FILE

PUCO EXHIBIT FILING

RECEIVED-DOCKETING DIV

2016 AUG -2 PM 2:52

PUCO

Date of Hearing: 8/1/2016

Case No. 14-1297-EL-SSO

PUCO Case Caption: In the Matter of the application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan

List of exhibits being filed: Volume X

Sierra Club Ex. 104

OCC Ex. 47

P3/EPSA Ex. 21

Reporter's Signature: Karen Sue Gibson

Date Submitted: 8/2/2016

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.

Technician SM Date Processed AUG 02 2016

BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

\- - -

In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan. : Case No. 14-1297-EL-SSO

\- - -

PROCEEDINGS

before Mr. Gregory Price and Ms. Megan Addison, Attorney Examiners, at the Public Utilities Commission of Ohio, 180 East Broad Street, Room 11-A, Columbus, Ohio, called at 10:00 a.m. on Monday, August 1, 2016.

\- - -

REHEARING VOLUME X

\- - -

ARMSTRONG & OKEY, INC.
222 East Town Street, Second Floor
Columbus, Ohio 43215-5201
(614) 224-9481 - (800) 223-9481
Fax - (614) 224-5724

\- - -

West Penn Statement No. 1

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

WEST PENN POWER COMPANY
DOCKET NO. R-2016-2537359

Direct Testimony
of
Charles V. Fullem

List of Topics Addressed

Overview of Distribution Base Rate Filing
Settlement Commitments from Docket No. R-2014-2428742
Reasons for the Requested Increase
Organization of the Filing and Introduction of Witnesses
Importance of Adequate Rate Relief to the Company

Sierra Club
Ex. 104

TABLE OF CONTENTS

DIRECT TESTIMONY
OF
CHARLES V. FULLEM

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Charles V. Fullem, and my business address is 2800 Pottsville Pike, Reading, Pennsylvania 19605.

Q. By whom are you employed and in what capacity?

A. I am employed by FirstEnergy Service Company, which is a direct subsidiary of FirstEnergy Corp. ("FirstEnergy"). I am the Director, Rates and Regulatory Affairs – Pennsylvania. The Pennsylvania Rate Department of FirstEnergy Service Company provides regulatory support for each of FirstEnergy's wholly-owned Pennsylvania operating companies ("Companies"), includingWest Penn Power Company ("West Penn"or "Company").

I am responsible to the Vice President of Rates and Regulatory Affairs for the development, coordination, preparation and presentation of the Companies' rate-related matters before the Pennsylvania Public Utility Commission ("Commission") and the New York State Public Service Commission, including their default service programs. My responsibilities encompass the preparation of various statements and reports addressing, among other things, distribution revenue requirement, energy costs, non-utility generation costs, quarterly earnings, and other financial matters. I am also responsible for administering theCompanies' tariffs, including developing retail electric rates, rules and regulations and ensuring their uniform application and interpretation.

Q. What is your educational and professional background?

A. I received a Bachelor of Science degree in Mineral Economics from the Pennsylvania State University in November 1981. I have over thirty years of experience with FirstEnergy and its predecessor companies. My work experience is more fully described in my professional biography, which is attached as Appendix A to this testimony.

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of West Penn.

Q. Please describe the purpose of your testimony.

A. The purpose of my testimony is to provide an overview of and the principal factors driving the distribution base rate increase request that the Company is proposing for approval by the Commission. I will also explain why approval of the proposed distribution rate increase is necessary to provide a fair return to shareholders and to establish the groundwork for enhanced reliability and customer service.

In addition to this Introduction, my testimony is comprised of three substantive sections: Section II reports on the Company's progress in meeting the settlement commitments made in West Penn's last base rate proceeding at Docket No. R-2014-2428742. In Section III, I provide an overview of the current filing and discuss the primary reasons the Company is requesting an increase in its distribution rates. Lastly, in Section IV, I describe the organization of the Company's rate filing, introduce the other witnesses submitting direct testimony on behalf of West Penn and explain the importance of this case to the Company and its customers.

Q. Are you sponsoring any exhibits?

A. Yes, I am sponsoring West Penn Exhibits CVF-1 through CVF-6, which consist of the following:[1]

West Penn Exhibit CVF-1 provides a summary of and specific reasons for the proposed rate increase. This exhibit also identifies and quantifies the major components of the Company's revenue request.

West Penn Exhibit CVF-2 identifies the other witnesses submitting direct testimony on behalf of the Company, their corresponding statement numbers and their areas of responsibility.

West Penn Exhibit CVF-3 is a table showing, at present and proposed rates, the Company's revenues, operating expenses, operating income and rate base, as adjusted for ratemaking purposes, and the resulting overall rates of return for the fully projected future test year, the twelve months ending December 31, 2017 ("FPFTY"). The table also provides references to exhibits sponsored by other witnesses that set forth this information in more detail.

