocator will no longer be needed as of June 2013, as the 8 Retail/DPLER energy allocator will suffice. 9 10 Is there a simple way to see how these allocators will work? Q. Yes. Please refer to the simplified numeric example provided in Exhibit CEH-1 attached 11 A. 12 to my testimony. This example illustrates how the Retail/DPLER, Retail/Wholesale, and 13 LSE/SSO allocators are calculated and used to assign charges or credits to SSO 14 customers. Is DP&L forecasting any other changes to the TCRR-B rate? 15 Q. 16 The rate should continue to decrease with the Company's portion of the SSO load, A. barring any unforeseen changes in the market-based products or costs. Beginning June 17 2016, 100% of DP&L's SSO load will be served via CBP. At that point DP&L's 18 19 TCRR-B rate will be set to zero. The final true-up of any remaining over- or under-20 recovery will be included in the Reconciliation Rider, Tariff Sheet No. D29, as discussed

by Company Witness Rabb.

21

### III. RELIABILITY PRICING MODEL

- Q. Please describe the Company's current methodology for recovery of capacity related costs.
- 4 A. The Company currently has Tariff Sheet No. G27 PJM Reliability Pricing Model (RPM) Rider, which was originally approved by the Commission on May 27, 2009 in Case 5 No. 09-256-EL-UNC, and was made a separate rider by Order of the Commission on 6 7 November 18, 2009. This rider recovers capacity-related costs, net of capacity-related 8 revenues, charged to the Company by PJM. Currently this rider is bypassable and 9 reconciled annually. The RPM rates currently in effect were approved by the 10 Commission in Case No. 12-524-EL-RDR on April 25, 2012 for rates effective May 11 2012 - April 2013.
- 12 Q. Please describe the role of capacity and the RPM rider during the ESP.
- 13 Winning bidders of the CBP will provide capacity for their portion of the competitively A. 14 bid load. DP&L will also continue to provide capacity through the PJM RPM market for 15 the remaining SSO load that it serves. Therefore, as discussed in Company Witness 16 Seger-Lawson's testimony, the RPM rider will be included as part of the rate blending 17 process. Because the RPM rider recovers prudently incurred capacity costs, this rate will 18 continue to be adjusted throughout the blending period to account for known and 19 measurable changes in costs. DP&L will continue to employ its existing true-up 20 methodology but on a seasonal quarterly basis. To initially implement the RPM Rider in 21 the ESP, the current RPM rates will be multiplied by the applicable ESP blend  $^{22}$ percentage. The resulting rate will then be included in the rate blending process on a

bills-rendered basis and will remain bypassable.

### Q. How does DP&L propose to true-up the RPM rider?

As in its current true-up methodology, DP&L will forecast allocated charges and credits from PJM as well as its share of projected SSO sales for each quarterly period.

Additionally, DP&L will calculate any over- or under-recovery from the previous periods. The netted PJM RPM charges and credits and over- or under-recovery will be allocated across tariff classes by the Company's 5 CP. These allocated costs will then be divided by the DP&L-supplied portion of the forecasted SSO billing determinants by tariff class to result in RPM rates per tariff class. The final step to producing tariffed rates will be to multiply the rates by the applicable blend percent. Similar to the other true-up riders, the RPM Rider will be subject to an annual audit by the PUCO.

### Q. Can you describe in more detail how the capacity-related charges and credits from PJM will be handled in the RPM rider going forward?

A. Yes. DP&L anticipates that RPM charges may increase/decrease in response to two factors: the RPM price, and DP&L's monthly load. After a drop to \$16.46 in the 2012-2013 delivery year, the RPM clearing price increases to approximately \$27.73 and \$125.94 for the 2013-2014 and 2014-2015 delivery years, respectively. This price has a direct impact on the level of capacity charges assessed to SSO customers, and DP&L will experience increased charges as the price rises. Conversely, as an increasing portion of the SSO load is included in the CBP, DP&L's SSO load obligation will decrease, and therefore the amount of capacity-related charges which it receives from PJM should decrease as well. Because DP&L will continue to act as the LSE for both SSO load and

DPLER customers, these load-based capacity charges will continue to be allocated to 2 SSO customers using the Retail/DPLER demand ratio. As more SSO load is included in 3 the CBP, this ratio will be adjusted, assigning a lower proportion of costs to SSO 4 customers. 5 6 DP&L will continue to receive the same amount of RPM revenue in relation to the RPM 7 price because this revenue is compensation for generation that is bid into the RPM 8 market. Because these credits are generator-based, this revenue is allocated to SSO 9 customers using a Retail/Wholesale ratio. As discussed above, the Retail/Wholesale 10 allocator inherently decreases with the implementation of a CBP. Applying this reduced 11 allocator to the RPM revenues properly assigns less revenue to SSO customers. After the 12 charges and revenues are each allocated appropriately, they will be netted and passed on 13 to SSO customers through the RPM rider in the same manner that they are today. 14 Q. Is DP&L forecasting any other changes to the RPM rate? 15 The rate should continue to decrease with the ESP percentage of SSO load, barring any A. 16 changes in the RPM construct. Beginning June 2016, 100% of DP&L's SSO load will be 17 served via CBP. At that point, DP&L's RPM rate will be set to zero. The final true-up of 18 any remaining over- or under-recovery will be included in the Reconciliation Rider.

