

**BEFORE THE PENNSYLVANIA PUBLIC  
UTILITY COMMISSION**

Pennsylvania Public Utility Commission, *et. al.* : R-2016-2537349, *et al.*  
:   
v. :   
:   
Metropolitan Edison Company :

Pennsylvania Public Utility Commission, *et. al.* : R-2016-2537352, *et al.*  
:   
v. :   
:   
Pennsylvania Electric Company :

Pennsylvania Public Utility Commission, *et. al.* : R-2016-2537355, *et. al.*  
:   
v. :   
:   
Pennsylvania Power Company :

Pennsylvania Public Utility Commission, *et. al.* : R-2016-2537359, *et al.*  
:   
v. :   
:   
West Penn Power Company :

**SURREBUTTAL TESTIMONY**  
  
**OF**  
  
**JAMES S. GARREN**  
  
**ON BEHALF OF**  
**OFFICE OF CONSUMER ADVOCATE**

**August 31, 2016**

1    **INTRODUCTION**

2    **Q.    PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.**

3    A.    My name is James S. Garren. I am an analyst with the economic consulting firm of  
4        Snavelly King Majoros & Associates, Inc. ("Snavelly King Majoros" or "SKM").

5    **Q.    HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS**  
6        **PROCEEDING?**

7    A.    Yes, I submitted direct testimony on July 22, 2016. That testimony included a summary  
8        of my qualifications and experience.

9    **PURPOSE OF SURREBUTTAL TESTIMONY**

10   **Q.    WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

11   A.    My surrebuttal testimony responds to the Rebuttal Testimony of John J. Spanos. Mr.  
12        Spanos objects to my testimony concerning the Companies' wholesale switch from  
13        Average Service Life ("ASL") depreciation to Equal Life Group ("ELG") depreciation  
14        thus collectively increasing by \$60.9 million, the depreciation expense charged to  
15        Pennsylvania ratepayers caused solely by the flip of a switch in a computer program.

16   **Q.    PLEASE SUMMARIZE YOUR POSITION.**

17   A.    I am opposed to ELG for various reasons but in summary, I do not think ELG is in the  
18        best interest of FirstEnergy's ratepayers. ELG is accelerated depreciation, which is  
19        antithetical to sound ratemaking principles and concepts. My Exhibit-JSG-3  
20        demonstrates that ELG is accelerated depreciation and it also demonstrates that from an  
21        economic standpoint, accelerated depreciation is harmful to ratepayers when their  
22        discount rate is used to evaluate overall revenue requirement streams which include

1 accelerated depreciation. From a practical standpoint, ELG has negative aspects and it is  
2 not necessary.

3 **Q. WHAT ARE SOME OF THE NEGATIVE ASPECTS?**

4 A. To date, these Companies have been using Commission-approved ASL depreciation  
5 rates. Mr. Spanos deems all of those prior depreciation rates to have been incorrect and  
6 proposes a wholesale switch from ASL to ELG. A wholesale switch from ASL to ELG  
7 in midstream creates an immediate accumulated reserve deficiency that is significant in  
8 dollar terms and then in turn increases current depreciation rates to penalize today's and  
9 future generations of ratepayers for a deficiency that is not reasonable or substantiated. A  
10 depreciation procedure switch does not change how plant will be retired, it merely  
11 increases depreciation expense on the same "on the ground plant" that has existed all  
12 along, even if the assumed life stays the same.

13 This is not fair and is tantamount to retroactive ratemaking through a regulatory slight-of-  
14 hand manipulation. Consequently, while I am opposed to ELG, I have recommended that  
15 if the Commission approves ELG, it should order the companies to file new depreciation  
16 studies using December 31, 2017 data and make the 2017 vintage the first ELG vintage  
17 rather than retroactively applying ELG to all prior vintages.

18 **Q. WOULD YOU OBJECT TO CALCULATING DEPRECIATION EXPENSE**  
19 **THROUGH 2016 IN THE CURRENT CASE USING ASL AND THEN APPLYING**  
20 **ELG SOLELY TO 2017?**

21 A. If the Commission decides to adopt ELG, I would not object to that procedure. The  
22 Companies could also use that procedure and 2017 as the demarcation point in their  
23 annual depreciation reports to the Commission.

1   **Q.   PLEASE SUMMARIZE MR. SPANOS’S REBUTTAL TO YOUR POSITION.**

2   A.   Mr. Spanos addresses my opposition to ELG “notwithstanding the large body of  
3       decisions by the PaPUC approving ELG for other utilities.”<sup>1</sup>

4   **Q.   DO YOU DISPUTE THAT THE COMMISSION HAS APPROVED ELG FOR**  
5   **OTHER UTILITIES?**

6   A.   No, the Commission has approved ELG in the past based on the circumstances in the  
7       cases involved. I am not cognizant of a situation where four utilities have made such a  
8       huge switch simultaneously. Furthermore, I understand that some of those earlier cases  
9       may have involved a switch from a decelerated depreciation method to ELG. I  
10      understand that in those proceedings the Companies involved claimed that the  
11      decelerated method was deficient. The circumstances here are different. To the best of  
12      my knowledge, no one has stated that the ASL method is deficient on its face. For  
13      example, Mr. Spanos files studies in most other jurisdictions using the ASL method.  
14      Therefore, the circumstances in this case are different than the circumstances in earlier  
15      cases where ELG was approved. Based on the facts of this case, a switch to ELG as  
16      proposed by the Companies is neither reasonable nor necessary for them to adequately  
17      recover their depreciation expense.