West Penn Exhibit CVF-4 provides a corporate history, including the dates of the Company's original incorporation and subsequent mergers and acquisitions.

[1] Exhibits CVF-1 through CVF-4 respond to filing requirements outlined in 52 Pa. Code § 53.53(a)(3). Specifically, these exhibits respond to requirements I-A-1, 2 and 3 and I-B-1 of Exhibit C to Section 53.53.

West Penn Exhibit CVF-5 provides a comparison of residential customer bills at the Company's existing and proposed base rates to residential customer bills, at the same usage levels, of Duquesne Light Company ("Duquesne"), PECO Energy Company ("PECO") and PPL Electric Utilities Corporation ("PPL"), as well as the other FirstEnergy-owned Pennsylvania EDCs.

West Penn Exhibit CVF-6 is a copy of the Meter Reading section of the Company's web-site.

II. SETTLEMENT COMMITMENTS

Q. In the Joint Petition for Settlement of Rate Investigation ("Settlement Agreement") which the Commission approved in West Penn's last base rate proceeding at Docket No. R-2014-242874, the Company, at pages 11- 14, made various commitments in the areas of customer service, meter reading and smart meter operations. Is West Penn in compliance with those provisions?

A. Yes, it is.

Q. Is the Company prepared to meet its commitment to achieve and maintain an annual call answer rate of at least 80% of calls answered within thirty seconds beginning with the twelve-month period ended December 31, 2016?

Q. Yes. In fact, the Company achieved 71% of calls answered within thirty seconds in 2014, therefore obtaining the level of service twelve months earlier than agreed to in the Joint Petition for Partial Settlement approved by the Commission as part of the proceeding which granted approval of the FirstEnergy/Allegheny Energy merger. Since that time the Company continued to focus on its commitment to achieve and maintain an annual call answer rate of at least 80% of calls answered within thirty seconds beginning with the twelve-month period ended December 31, 2016, and the Company reported 76% of calls answered within thirty seconds during 2015. During the twelve months ended March of 2016, the company had a call answer rate of 82% of calls answered within thirty seconds.

Q. The Company also agreed to reduce the number of residential disputes that did not receive a response within thirty days to no more than sixty beginning with the twelve-month period ending December 31, 2016. Is West Penn on track to comply with that standard?

A. Yes. The Company has made great strides in this area. For example, in 2014, West Penn had 479 residential disputes that did not receive a response within thirty days. The Company reduced that figure to eight in 2015 and, as of March 31, 2016, West Penn had no outstanding residential customer disputes that had not received a response within thirty days.

Q. The Company also agreed to take the necessary action to: (i) consistently meet the twelve-month performance standards established by the Commission for SAIFI[2], SAIDI[3] and CAIDI[4] by the end of the first reporting quarter of 2016 (i.e., March 31, 2016); (ii) consistently meet the three-year performance standards established by

[2] System Average Interruption Frequency Index, or"SAIFI," represents the average frequency of sustained interruptions per customer during an analysis period.

[3] System Average Interruption Duration Index, or "SAIDI," represents the average duration of sustained interruptions per customer during an analysis period.

[4] Customer Average Interruption Duration Index, or "CAIDI," represents the average interruption duration of sustained interruptions for those customers who experience interruptions during an analysis period.

the Commission for SAIFI, SAIDI, and CAIDI by the end of calendar year 2017; and (iii) strive towards the achievement of reliability performance at or better than the performance benchmarks established by the Commission. How is the Company performing with respect to these reliability commitments?

A. The Company has made tremendous progress and has met, or is in the process of meeting, all of its reliability obligations as shown in Table 1 below:

Table 1

West Penn Power Reliability Performance as of March 31, 2016

Metric	Benchmark	12-Month Standard	12-Month Actual	3-Year Standard	3-Year Actual
SAIFI	1.05	1.26	1.16	1.16	1.11
CAIDI	170	204	157.5	187	150
SAIDI	179	257	182.8	217	167

As indicated above, the Company has bettered the 12-month and 3-Year Standards for all three metrics, has achieved the performance benchmark for CAIDI, and is very close to satisfying the benchmarks for SAIFI and SAIDI.

Q. As part of the Settlement Agreement, the Company also agreed to ensure that its policies and procedures were designed such that customer meters are read at least every other month and to document the specific reasons when it is unable to do so. Has the Company complied with this commitment?

A. Yes. The Company continues to focus on its meter reading operations to ensure that its performance is consistent with all regulatory requirements. In furtherance of the commitment it made in its last base rate case, the Company created a new report that summarizes its meter-reading performance and identifies the causes for any missed reads. The Company provided such a report, covering the period from June 1, 2015 through December 31, 2015, to the statutory advocates on April 8, 2016.