### IV. SCHEDULES AND WORKPAPERS

19

Q. Are you responsible for Schedules 2A, 2A-1, 2A-2, and 2C? If so, what is contained in those schedules?

. 1	A.	Yes. Schedule 2A-1 calculates the rate adjustment required to remove any non-market-
2		based products from the TCRR rate as it is shown in Case No. 12-524-EL-RDR.
3		Schedule 2A-2 shows how this adjustment affects the max charge rates for TCRR.
4		Schedule 2A summarizes the results of Schedule 2A-1 to show the total adjustment to the
5		TCRR rate. Schedule 2C shows that the Company is not proposing any adjustments to its
6		PJM RPM Rider rate.
7	Q.	What is the source of the information shown on Schedules 2A, 2A-1, 2A-2, and 2C?
8	A.	The information on these schedules was developed from Case No. 12-524-EL-RDR,
9		which references both accounting records and Company projections.
10	Q.	Can you describe the process that you used to calculate the figures shown on
<b>J</b> 1		Schedule 2A-1?
12	A.	Yes. I started with Schedule C-3a from Case No. 12-524-EL-RDR, which shows the
13		development of the base TCRR rates. Then I classified each line item as market-based or
14		non-market-based, since this classification determines whether they remain in the
15		bypassable TCRR-B rate or if they will move to the non-bypassable TCRR-N. All
16		market-based charges, with the exception of the Synchronous Condensing charge, were
17		then set to zero, leaving only the projected non-market-based costs. The resulting rate is
18		the adjustment that is used to reduce the proposed TCRR rate to the market-based
19		TCRR-B rate.
20	Q.	Why is an exception made for the Synchronous Condensing charge?
21		The Synchronous Condensing charge is treated differently due to a change in its billing

classification. In the TCRR, this line item is classified as a Reactive Demand component 2 because it compensates synchronous condensers for their reactive-based services. 3 However, it is billed to DP&L on a real-time load (energy) basis. With the separation of 4 costs into the TCRR-B and TCRR-N, the primary share of DP&L's reactive charge, 5 Reactive Supply and Voltage Control, will essentially function as a distribution charge 6 for reactive demand. Leaving the nominal Synchronous Condensing charge as a 7 bypassable reactive demand charge is simply redundant. Therefore it is more reasonable 8 to eliminate the kVar charge in the TCRR-B and move Synchronous Condensing to an 9 Energy component in that rider. To illustrate this adjustment in Schedule 2A-1, this line 10 item is shown as a charge that will be removed from the Reactive Demand rate (by 11 increasing the non-market-based adjustment) and added to the Energy rate (by reducing 12 the non-market-based adjustment).

### Q. Are the results of the calculation reasonable?

13

- 14 A. Yes. This schedule shows what portion of the current TCRR rate is due to non-market15 based charges. Simultaneously it makes an adjustment for the re-classification of PJM's
  16 Synchronous Condensing charge. By making this modification and removing the non17 market-based portion, the remaining rate reflects only the fully bypassable, market-based
  18 charges.
- 19 Q. Are you responsible for Schedule 7C? If so, what is shown on that schedule?
- 20 A. Yes. Schedule 7C shows the proposed TCRR-N rate by tariff class. These rates are calculated via the schedules submitted in Case No. 12-672-EL-RDR.

- Q. Are you responsible for all of the Schedules and Workpapers in Case
  - No. 12-672-EL-RDR? If so, what is contained on those schedules?
- 3 A. Yes. These Schedules and Workpapers are intended to comply with the filing
- 4 requirements of OAC §4901:1-36-03 for a Transmission Cost Recovery Rider. They
- 5 show the development of the TCRR-N rates with all necessary supporting data.

### 6 V. CONCLUSION

- 7 Q. Does this conclude your direct testimony?
- 8 A. Yes, it does.

### The Dayton Power and Light Company Case Nos. 12-426-EL-SSO, 12-672-EL-RDR TCRR and RPM Allocator Examples

Data: For Illustrative Purposes Only

Type of Filing: Revised

Work Paper Reference No(s).: None

Exhibit CEH-1
Page 1 of 1
Witness Responsible: Claire E. Hale

### FOR ILLUSTRATIVE PURPOSES ONLY Line Description Allocators & Charges Prior to Competitive Bidding (CB) Allocators & Charges Post Competitive Bidding (A) (B) (C) (D)(E) **(F)** 1 Load (MWh)1 Prior to CB Source Post CB Source 90% \* Col (C) 2 SSO Load 100 Illustrative 90 DPLER Load Illustrative Col(C) 50 50 3 4 Wholesale Load 20 Illustrative Col (C) + [Col (C) Line 2 - Col (E) Line 2] 5 Total Charges at \$1/MWh 6 7 Load-Based Charges \$150.00 Line 2 + Line 3 \$140.00 Line 2 - Line 3 \$170.00 \$170.00 8 Generator-Based Charges Sum (Lines 2 thru 4) Sum (Lines 2 thru 4) 9 FTR Charges<sup>2</sup> \$150.00 Line 2 + Line 3 \$150.00 Col (C) Line 2 + Col (C) Line 3 10 11 Allocators 12 Retail/DPLER 66.7% Line 2 / (Line 2 + Line 3)64.3% Line 2 / (Line 2 + Line 3)Retail/Wholesale 58.8% Line 2 / Sum (Lines 2 thru 4) 52.9% Line 2 / Sum (Lines 2 thru 4) 13 LSE/SSO 100.0% (Line 2 + Line 3) / [(Line 2 / 100%) + Line 3](Line 2 + Line 3) / [(Line 2 / 90%) + Line 3]14 93.3% Commission Order in Case No. Commission Order in Case No. 75.0% 09-256-EL-UNC, Dated May 27, 2009, 15 09-256-EL-UNC, Dated May 27, 2009, 75.0% Customer Share Page 5, Paragraph (17) Page 5, Paragraph (17) 17 Allocated Charges 18 Load-Based Charges \$100.00 Line 7 \* Line 12 \$90.00 Line 7 \* Line 12 Line 8 \* Line 13 19 Generator-Based Charges \$100.00 \$90.00 Line 8 \* Line 13 Line 9 \* Line 12 \* Line 14 \* Line 15 \$75.00 Line 9 \* Line 12 \* Line 14 \* Line 15 \$67.50 20 FTR Charges 21

<sup>&</sup>lt;sup>1</sup>The same illustrative example can be used with MW for SSO and DPLER Load.

<sup>23 2</sup>FTR Charges will not change with the implementation of a CB Process since they are purchased in April for the June - May Delivery Year.

### **BEFORE THE**

### **PUBLIC UTILITIES COMMISSION OF OHIO**

### THE DAYTON POWER AND LIGHT COMPANY

**CASE NO. 12-426-EL-SSO** 

**CASE NO. 12-427-EL-ATA** 

CASE NO. 12-428-EL-AAM

**CASE NO. 12-429-EL-WVR** 

**CASE NO. 12-672-EL-UNC** 

### DIRECT TESTIMONY OF PHILIP R. HERRINGTON

- **MANAGEMENT POLICIES, PRACTICES, AND ORGANIZATION**
- □ OPERATING INCOME
- **TATE BASE**
- **B** ALLOCATIONS
- **RATE OF RETURN**
- **RATES AND TARIFFS**
- □ OTHER

### **BEFORE THE**

### **PUBLIC UTILITIES COMMISSION OF OHIO**

### ELECTRIC SECURITY PLAN (ESP) DIRECT TESTIMONY OF

### PHILIP R. HERRINGTON

### ON BEHALF OF THE DAYTON POWER AND LIGHT COMPANY

### **TABLE OF CONTENTS**

I.	INTRODUCTION	1
II.	OVERVIEW OF FILING	2
III.	ADVANCEMENT OF STATE POLICIES	4
IV.	CONCLUSION	7

1	I.	<u>INTRODUCTION</u>
2	Q.	Please state your name and business address.
3	A.	My name is Phil Herrington. My business address is 1065 Woodman Drive, Dayton,
4		Ohio 45432.
5	Q.	By whom and in what capacity are you employed?
6	A.	I am President and Chief Executive Officer of DPL Inc., the parent company of The
7		Dayton Power and Light Company ("DP&L" or "Company"), and President and Chief
8		Executive Officer of DP&L.
9	Q.	How long have you been in your present position?
0	A.	I assumed my present position in March 2012. Prior to that, I was President of AES
11		Global Wind Generation.
12	Q.	Will you describe briefly your educational and business background?
13	A.	I received a B.S. degree in Chemical Engineering from the University of California at
14		Santa Barbara in 1985 and a Masters in Business Administration from the University of
15		Southern California Marshall School of Business in 1997. Before joining AES, I spent
16		seventeen years at Edison Mission Energy, a subsidiary of California based Edison
17		International, in various leadership positions in development, asset management and
18		engineering involving technologies including natural gas, wind and geothermal power

generation. Prior to that, I was a project manager with Monsanto Chemical's engineering

group, and before then, served as a naval officer aboard nuclear submarines.

19

20

- - 2 Q. What are the purposes of this testimony?
  - 3 A. The purposes of this testimony are to: (1) provide an overview of DP&L's Electric
  - 4 Security Plan ("ESP") filing; and (2) demonstrate that DP&L's ESP filing promotes the
  - 5 policies of the State of Ohio.

### 6 II. OVERVIEW OF FILING

- 7 Q. Will you provide an overview of DP&L's ESP filing?
- 8 A. Yes. DP&L proposes an ESP pursuant to Ohio Rev. Code § 4928.143. Under DP&L's
- 9 ESP, DP&L's base generation rate would be a blend of DP&L's existing base generation
- rates and rates set through a competitive bidding process. The blending percentages that
- DP&L proposes are:

<u>Date</u>	Existing Rates	Competitive Bid
January 1, 2013 - May 31, 2014	90%	10%
June 1, 2014 - May 31, 2015	60%	40%
June 1, 2015 - May 31, 2016	30%	70%
June 1, 2016	0%	100%

- DP&L's Rate Blending Plan is sponsored by Company Witness Dona Seger-Lawson.
- DP&L's competitive bidding plan is sponsored by Company Witness Robert Lee.
- 14 Q. Does DP&L seek a nonbypassable charge that would permit DP&L to stabilize and
- provide continuity regarding retail electric service?

A. Yes, DP&L seeks a nonbypassable Service Stability Rider (SSR) of \$120 million per year during the ESP period to permit it to provide stable electric service. In the Commission's recent decision in AEP's ESP case, the Commission set a "reasonable revenue target that would allow AEP-Ohio an opportunity to earn somewhere within the seven to eleven percent range." As explained in the testimony of Company Witness William Chambers (who sponsors DP&L's request for the SSR), an annual \$120 million SSR would give DP&L an opportunity to earn a reasonable ROE.

8 Q. Can you describe the interests that DP&L considered as DP&L established the
9 terms and conditions of its ESP?

Yes. In considering the terms and conditions of the ESP filing, DP&L sought to balance the interests of customers, non-customer intervenors, and the Company. The goal of the filing is to allow DP&L the opportunity to maintain its financial integrity with the opportunity to earn a reasonable rate of return, while balancing the interests of other intervening parties. DP&L's ESP filing strikes an appropriate balance among those interests, since it will allow DP&L to maintain its financial integrity (as explained in Company Witness Chambers' testimony) while providing for competitive bidding on a timeline that is faster than the timeline authorized under the Market Rate Offer (MRO) statute (Ohio Rev. Code § 4928.142).

Q. Does DP&L's ESP filing address the transfer of generation assets?

10

11

12

13

14

15

16

17

18

19

A.

<sup>&</sup>lt;sup>1</sup> Opinion and Order, p. 33 (Case No. 11-346-EL-SSO).