Q. West Penn further agreed to revise its website and customer education materials to explicitly inform its customers, in plain language, of the Company's policy to issue bills based on actual meter readings no less frequently than every other month and to explain the procedures for customers to submit self-readings if they elect to do so. Has West Penn complied with this settlement provision?

A. Yes. The Company modified its website on July 1, 2015 to provide the information requested by the settling parties. Exhibit CVF- 6 provides a copy of the relevant Meter Reading page, shown on the website, of West Penn's current tariff.

Q. The Settlement Agreement also required that West Penn provide the statutory advocates with certain information regarding the operation of its modified estimated billing algorithm, including its performance over the first full year of its use. Is the Company on track to supply the necessary information?

A. Yes. Company representatives met with the statutory advocates on September 10, 2015 in Harrisburg to review its modified estimated billing algorithm and to answer any questions regarding its operation. Due to final upgrades taking place through the end of 2015, it was agreed that the Company will use the twelve-month period ending December 31, 2016 to study the accuracy and performance of the new algorithm and will provide a report to the statutory advocates in March of 2017.

Q. Turning to a different area, did the Company add certain reporting metrics to its Annual Progress Report under its Smart Meter Technology Deployment Plan

approved by the Commission at Docket No. M-2013-2341994 ("Smart Meter Plan"), as it agreed to do in its Settlement Agreement?

A. Yes. Beginning with the August 1, 2015 Annual Progress Report submitted pursuant to its Smart Meter Plan, the Company provided information concerning the following metrics:

Home area network ("HAN") devices. Number of utility AMI meters with consumer devices registered to operate with the HAN chip.

AMI meter installs. Number of smart meters installed and registered.

Customer complaints. Number of formal and informal PUC complaints related to AMI meter deployment, broken down by type of complaint and resolution. AMI meter deployment includes installation, functioning or accuracy of the AMI meter, and HAN device registration.

Reduction in greenhouse gas emissions. Reduced emissions attributable to reduced truck rolls due to automatic meter readings and increased efficiencies. This reporting will commence once the realization of this benefit has been determined and reflected in the smart meter baseline savings as of April 30, 2016.

Voltage and VAR controls. Number and percentage of distribution lines using sensing from an AMI meter as part of the Company's voltage regulation scheme.

Q. Did the Company also host an informational meeting with respect to the Company's smart meter and smart grid deployment efforts as committed to in the Settlement Agreement?

A. Yes. The meeting was held on July 20, 2015 at the FirstEnergy General Offices in Akron. Representatives of the Environmental Defense Fund attended in person and representatives of the Office of Consumer Advocate participated via teleconference.

III. <u>OVERVIEW OF RATE REQUEST AND REASONS FOR PROPOSED INCREASE</u>

Q. Please describe the increases and changes in rates for distribution service that the Company is proposing.

A. The Company is proposing a general rate increase to its distribution rates and is also requesting increases in rates charged under its Default Service Support ("DSS") Rider and Hourly Pricing Default Service ("HPS") Rider in order to fully collect the uncollectible expense associated with the provision of default service, as well as the Purchase of Receivables Program offered to Electric Generation Suppliers. Finally, the Company is proposing to roll smart meter and Distribution System Improvement Charge ("DSIC") investment costs into base rates.

Q. Please identify the principal changes to existing and pending rate riders that affect distribution base rate revenue in this case.

A. The Company currently has a Smart Meter Technologies Charge ("SMT-C") Rider through which it recovers the costs of implementing its Smart Meter Plan. . Because of this filing, the Company will instead include its 2017 smart meter costs in base rates and will maintain its SMT-C Rider rate at zero. The SMT-C Rider will remain in the

Company's tariff and will be utilized to recover the costs of its Smart Meter Plan in excess of the level of such costs included in base rates, net of applicable savings.

Likewise, the Company has sought the Commission's approval to implement a DSIC Rider for service rendered beginning July 1, 2016 at Docket No. P-2015-2508948. The Company proposes to roll the projected DSIC Rider charges and costs into base distribution rates, and to reset the DSIC Rider to zero as of the effective date of the base rates determined in this case. The DSIC Rider will remain at zero until West Penn has added plant through its Commission-approved Long Term Infrastructure Improvement Plan ("LTIIP") in excess of the claimed amount included in its estimated December 31, 2017 rate base in the present case.

Q. What effect will the proposed increases and changes in distribution rates and riders have on the Company's pro forma revenues at current rates ?