<b>1</b>	A.	Yes. As explained in Company Witness Sobecki's testimony, DP&L agrees make a
2		separate application by December 31, 2013 to accomplish the transfer of its generation
3		assets. In this subsequent application, DP&L expects to request that the Commission
4		authorize DP&L to transfer its generation assets by no later than December 31, 2017.
5	Q.	Does DP&L's ESP filing promote competition?
6	A.	Yes. As explained in the testimony of Company Witness Dona Seger-Lawson, DP&L's
7		ESP filing contains six new provisions that will make it easier for CRES providers to do
8		business in DP&L's certified territory.
9	Q.	Does DP&L's ESP filing pass the "more favorable in the aggregate" test required by
10		Ohio Revised Code §4928.143(C)(1)?
11	A.	Yes. Company Witness Jeff Malinak supports the Company's determination that this
12		ESP plan is more favorable in the aggregate that what would otherwise apply under an
13		MRO.
14	III.	ADVANCEMENT OF STATE POLICIES
15	Q.	Are you familiar with the state policies contained in Ohio Revised Code § 4928.02?
16	A.	Yes, I have studied the policies and I am familiar with them.
17	Q.	Does DP&L's ESP filing advance those policies, and if so, how?
18	A.	Yes, it does. As described below, DP&L's ESP filing advances many of the ORC
19		§4928.02 policies. There are some policies in ORC §4928.02 that are unrelated to
20		DP&L's ESP filing (e.g., those relating to transmission and distribution) that my

$\mathbf{I}$		testimony does not address; DP&L's ESP filing is consistent with those policies, as the
2		filing does not adversely affect the achievement of those policies.
3	Q.	Section 4928.02(A) states that it is the policy of the state to:
4 5 6		"Ensure the availability to consumers of adequate, reliable, safe, efficient, nondiscriminatory, and reasonably priced retail electric service."
7		Does DP&L's ESP advance that policy, and if so, how?
8	A.	Yes. Through the ESP, DP&L will procure generation to satisfy a portion of its Standard
9		Service Offer (SSO) obligations through a competitive bidding process. DP&L's
10		customers should thus be assured of receiving reasonably priced retail electric service.
11		Further, since only those suppliers that satisfy the financial and managerial criteria of
12		DP&L's Competitive Bidding Process (CBP) will be allowed to bid, the consumer can be
13		assured that the generation will be adequate, reliable, safe, efficient and
14		nondiscriminatory.
15	Q.	Section 4928.02(B) states that it is the policy of the state to:
16 17 18 19		"Ensure the availability of unbundled and comparable retail electric service that provides consumers with the supplier, price, terms, conditions, and quality options they elect to meet their respective needs."
20		Does DP&L's ESP advance that policy, and if so, how?
21	A.	Yes. Through DP&L's ESP, SSO customers will receive generation through the CBP
22		from the lowest bidder. Further, customers will retain the right to select any generation
23		supplier from which they wish to buy.
24	Q.	Section 4928.02(H) states that it is the policy of the state to:

1 2 3 4 5 6 7		"Ensure effective competition in the provision of retail electric service by avoiding anticompetitive subsidies flowing from a noncompetitive retail electric service to a competitive retail electric service or to a product or service other than retail electric service, and vice versa, including by prohibiting the recovery of any generation-related costs through distribution or transmission rates."
8		Does DP&L's ESP advance that policy, and if so, how?
9	A.	Yes. DP&L's ESP filing advances this policy because DP&L's filing describes its plan to
10		transfer DP&L's generation assets into a separate affiliate.
11	Q.	Section 4928.02(I) states that it is the policy of the state to:
12 13 14		"Ensure retail electric service consumers protection against unreasonable sales practices, market deficiencies, and market power."
15		Does DP&L's ESP advance that policy, and if so, how?
16	A.	Yes. By conducting a competitive bidding process in which all qualified bidders are
17		permitted to bid, DP&L's ESP should ensure that its customers receive the best available
18		market price. Further, the CBP will be conducted in accordance with Commission rules,
19		and will be managed by an independent third party auction manager, so that there should
20		be no unreasonable sales practices, market deficiencies or exercise of market power.
21	Q.	Section 4928.02(L) states that it is the policy of the state to:
22		"Protect at-risk populations, including, but not limited to,
23 24		when considering the implementation of any new advanced energy or renewable energy resource."
25		Does DP&L's ESP advance that policy, and if so, how?

	A.	Yes. DP&L's ESP protects at-risk populations by ensuring that they will receive the best
2		available market price.
3	Q.	Section 4928.02(N) states that it is the policy of the state to:
4 5 6 7 8		"Facilitate the state's effectiveness in the global economy. In carrying out this policy, the commission shall consider rules as they apply to the costs of electric distribution infrastructure, including, but not limited to, line extensions, for the purpose of development in this state."
9		Does DP&L's ESP advance that policy, and if so, how?
10	A.	Yes. DP&L's ESP will facilitate Ohio's effectiveness in the global economy by ensuring
11		that Ohio businesses have access to market-based generation. In addition, competitive
12		retail enhancements funded through DP&L's ESP will reduce administrative barriers and
13		transaction costs that potentially affect the opportunities for CRES providers to
14	•	encourage customers to switch to competitive suppliers. The overall design of the ESP,
15		which allows DP&L to smoothly transition to market-based pricing, will have a positive
16		influence on economic development initiatives in the state, enhancing Ohio's ability to
17		compete in the global economy

#### **CONCLUSION** IV. 18

- Does this conclude your direct testimony? 19 Q.
- Yes, it does. 20 A.