A. The effect of the proposed increases and changes in distribution rates and riders on the Company's pro forma revenues at current rates for the FPFTY is summarized in West Penn Exhibit CVF-3 and highlighted in Table 2 below:

Table 2

Requested Revenue Change	
West Penn	($ Thousands)
Distribution Base Rate	$93,270
DSS & HPS Riders	$ 4,958
Total Request	$98,228
Percentage Increase in Total Revenue	5.74%
Smart Meter Roll In	$
DSIC Roll In	$ 3744
Net Increase in Revenue	$94,484
Percentage Increase in Total Revenue	5.51%
Smart Meter – 2017 Rider revenue in the absence of the rate case	
DSIC Roll in – 2017 Rider revenue in the absence of the rate case	

The percentage increases shown are based on total Company revenue, assuming all customers are taking default service from the Company.

Q. What overall rate of return and return on common equity does the Company propose be used for purposes of calculating its revenue requirement in this case?

A. West Penn's proposed distribution rates are designed to recover the Company's costs to furnish safe and reliable distribution service and to provide it an opportunity to earn a fair return on its investment in distribution assets. More specifically, as summarized in West Penn Exhibit CVF-3 and explained in more detail in the direct testimony of Pauline M. Ahern (West Penn St. No. 8), the requested increase proposed by the Company would provide it an opportunity to earn an overall rate of return of 7.90% and a 10.90% return on common equity.

Q. How will the proposed rate increase impact the total bill of a typical residential customer using 1,000 kWh per month and how will the resulting bill compare to the current average residential bills of other Pennsylvania EDCs?

A. Table 3 below shows: (1) a current monthly bill for a residential default service customer using 1,000 kWh; (2) the requested increase in that bill; and (3) the new bill under proposed base rates.

Table 3

	Current Monthly Bill	Increase	Total Bill After Increase
West Penn	$112.99	$10.89	$123.88

*Based upon current default service rates as of the date of this filing.

Under the corresponding rates in effect as of May 1, 2016, customers of the other three non-affiliated major Pennsylvania EDCs (i.e., Duquesne, PECO and PPL) would pay a monthly bill of between $136.37 and $156.21. **West Penn Exhibit CVF-5** graphically depicts the billing comparison I just described.

Q. What are the principal factors driving the Company's need for rate relief?

A. The principal factors driving the Company's need to increase its distribution base rates are as follows:

1. **Growth in the Company's distribution rate base.** One of the factors driving West Penn's need for rate relief is the 12.5% growth in the Company's rate base attributable to its ongoing investment in distribution plant (including smart meter and DSIC-eligible investment). As shown in Table 4 below, the Company's estimated rate base at December 31, 2017, as summarized in West Penn Power

Exhibit CVF-3 and developed in Mr. D'Angelo's **West Penn Exhibit RAD-1**, is expected to be $152 million greater than the level reflected in current rates:

Table 4

	West Penn (thousands)
Rate Base Docket No. R-2014-2428742	$ 1,212,1855
Rate Base RAD-1 pg. 1 line 19	$ 1,364,215
Increase	$ 152,030
Percentage Change	12.5%

2. **Reduction in sales.** West Penn's projected 2017 revenue at current rates is seventeen million dollars less than the revenue requirement agreed to in the Settlement Agreement approved by the Commission at Docket No. R-2014-2428742. Sales to the residential class as a whole are expected to decrease by 1.33% annually, driven by a decline in the average usage per customer of approximately 1.45% annually over the next four years, offset only slightly by increases in the number of residential customers. The decline in the average residential usage in the Company's service area is primarily due to implementation of Pennsylvania's state-mandated energy efficiency programs under Act 129, as well as federally mandated energy efficiency lighting standards.

3. **Deferred taxes.** West Penn's deferred tax expense for the FPFTY is higher than the amount reflected in its last base rate proceeding.

4. **Depreciation expense associated with increased investment in plant in service.** The Company has included with this filing a new service life study reflecting adoption of the Equal Life Group Method. The updated accrual rates,

along with the new distribution plant, result in corresponding increases in depreciation expense.

5. **Increase in operations and maintenance ("O&M") expense.** Implementation of the Company's LTIIP, will drive higher O&M expenses as work included in the LTIIP has an on-going O&M component in addition to the capital component. In addition, the Company has budgeted increases in expenses associated with vegetation management, facility repairs and substation maintenance, as part of its on-going efforts to enhance reliability. Finally, the Company continues to experience increased uncollectible accounts expense.

IV. ORGANIZATION OF THE FILING, OTHER WITNESSES AND THE IMPORTANCE OF THIS CASE TO THE COMPANY AND ITS CUSTOMERS

Q. Please identify the other witnesses presenting direct testimony on behalf of the Company and the principal subjects they address.

A. The Company is submitting the direct testimony of nine witnesses including myself. The other witnesses submitting direct testimony and the principal subjects they address are identified in West Penn Exhibit CVF-2 and can be summarized as follows:

Richard A. D'Angelo	Statement No. 2	Development of the Company's revenue requirement, including sponsoring and explaining the Company's principal accounting exhibits.
Kevin M. Siedt	Statement No. 3	Development of normalized sales and revenues; development of the Company's proposed rate design; proposed changes to tariff rules and regulations, rate schedules and riders.

Thomas J. Dolezal	Statement No. 4	Development of the Company's cost of service studies; separation studies; and cost of service at existing rates.
Jeffrey L. Adams	Statement No. 5	Development of the Company's claim for cash working capital.
Laura W. Gifford	Statement No. 6	Updating uncollectible accounts expense to be recovered in West Penn's DSS and HPS Riders. Updating the baselines for the measurement of smart meter savings.
John J. Spanos	Statement No. 7	Annual and accrued depreciation rates and service lives.
Pauline M. Ahern	Statement No. 8	Cost of common equity.
Joseph Dipre	Statement No. 9	Capitalization ratios; cost rates of long-term debt and common equity; and overall cost of capital.

Q. Please explain the importance of the proposed rate increase to the Company?

A. In order to continue enhancing reliability and customer service, the Company must continue to make very substantial investments in new and replacement distribution plant, including the investments set forth in its Commission-approved LTIIP. Moreover, it must do so during a period of declining sales and ever increasing O&M expenses. Due to these factors, West Penn's projected overall rate of return for the FPFTY, at present rates, is only 4.14%. More importantly, its indicated return on common equity during that same period is anticipated to be but 3.14%, which is obviously grossly inadequate by any reasonable standard. Returns at these levels will simply not support the level of investment required to ensure that customers continue to receive safe and reliable electric service. Accordingly, it is critically important that the Company be granted the rate relief it is requesting in this case.

Q. In view of the foregoing, do you have a recommendation regarding the rate of return on common equity that should be approved for the Company?

A. Yes, I do. I strongly encourage the Commission to adopt the 10.9% equity return developed by Ms. Ahern.

Q. Does this conclude your direct testimony?

A. Yes, it concludes my direct testimony at this time. However, I would like to reserve the right to supplement my direct testimony should it become necessary to do so.

S&P Global
Ratings

x

On April 28, 2016, the name Standard & Poor's Ratings Services was changed to S&P Global Ratings. Until all content is re-branded, you will continue to see references to Standard & Poor's Ratings Services on our web site, in historical documents, and in some of our disclosures.

FirstEnergy Solutions Corp. And Affiliates Ratings Placed On CreditWatch Negative

22-Jul-2016 14:25 EDT

View Analyst Contact Information

FirstEnergy Solutions Corp. (FES) has announced a $1.51 billion pre-tax charge relating to certain generation assets and terminated coal contracts within its power supply business.

While the charges are noncash, they underscore the diminishing value and cash flows from the competitive merchant power supply business.

We see increasing pressure on management to reassess the strategic importance of the unregulated supply business. Given the decreasing relative size of the competitive businesses, and the widening gap between the business risk profiles of parent FirstEnergy Corp.'s utility and unregulated operations, we see the prospects of reduced support for the competitive business.

We are placing our ratings on FES and its unregulated affiliates on CreditWatch with negative implications pending a review of the strategic importance of the competitive business to the parent.

NEW YORK (S&P Global Ratings) July 22, 2016--S&P Global Ratings today placed its 'BBB-' corporate credit ratings on FirstEnergy Solutions Corp. (FES), and affiliates FirstEnergy Generation Corp., FirstEnergy Nuclear Generation Corp., Allegheny Energy Supply Co. LLC (AYE Supply), and Allegheny Generating Co. on CreditWatch with negative implications. We will resolve the CreditWatch listing after reviewing FirstEnergy Corp.'s strategic plan and discussing the supply business's importance to the parent with management.

In addition, we are withdrawing the corporate credit rating on Allegheny Energy Inc. at the issuer's request.

The CreditWatch listing affects about $3.6 billion of debt at FES and affiliates.

We currently view FES and AYE Supply as core subsidiaries of parent FirstEnergy Corp. (FirstEnergy), and the 'BBB-' ratings continue to be driven by ratings on FirstEnergy on a consolidated basis. In general, the core designation reflects our view of a subsidiaries' strategic importance to the parent company, including an expectation that they would not be sold and that the parent company would support them under the vast majority of contemplated stress scenarios.

We currently consider FES and affiliates as core to the parent. We note, however, that our analysis of group status can change over time.

"As part of the CreditWatch resolution we will reassess the core designation of FES and its affiliates due to the decreasing relative size of the

OCC [illegible]
Ex. 47

competitive businesses to the parent company, and because of the widening gap between the business risk profiles of FirstEnergy's regulated and competitive operations," said S&P Global Ratings credit analyst Aneesh Prabhu.