#### PUBLIC UTILITIES COMMISSION OF OHIO

#### THE DAYTON POWER AND LIGHT COMPANY

**CASE NO. 12-426-EL-SSO** 

**CASE NO. 12-427-EL-ATA** 

**CASE NO. 12-428-EL-AAM** 

**CASE NO. 12-429-EL-WVR** 

**CASE NO. 12-672-EL-RDR** 

#### **ELECTRIC SECURITY PLAN (ESP)**

DIRECT TESTIMONY OF ALDYN W. HOEKSTRA

- **□** MANAGEMENT POLICIES, PRACTICES, AND ORGANIZATION
- OPERATING INCOME
- □ RATE BASE
- ALLOCATIONS
- □ RATE OF RETURN
- □ RATES AND TARIFFS
- OTHER

### **PUBLIC UTILITIES COMMISSION OF OHIO**

## **ELECTRIC SECURITY PLAN (ESP)**

# DIRECT TESTIMONY OF ALDYN W. HOEKSTRA

## **TABLE OF CONTENTS**

I.	INTRODUCTION	1
II.	WORKPAPERS	3
III.	CUSTOMER SWITCHING	<del>(</del>
IV.	CONCLUSION	10

1	I.	<u>IN</u>	TF	<u> </u>	DL	<u>IC:</u>	TIC	N

- Q. Please state your name and business address.
- 3 A. My name is Aldyn W. Hoekstra and my business address is 1065 Woodman Drive,
- 4 Dayton, Ohio, 45432.
- 5 Q. By whom and in what capacity are you employed?
- 6 A. I am employed by The Dayton Power and Light Company ("DP&L" or "Company") as
- 7 Vice President, Merchant Portfolio Strategy.
- 8 Q. How long have you been in your present position?
- 9 A. I assumed my present position in July 2012.
- Q. What are your responsibilities in your current position and to whom do you report?
- 11 A. In my current position, I report to the Senior Vice President, Competitive Market
- Services, and I have responsibility for managing the Company's Commercial Structuring
- function, which includes commodity pricing, deal structuring, portfolio management and
- term trading, portfolio analytics and business planning responsibilities.
- 15 Q. Will you describe briefly your educational and business background?
- 16 A. I received a Bachelor of Science degree in Industrial Engineering from Purdue University
- in 1987 and a Master of Science degree in Engineering-Economic Systems from Stanford
- 18 University in 1988. I have over 20 years of industry and consulting experience, focusing
- on North American energy markets, strategy and economics. Prior to joining DP&L, I
- spent over 15 years as a consulting energy economist with various firms, as well as 5

lacksquare		as the Vice President of Strategy and Risk Management.
2		as the vice i resident of Strategy and Risk Management.
3	Q.	Have you previously provided testimony before the Public Utilities Commission of
4		Ohio ("PUCO" or the "Commission"), any other state commission, or the Federal
5		Energy Regulatory Commission ("FERC")?
6	A.	I have not previously provided testimony before the PUCO, but I have sponsored
7		testimony before the California Public Utilities Commission (CPUC) and Public Utilities
8		Commission of Nevada (PUCN) in the following matters:
9 10 11 12 13 14 15 16 17 18 19 20 21 22		<ul> <li>CPUC Application Nos. 90-08-066, 90-08-067, 90-09-001: Certificate of Public Convenience and Necessity for the California-Oregon Transmission Project; Testimony on behalf of Toward Utility Rate Normalization (1990)</li> <li>PUCN Docket Nos. 02-12046 through 02-12054: Applications of MGM Mirage, et. al., to purchase energy, capacity and/or ancillary services from a provider of new electric resources; Testimony on behalf of Sempra Energy Solutions (2003)</li> <li>PUCN Docket Nos. 02-12053 and 02-12054: Applications of MGM Mirage and Victoria Partners to purchase energy, capacity and/or ancillary services from a provider of new electric resources; Affidavit on behalf of MGM Mirage and Victoria Partners (2003)</li> <li>CPUC Rulemaking No. 06-02-012: Order Instituting Rulemaking to Develop Additional Methods to Implement the California Renewables Portfolio Standard Program; Testimony on behalf of the Alliance for Retail Energy Markets (2006)</li> </ul>
23	Q.	What is the purpose of your testimony?
24	A.	The purpose of my testimony is to support the baseline volumes for DP&L distribution
25		sales and DP&L Standard Service Offer (SSO) sales used for the projections of financial
26		and rate impacts supported by other DP&L witnesses.
27	Q.	What Workpapers are you supporting?

1	A.	I am supporting Workpaper 8A "Distribution Sales Baseline Volumes" and Workpaper
<b>D</b> <sub>2</sub>		8B "SSO Sales Baseline Volumes."
3	H.	WORKPAPERS
4	Q.	Are you responsible for Workpaper 8A? If so, please describe what is provided on
5		Workpaper 8A.
6	A.	Yes. Workpaper 8A "Distribution Sales Baseline Volumes" shows actual, weather-
7		normalized distribution sales volumes on the DP&L system for calendar year 2011,
8		differentiated by customer revenue class, and displayed as an annualized total and also by
9		month.
10	Q.	What is the source of the information shown on Workpaper 8A?
1	A.	The information on Workpaper 8A contains historical distribution sales data obtained
12		from the Company's accounting records, kept in the ordinary course of business, as
13		adjusted to account for the impact on weather-sensitive customer usage of differences
14		between actual weather conditions during 2011 and long-term average weather
15		conditions, specifically Heating Degree Days (HDD) and Cooling Degree Days (CDD).
16	Q.	How was the information contained on Workpaper 8A developed?
17	A.	The information on Workpaper 8A was developed by adjusting recorded 2011
18		distribution sales through the use of statistical regression equations that the Company
19		uses to adjust actual sales data for weather-sensitive customers based on the difference
20		between normal and actual HDDs and CDDs.

How is the information on Workpaper 8A used in the Company's filing?

Q.