While FirstEnergy currently continues to support its competitive businesses, it has been our experience that when differences in the business risk profiles of a company's operating segments increase, they are often accompanied by reduced support for the riskier businesses in periods of duress. We will reassess FirstEnergy's strategy and posture towards FES and AYE Supply and we would lower these ratings if we determine that these companies are no longer core to parent FirstEnergy.

RELATED CRITERIA AND RESEARCH

Related Criteria

Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
Criteria - Corporates - Industrials: Key Credit Factors For The Unregulated Power And Gas Industry, March 28, 2014
General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
General Criteria: Methodology: Industry Risk, Nov. 19, 2013
Criteria - Corporates - Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
General Criteria: Group Rating Methodology, Nov. 19, 2013
Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
General Criteria: Methodology For Linking Short-Term And Long-Term Ratings For Corporate, Insurance, And Sovereign Issuers, May 7, 2013
General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
2008 Corporate Criteria: Rating Each Issue, April 15, 2008

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.globalcreditportal.com and at spcapitaliq.com. All ratings referenced herein can be found on the S&P Global Ratings public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

Primary Credit Analyst: Aneesh Prabhu, CFA, FRM, New York (1) 212-438-1285; aneesh.prabhu@spglobal.com
Secondary Contact: Terry A Pratt, New York (1) 212-438-2080; terry.pratt@spglobal.com

FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. 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 S&P Global Ratings, Client Services, 55 Water Street, New York, NY 10041; (1) 212-438-7280 or by e-mail to: research_request@spglobal.com.

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's Downgrades FirstEnergy Solutions Corp and Allegheny Energy Supply Co; Rating Outlooks remain negative

Global Credit Research - 29 Jul 2016

Approximately $5.0 billion of debt affected

New York, July 29, 2016 -- Moody's Investors Service, ("Moody's") today downgraded the senior unsecured rating for First Energy Solutions Corp (FES) to Ba2 from Baa3 and for Allegheny Energy Supply Company, LLC (AES) to Ba1 from Baa3. The Baa2 senior secured revenue bond rating for FES and the Baa3 senior unsecured rating for Allegheny Generating Company (AGC) were affirmed. The rating outlooks for FES and AES remain negative. The rating outlook for AGC was changed to stable from negative.

Moody's also assigned a Ba2 Corporate Family Rating (CFR) and Ba2-PD Probability of Default Rating (PDR) to FES and a Ba1 CFR and Ba1-PD to AES. The Baa3 Issuer rating for FES was withdrawn. Moody's also assigned an SGL-2 speculative grade liquidity rating for both FES and AES.

The Baa3 issuer rating and negative rating outlook for FirstEnergy Corp (FirstEnergy) remain unchanged.

"The lower ratings at FES and AES reflect Moody's decision to delink the ratings on these companies from that of parent FirstEnergy following its decision to eventually exit the merchant business and transition to a purely regulated utility holding company", said Swami Venkataraman, Vice President -- Senior Credit Officer. "The downgrade also reflects the weak merchant market conditions and incorporates our expectations that any assistance provided to FirstEnergy by the state of Ohio will likely not be linked to the generation business."

Downgrades:

..Issuer: Allegheny Energy Supply Company, LLC

....Senior Unsecured Regular Bond/Debenture, Downgraded to Ba1 (LGD4) from Baa3

..Issuer: Beaver (County of) PA, Industrial Devel Auth

....Senior Unsecured Revenue Bonds, Downgraded to Ba2 (LGD4) from Baa3

..Issuer: Bruce Mansfield Unit 1

....Senior Secured Pass-Through, Downgraded to Ba2 (LGD4) from Baa3

..Issuer: FirstEnergy Solutions Corp.

....Senior Unsecured Bank Credit Facility, Downgraded to Ba2 from Baa3

....Backed Senior Unsecured Regular Bond/Debenture, Downgraded to Ba2 (LGD4) from Baa3

..Issuer: Ohio Air Quality Development Authority

.... Backed Senior Unsecured Revenue Bonds, Downgraded to Ba2 (LGD4) from Baa3

..Issuer: Ohio Water Development Authority

....Backed Senior Unsecured Revenue Bonds, Downgraded to Ba2 (LGD4) from Baa3

..Issuer: Pennsylvania Economic Dev. Fin. Auth.

....Backed Senior Unsecured Revenue Bonds, Downgraded to Ba2 (LGD4) from Baa3

..Issuer: Pleasants (County of) WV, County Commission

....Backed Senior Unsecured Revenue Bonds, Downgraded to Ba1 (LGD4) from Baa3

P3/EPSA
Ex. 21

Assignments:

..Issuer: FirstEnergy Solutions Corp.

.... Corporate Family Rating, Assigned Ba2

.... Probability of Default Rating, Assigned Ba2-PD

.... Speculative Grade Liquidity Rating, Assigned SGL-2

..Issuer: Allegheny Energy Supply Company, LLC

.... Corporate Family Rating, Assigned Ba1

.... Probability of Default Rating, Assigned Ba1-PD

.... Speculative Grade Liquidity Rating, Assigned SGL-2

Affirmations:

..Issuer: Ohio Air Quality Development Authority

....Backed Senior Secured Revenue Bonds, Affirmed Baa2

..Issuer: Ohio Water Development Authority

....Backed Senior Secured Revenue Bonds, Affirmed Baa2

..Issuer: Allegheny Generating Company

....Senior Unsecured Regular Bond/Debenture, Affirmed Baa3

Outlook Actions:

..Issuer: Allegheny Energy Supply Company, LLC

....Outlook, Remains Negative

..Issuer: Bruce Mansfield Unit 1

....Outlook, Remains Negative

..Issuer: FirstEnergy Solutions Corp.

....Outlook, Remains Negative

..Issuer: Allegheny Generating Company

....Outlook, Changed To Stable From Negative

Withdrawals:

..Issuer: FirstEnergy Solutions Corp.

.... Issuer Rating, Withdrawn , previously rated Baa3

RATINGS RATIONALE

Moody's historically rated FES and AES at the same level as FirstEnergy because of the importance of the merchant operations to the company's over-all corporate strategy. FirstEnergy has also provided extraordinary financial assistance to FES in the past, such as the 2013 transfer of $1.5 billion of debt from FES to FirstEnergy. In 2015, FirstEnergy's management substantially reduced the size and focus of the merchant segment and also stated that it would not infuse any more capital into the business. However, we maintained the rating link between FE and FES because FirstEnergy was still pursuing regulatory options in Ohio linked to its generation business designed to collect additional cash flow, which would have bolstered FirstEnergy's consolidated financial profile. None of these historic considerations are valid going forward.

FES' Ba2 CFR reflects weak merchant market conditions as well as the composition of FES' generation portfolio, which is roughly 50% coal, 40% nuclear and 5% each of gas and renewables. Low power prices, driven by low natural gas prices, are placing considerable strain on FES' business. This trend is especially pronounced in eastern Ohio and Pennsylvania due to its proximity to the Marcellus natural gas shale formation. The rating is benefited by the cash flow that is derived from capacity revenues procured through the Pennsylvania-Maryland-New Jersey Regional Transmission Organization (PJM), which represents about 30% of FES' total gross margins. Nevertheless, FES' EBITDA is backwardated, meaning projected capacity and energy prices are falling. In 2016 and 2017, Moody's expects FES to generate roughly $100 - $150 million in free cash flow (after accounting for maintenance capex and nuclear fuel expenses) but will be free cash flow negative in 2018.

Moody's expects FES's cash from operations pre-working capital (CFO pre-WC) coverage of debt to fall from about 24% in 2016 (owing to strong capacity pricing in PJM's ATSI zone) to 16% in 2018, and free cash flow (FCF) coverage of debt from 5% in 2016 to zero by 2018. Moody's estimates FES' generation assets are worth approximately $3.6 billion, compared to adjusted debt of roughly $4.3 billion.

AES' Ba1 CFR is higher than FES because of a significantly different portfolio composition and materially lower leverage. AES' 2,982 MW portfolio is 46% coal, 30% natural gas and 24% pumped storage hydro. AES' coal plant is also a relatively better performer than FES' coal plants, with capacity factor of 62% in 2015 and over 70% in the years before. The gas and hydro assets are well positioned in PJM and don't face the same environmental or cost pressures as coal and nuclear generation.

AES has substantially lower leverage than FES. Moody's expects AES's CFO pre-WC coverage of debt to fall from about 31.5% in 2016 to 15% in 2018. Free cash flow (FCF) coverage of debt is expected to fall from 18% in 2016 to 4% by 2018. The material decline in 2018 is partly attributable to deferred tax swings and we expect that CFO pre-WC and FCF coverage ratios in 2017 and 2019 would be 20-25% and 8-10%, respectively, in the absence of these swings. Moody's estimates a value for AES' generating assets at $1.37 billion, compared to debt of $653 Million.

The affirmation of AGC's rating and the revision of the rating outlook to stable from negative reflects the unique nature of AGC's operations. AGC is 59% owned by AES and 41% owned by Monongahela Power Company (MP; Baa2 senior unsecured, stable outlook), a regulated utility subsidiary of FirstEnergy. As such, this ownership structure provides some bankruptcy insulation from AES, as well as FES. Further, AGC is regulated by the Federal Energy Regulatory Commission (FERC) and generates revenues from both AES and MP. The FERC authorized revenue tariff includes all of AGC's operating costs, as well as an 11% return on equity.