1	A.	The information on Workpaper 8A is used by Company Witness Jackson for projections
$\mathbf{D}_2$		of the financial impacts of the Company's filing, by Company Witness Rabb to establish
3		the rates for the Reconciliation Rider and to demonstrate how the Competitive Bidding
4		Rate will be set, by Company Witness Parke to develop the Service Stability Rider, and
5		by Company Witness Hale to establish the rates for the Transmission Cost Recovery
6		Rider – Non-bypassable.
7	Q.	Is the information provided on Workpaper 8A reasonable?
8	A.	Yes, the distribution sales volumes shown in Workpaper 8A reflect actual, weather-
9		normalized distribution sales for the most recently-completed calendar year of 2011. As
10		a result, these annualized and weather-normalized distribution sales baseline volumes
11		provide a reasonable basis for the projections of financial and rate impacts of the
12		Company's Application which are supported by other DP&L witnesses.
13	Q.	Are you responsible for Schedule Workpaper 8B? If, yes, please describe what is
14		provided on Workpaper 8B.
15	A.	Yes. Workpaper 8B "SSO Sales Baseline Volumes" shows annualized SSO sales
16		volumes, consistent with the distribution sales volumes shown on Workpaper 8A,
17		differentiated by customer revenue class, and displayed as an annualized total and also by
18		month.
19	Q.	What is the source of the information shown on Workpaper 8B?
20	A.	The information on Workpaper 8B was developed from the annualized and weather-
21		normalized distribution sales volumes shown on Workpaper 8A, as adjusted to remove

sales to customer accounts that were known to have switched from SSO service to retail

1		electric generation service from a Competitive Retail Electric Service (CRES) provider as
2		of August 30, 2012, the date Workpaper 8B was prepared. The identification of accounts
3		known to have switched to CRES providers as of that date was obtained from the
4		Company's customer information records, kept in the ordinary course of business.
5	Q.	How was the information contained on Workpaper 8B developed?
6	A.	The information on Workpaper 8B was developed by subtracting, from the distribution
7		sales volumes shown on Workpaper 8A, the most recent 12 months' usage for accounts
8		that had switched to CRES service as of August 30, 2012.
9	Q.	How is the information on Workpaper 8B used in the Company's filing?
10	A.	The information on Workpaper 8B is used by Company Witness Jackson for projections
1		of the financial impacts of the Company's filing, by Company Witness Rabb to
12		demonstrate how the Competitive Bidding Rate will be set, and by Company Witness
13		Parke to demonstrate how the Competitive Bid True-up rate will be established on
14		Schedule 7B.
15	Q.	Is the information provided in Workpaper 8B reasonable?
16	A.	Yes, the SSO sales baseline volumes shown on Workpaper 8B reflect annualized and
17		weather-normalized sales to the customer accounts that are being served under DP&L's
18		SSO tariff based on actual currently-known customer switching. As a result, these
19		annualized and weather-normalized SSO sales baseline volumes provide a reasonable
20		basis for the projections of financial and rate impacts of the Company's Application

which are supported by other DP&L witnesses.

# III. CUSTOMER SWITCHING

1

2

4

11

3 Q. What was the level of customer switching from the Standard Service Offer (SSO)

tariff to Competitive Retail Electric Service ("CRES") suppliers in DP&L's service

5 territory as of the date Workpaper 8B was prepared?

6 A. As of August 30, 2012, the percentage of DP&L distribution load, expressed on an

7 annualized forward-looking basis as a percentage of the overall distribution sales volumes

8 shown on Workpaper 8B, that has switched from the SSO tariff to CRES suppliers is:

9 • Residential 24.7%

• Non-residential 84.0%

• Total System: 61.7%.

- 12 Q. In the most recent quarterly PUCO summary of switch rates from electric
- distribution utilities (EDU) shows that 18.37% of residential load, 83% of non-

residential load, and 58.57% of overall load had switched from DP&L to a CRES

provider as of June 30, 2012. The data from this PUCO switching report is lower

than the switching statistics you provided above—are both sets of numbers correct?

- 17 A. Yes, both sets of numbers are correct.
- 18 Q. If both sets of numbers are correct, how do you reconcile the differences between
- 19 them?
- 20 A. The switching rates provided above as of August 30, 2012 include the annualized usage of
- customer accounts that were known to have switched to CRES service even if that CRES
- service may not have actually started. Thus, these numbers reflect switching rates
- expressed on an annualized, forward-looking basis, consistent with the baseline volumes

1		for DP&L distribution sales and DP&L Standard Service Offer (SSO) sales provided in
2		Workpaper 8A and Workpaper 8B, respectively.
3		In contrast, DP&L switching rates found in the quarterly PUCO report dated June 30,
4		2012 are based solely on sales billed in the month of June 2012. This data is reported as
5		required by the PUCO. Therefore, the <u>historical, backward-looking</u> switching rates in
6		the PUCO quarterly reports is a ratio derived by dividing CRES supplier sales from DP&L
7		distribution sales for billed meter reads that DP&L recorded throughout the month of June
8		2012.
9	Q.	What is the basis for the large switching level in non-residential customer load?
10	A.	The switching level for non-residential customers is already high relative to residential
11		switching because of early switching in non-residential sectors as a result of direct sales
12		efforts by CRES providers since the current ESP was implemented in 2009.
13	Q.	Does DP&L expect switching rates to remain at the levels as of August 30, 2012?
14	A.	No, DP&L expects switching to increase as more residential and small commercial
15		customers switch from the SSO tariff in the current environment of low market prices,
16		whether in the form of "organic" switching by individual customer choice, or in the form
17		of government aggregation.
18	Q.	What level of customer switching does DP&L project over the term of the filed
19		Electric Security Plan ("ESP")?
20	A.	DP&L projects that by the end of 2012 customer switching will increase to an annualized
21		rate of 70% among residential customers, 70% among non-residential customers and
22		% overall for the DP&L system, Projected switching rates at the end of subsequent
23		years of the ESP term are provided in the table below.

Realized & Projected Annualized Switching in DP&L Territory\*

*as of year end	2011	2012	2013	2014	2015	2016	2017
Residential	12.8%						
Non-Residential	77.8%						
Overall	53.0%						

#### 2 Q. What is the basis for DP&L's expectation of increased residential switching?

Α.

A.

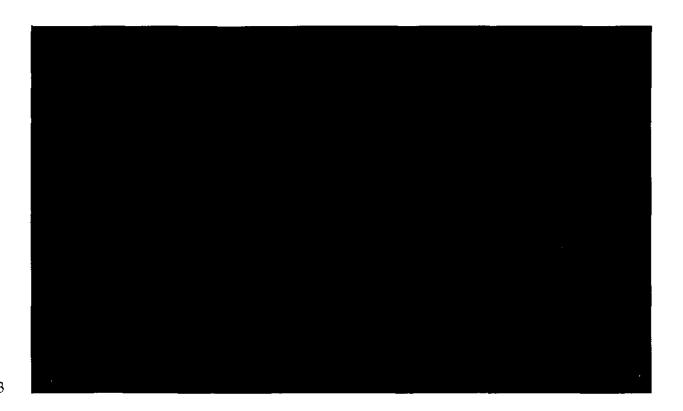
These projected switching rates are based on an analysis of current and historical switching levels in the DP&L service territory, combined with future projections that reflect these historical trends and projections of how the marketplace is expected to change over the ESP term. For example, increased competition for residential customers has led to an increase in the entry of additional third-party CRES suppliers into the residential marketplace, and simultaneously an increased level of switching among residential customer load. DP&L's projection of increased residential switching is in part due to this observed increase in marketing and sales efforts directed towards residential customers, and an expectation that it will continue if the Company's ESP proposal in this case is approved as filed.

# Q. Are you aware of any other factors that could provide additional opportunities for customer switching?

Yes, I believe that increased switching in the residential and small commercial sectors will be driven in part through increases in opt-out governmental aggregation programs conducted by communities that pass ballot initiatives to implement them. The chart below provides the forecasted growth in aggregation-derived and organically switched load as compared to the corresponding decline in load remaining on the SSO tariff. The chart

),

shows how switching is projected to increase due to the effects of communities implementing opt-out government aggregation programs.



Total Expected Aggr	egation	Load (GV	Vh)		
_	2013	2014	2015	2016	2017
Load Already Aggregated as of 8/30/2012	40	40	40	40	40
Projected Cumulative Residential Switched					
Load due to Aggregation					
Total					

4

1 IV. CONCLUSION

- Q. Does this conclude your direct testimony?
- 3 A. Yes, it does.

#### PUBLIC UTILITIES COMMISSION OF OHIO

#### THE DAYTON POWER AND LIGHT COMPANY

**CASE NO. 12-426-EL-SSO** 

**CASE NO. 12-427-EL-ATA** 

CASE NO. 12-428-EL-AAM

CASE NO. 12-429-EL-WVR

**CASE NO. 12-672-EL-RDR** 

DIRECT TESTIMONY
OF CRAIG L. JACKSON

- □ MANAGEMENT POLICIES, PRACTICES, AND ORGANIZATION
- **OPERATING INCOME**
- □ RATE BASE
- ALLOCATIONS
- **RATE OF RETURN**
- □ RATES AND TARIFFS
- OTHER

#### **PUBLIC UTILITIES COMMISSION OF OHIO**

# ELECTRIC SECURITY PLAN (ESP) DIRECT TESTIMONY OF

#### **CRAIG L. JACKSON**

# ON BEHALF OF THE DAYTON POWER AND LIGHT COMPANY

### **TABLE OF CONTENTS**

l.	INTRODUCTION	
II.	PURPOSE OF TESTIMONY	2
III.	FINANCIAL STATEMENTS	3
IV.	COST OF LONG-TERM DEBT	10
٧.	WORKPAPERS	11
VI.	CONCLUSION	14

1	١.	INTRODUCTION
2	Q.	Please state your name and business address.
3	A,	My name is Craig Jackson and my business address is 1065 Woodman Drive, Dayton,
4		Ohio, 45432.
5	Q.	By whom and in what capacity are you employed?
6	A,	I am employed by The Dayton Power and Light Company ("DP&L" or "Company") as
7		Senior Vice President and Chief Financial Officer.
8	Q.	How long have you been in your present position?
9	A.	I assumed my present position in May 2012.
$\bigcap_{0}$	Q.	What are your responsibilities in your current position and to whom do you report?
11	A.	In my current position, I report to the Company's President and Chief Executive Officer
12		and have direct responsibility and oversight for the Company's accounting, tax, financial
13		planning, treasury, risk management, and internal audit functions.
14	Q.	Will you describe briefly your educational and business background?
15	A.	I received a Bachelor of Science degree in Business Administration from Bloomsburg
16		University in 1996. I also earned a Master of Business Administration degree in Finance
17		from Wright State University in 2001.
18		I joined DP&L in February 2000 as a Financial Analyst, Corporate Modeling. In
19		December 2002, I accepted the position of Team Leader, ISO Settlements, with PPL
20		Corporation. In June 2004, I returned to DPL as Manager, Financial Planning and

Analysis, reporting to the Chief Financial Officer. From June 2004 to May 2012, I was
promoted through several positions of increasing responsibility within the Treasury
organization at DP&L, the last of which was as Vice President and Treasurer.

Prior to joining DP&L in February of 2000, I served in the United States Air Force ("Air

Force") as a Finance Technician. I began my service with the Air Force in May 1996.

6 II. PURPOSE OF TESTIMONY

5

- 7 Q. What is the purpose of your testimony?
- A. The purpose of my testimony in this proceeding is to support: (1) the Company's pro
  forma financial projections for the period of this ESP (January 2013 through December
  2017); and (2) the Company's cost of debt calculations.
  - Q. Please summarize the results from the pro forma financial statements.
- 12 The pro forma Income Statement, Balance Sheet, and Cash Flow for DP&L for the 2013 A. 13 through 2017 period are provided on Exhibit CLJ-2, CLJ-3 and CLJ-4 respectively. As 14 shown on Exhibit CLJ-2, Line 35, the Company projects its average annual return on 15 equity (ROE) to decline from approximately in 2013 to approximately in 2017. 16 with a 5-year average annual ROE of approximately. The decline in the forecasted 17 ROE is driven by low forward commodity prices, customer shopping realized as of 18 August 30, 2012, and the Company's transition to 100% auction, only partially offset by 19 the annual recovery of \$120 million through the Company's proposed service stability 20 rider.
  - Q. Do the financial results include the impact of customer switching?