Structural Considerations

The ratings for FES and AES' debt instruments comprise both the overall probability of default of the corporate family rating, reflected in their Ba2-PD and Ba1-PD PDRs, respectively, and an average family loss given default assessment, using Moody's Loss Given Default Methodology. The Baa2 rating assigned to the secured debt at FES' subsidiaries First Energy Generation (FEG) and FirstEnergy Nuclear Generating (FENG) reflects the presence of only about $310 million of secured debt against a total outstanding debt of about $3 billion.

The Ba2 (LGD4 59%) rating assigned to the unsecured debt at FES, FEG and FENG reflects the cross-guarantees that exist between FES and each of FEG and FENG which effectively makes unsecured debt at FES pari-passu with unsecured debt at FEG and FENG. In fact, any unsatisfied secured claims at FEG and FENG will also be pari-passu with these unsecured claims.

Liquidity

Moody's assigned an SGL-2 speculative grade liquidity rating for both FES and AES reflecting adequate liquidity and or expectation that the companies can finance all their cash needs, including maintenance capex from operating cash flow over the next twelve months. The companies had about $42 million outstanding under their shared $1.5 billion revolving credit facility which matures in March 2019. FES and AES have sub-limits of $1.5 billion and $1 billion, respectively. This revolver is mostly undrawn as its primary purpose is to provide contingent liquidity in the event of a credit or market shock. FirstEnergy disclosed that the collateral impact from a downgrade of FES/AES by all rating agencies was about $300 million, which is easily manageable with its current . Liquidity is managed centrally at FirstEnergy, which has another revolver sized at $3.5 billion where the regulated utilities are also co-borrowers. FirstEnergy had $146 million of cash on hand as of March 31, 2016

FES and AES' revolving credit facility contains only one financial covenant, applicable to both, which is a requirement to maintain a consolidated debt to total capitalization ratio of no more than 65%. Both companies were in compliance with this requirement as of Mar 31, 2016.

We expect FES and AES to generate free cash flow of $100-150 million and $50-100 million, respectively in each of 2016 and 2017. AES has no debt maturities in the next 12 months. FES needs to remarket $391 million of its variable rate revenue bonds in 2016. About $285 million of this amount has already been taken out using the FES revolver to date and an additional $106.45 million will mature in September.

Rating Outlook

The negative rating outlook on FES and AES reflects the expected decline in capacity revenues and EBITDA going forward and the fact that financial ratios are expected to fall significantly from 2018 onwards in the absence of a general recovery in merchant market conditions.

Factors that Could Lead to an Upgrade

The rating could be upgraded if merchant market conditions improve and enable the company to consistently maintain a financial profile adequate for the rating. This includes CFO pre-WC and FCF coverage of debt in the high-teens and 8-10%, respectively for FES and 20-25% and 10-15%, respectively for AES

Factors that Could Lead to a Downgrade

Financial ratios that are currently forecasted for 2016 and 2017 are adequate for the ratings at FES and AES. However, ratings may again be downgraded if expectations for 2018 and beyond don't improve from current levels and the expected CFO pre-WC and FCF coverage of debt for 2018 and beyond were to decline below levels required to stabilize the outlook mentioned above.

The principal methodology used in rating Allegheny Generating Company was Regulated Electric and Gas Utilities published in December 2013. The principal methodology used in rating FirstEnergy Solutions Corp. and Allegheny Energy Supply Company, LLC was Unregulated Utilities and Unregulated Power Companies published in October 2014. Please see the Ratings Methodologies page on www.moodys.com for a copy of these methodologies.

REGULATORY DISCLOSURES

For ratings issued on a program, series or category/class of debt, this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series or category/class of debt or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the rating action on the support provider and in relation to each particular rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

For any affected securities or rated entities receiving direct credit support from the primary entity(ies) of this rating action, and whose ratings may change as a result of this rating action, the associated regulatory disclosures will be those of the guarantor entity. Exceptions to this approach exist for the following disclosures, if applicable to jurisdiction: Ancillary Services, Disclosure to rated entity, Disclosure from rated entity.

Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Please see www.moodys.com for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

Please see the ratings tab on the issuer/entity page on www.moodys.com for additional regulatory disclosures for each credit rating.

Swami Venkataraman, CFA

VP - Senior Credit Officer
Infrastructure Finance Group
Moody's Investors Service, Inc.
250 Greenwich Street
New York, NY 10007
U.S.A.
JOURNALISTS: 212-553-0376
SUBSCRIBERS: 212-553-1653

James Hempstead
Associate Managing Director
Infrastructure Finance Group
JOURNALISTS: 212-553-0376
SUBSCRIBERS: 212-553-1653

Releasing Office:
Moody's Investors Service, Inc.
250 Greenwich Street
New York, NY 10007
U.S.A.
JOURNALISTS: 212-553-0376
SUBSCRIBERS: 212-553-1653

MOODY'S
INVESTORS SERVICE

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third- party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from $1,500 to approximately $2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000. MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.