The financial results include the impact of customers that have switched as of August 30, A. 1 2 2012; however, the results do not include incremental organic switching after August 30, 3 2012. To the extent that additional switching occurs beyond the level at August 30, 2012, 4 DP&L's earnings and return on equity will be negatively impacted, unless the proposed 5 switching tracker (described below) is adopted. 6 Q. Explain the Company's justification for the service stability rider (SSR). 7 The amount and duration of the service stability rider is critical for the Company to A. 8 maintain its financial integrity and to have the opportunity to earn a reasonable rate of 9 return as described by Company Witness Chambers' testimony in this case. As shown on 10 Exhibit CLJ-2, Line 45, the exclusion of the service stability rider would be disastrous for the Company as it would result in 11 (reaching in 12 2017). Furthermore, if additional retail switching occurs beyond the August 30, 2012 13 level, then the earnings profile will deteriorate further. III. FINANCIAL STATEMENTS 14 15 Q. Does DP&L's Application comply with Ohio Administrative Code § 4901:1-35-03, 16 and if so, how? 17 A. Yes. In seeking approval of the Electric Security Plan ("ESP"), the Company must meet certain filing requirements as described in OAC §4901:1-35-03. These include the 18 requirement that the Company provide pro forma financial projections for the filing 19 20 period (2013 – 2017) as well as calculations of its projected return on equity for each year of the ESP. The code also requires balances sheet and income statement information 21 22 along with the methodology and assumptions for these projections. DP&L satisfies these

requirements by providing financial projections including balance sheet, income

statements, cash flow statements and return on equity projections for every year of the
ESP period (2013 through 2017). The projections are included in Exhibit CLJ-2, CLJ-3
and CLJ-4.

# Q. What methodology and associated processes were used to develop the pro forma financial statements?

A.

The pro forma financial statements included in Exhibit CLJ-2, CLJ-3 and CLJ-4 reflect the projected financial impact of the Company's filed ESP and were developed consistent with the methodology and process used by the Company for preparing its normal operating forecast. This methodology is a "bottom up" approach to forecasting that requires input and assumptions from a variety of areas within the Company. The assumptions, which include distribution sales, Standard Service Offer ("SSO") sales, customer shopping, generation plant characteristics, commodity price curves, and fuel and operating cost projections, among others, are reviewed with the business areas to determine the most reasonable set of assumptions to be incorporated into the forecast. As we progress through the business year, we track and monitor actual results compared to the forecast. Based on actual results combined with potential changes in business and market conditions, the forecast is adjusted as needed. This process makes the forecast a reliable one.

#### Q. What are the major components of in the financial forecast?

- A. The inputs and assumptions received from the various areas within the Company are used to derive the following major components of the forecast:
  - (1) distribution baseline sales volumes and SSO baseline sales volumes;

<b>)</b> 1		(2) commodity price forecast;
2		(3) generation dispatch forecast;
3		(4) retail and wholesale revenue estimates;
4		(5) operations and maintenance expenses forecast; and
5		(6) capital expenditures forecast.
6	Q.	How are each of the above components developed?
7	A.	The development and methodology for each of these major components are as follows:
8		(1) <u>Distribution Sales and SSO Sales</u> – The development of the distribution baseline sales
9		volumes and SSO baseline sales volumes are described in Company Witness Hoekstra's
10		testimony in this case.
11		(2) <u>Commodity Price Forecast</u> – The Company does not develop internal commodity
12		price curve forecasts. We utilize publically available forward market curves in the
13		Company's forecast.
14		(3) Generation Dispatch Forecast - The generation dispatch forecast, combined with
15		forecasted energy purchases, is modeled to meet sufficiently the Company's anticipated
16		total energy requirements. Based on a number of assumptions, including plant
17		operational characteristics, planned outages, plant availability, variable costs, and
18		forward market curves, we model, by generating unit, the estimated generation megawatt
19		hours, the cost of fuel consumed, variable production costs, and costs associated with the
20		operation of environmental equipment. In addition to fuel and other generation-related
21		costs, we model and forecast purchased power costs.

<b>1</b>	(4) Retail and Wholesale Revenue Estimates - Retail revenue estimates for customers
2	under DP&L's SSO rates are developed by customer class. The retail revenues reflected
3	in the Company's pro forma financials include existing tariff rates, adjustments to retail
4	riders that are cost trackers (such as the fuel adjustment clause), the effects of the ESP
5	(including the impact that the Competitive Bid Process has on retail rates), and the
6	distribution baseline sales volumes and SSO baseline sales volumes described earlier.
7	Wholesale revenues estimates include: (a) known special contracts, which are developed
8	according to the terms of the contracts; (b) known forward wholesale agreements, which
9	are developed according to the terms of the agreements; and (c) spot market wholesale
10	sales, which are not committed or known sales when the forecast is developed, but are
11	projected based on forecasted generation output and expected wholesale market prices.
12	(5) Operations and Maintenance ("O&M") Expense Forecast - O&M expenses are
13	forecasted by (and reviewed with) all of the business areas within the Company.
14	Underlying the O&M forecast are assumptions for various items such as projected salary
15	increases and inflationary factors. Each area's O&M forecast includes staffing plans,
16	labor costs, and other operational costs necessary to perform the functions of the specific
17	area.
18	(6) <u>Capital Expenditures Forecast</u> – Capital expenditures are forecasted by (and reviewed
19	with) all of the relevant business areas within the Company, although a substantial
20	portion of the forecast is driven by the Company's operational groups: Transmission;
21	Distribution; and Generation. The forecast includes specific projects with estimated in-
22	service dates as well as dollars allocated to fund smaller projects under a blanket capital