18   **Q.   DO YOU HAVE ANY GENERAL COMMENTS REGARDING MR. SPANOS’S**  
19   **REBUTTAL TO YOUR TESTIMONY?**

20   A.   Yes, in many cases Mr. Spanos did not accurately quote my testimony, thus at a  
21      minimum he puts his own spin on my position. For example, at page 3 Mr. Spanos states  
22      “First, utilities are entitled to a return of as well as a return on their investment in plant  
23      and equipment dedicated to furnishing public utility service.” Mr. Spanos’s footnote

---

<sup>1</sup> Spanos Rebuttal p. 1-2

1           reverences page 5, lines 13-15 of my testimony. I did not use the word “entitled.” In my  
2           opinion, utilities are entitled to an opportunity to earn a return on and of their capital  
3           prudently invested in public utility property. On the other hand, there are no guarantees.

4   **Q.   IS THERE A PRIMARY DIFFERENCE BETWEEN ELG AND ASL THAT LIES**  
5   **AT THE HEART OF THE DISAGREEMENT BETWEEN YOU AND MR.**  
6   **SPANOS?**

7   A.   Yes, ASL is straight-line depreciation whereas ELG is accelerated depreciation. Straight-  
8       line depreciation will reach a 50 percent depreciation reserve level when an asset reaches  
9       50 percent of its life. Accelerated depreciation will reach a depreciation reserve level  
10      more than 50 percent when an asset reaches 50 percent of its life, and decelerated  
11      depreciation will reach a reserve level of less than 50 percent when an asset reaches 50  
12      percent of its life. My Exhibit JSG-3 demonstrates that ELG produces a reserve level  
13      greater than 50 percent when an asset reaches 50 percent of its life. This is a fundamental  
14      fact.

15 **Q.   WHAT ARE SOME OF THE POINTS MR. SPANOS USES TO PUT FORTH HIS**  
16 **ARGUMENT?**

17 A.   In addition to his fundamental disagreement with the facts:

- 18       • Mr. Spanos alleges that ELG provides better matching, but Exhibit-JSG-3 demonstrates  
19       that ELG does not provide better matching.
- 20       • He asserts that depreciation does not provide a pass-through of cash from ratepayers to  
21       the utility,
- 22       • He argues that depreciation cannot increase profits,
- 23       • He argues that ELG is not a form of accelerated depreciation.

- 1 • Mr. Spanos argues that *present value* of the difference between ELG depreciation and  
2 ASL depreciation is not sensitive to the difference between the two.
- 3 • He apparently believes that ELG produces intergenerational equity as opposed to ASL,  
4 which he apparently believes is inconsistent with intergenerational equity.<sup>2</sup>
- 5 • Mr. Spanos says ‘since recovery should be consistent in its application to all utility plant  
6 in service, the Commission should use the same grouping procedure for all vintages.  
7 Otherwise, intergenerational inequity occurs.’ However, he fails to point out that the  
8 reserve deficiency he creates by the switch in mid-stream is a major breach in  
9 intergenerational equity. It penalizes today’s and future ratepayers for the companies  
10 having used Commission-approved acceptable depreciation methods and procedures in  
11 the past.

12 **Q. WHAT IS YOUR RESPONSE TO MR. SPANOS?**

13 A. While there may be certain minor aspects of his testimony where we might agree, in  
14 general I disagree with most of what Mr. Spanos says because he is not telling the whole  
15 story. The mid-stream switch from ASL to ELG is neither reasonable nor necessary. At  
16 least in theory, the switch will not change the total amount they charge for depreciation  
17 over the entire life of the assets. On the other hand it will immediately increase charges  
18 to current and future ratepayers for the reserve deficiency created by the switch.

19 **Q. BEFORE DISCUSSING YOUR EXHIBIT, PLEASE ADDRESS THOSE ASPECTS**  
20 **OF MR. SPANOS’S REBUTTAL THAT SHOULD NOT REQUIRE EXHIBITS**  
21 **TO DISPUTE.**

---

<sup>2</sup> Spanos p. 7

1 A. Mr. Spanos does not agree that depreciation results in a pass through of cash from  
2 ratepayers to the utility. I am surprised at this disagreement. All one must do is examine  
3 the utilities Statements of Income and Statements of Cash Flows to see the pass through –  
4 the pass through is not hidden.

5 **Q. MR. SPANOS ARGUES ‘THAT DEPRECIATION REPRESENTS THE**  
6 **REPAYMENT TO INVESTOR – OVER TIME – OF THEIR OWN MONEY?’ IS**  
7 **THAT TRUE?**

8 A. Yes, that is true. Nothing I am proposing here results in a reduction to the return of the  
9 total amount of the Companies’ investment in plant and equipment. The issue in this case  
10 involves an unnecessary acceleration to the annual amount of that return.

11  
12 **Q. DOES MR. SPANOS MAKE ANY OTHER COMMENTS REGARDING THE**  
13 **ACCOUNTING CONSEQUENCES OF DEPRECIATION.**

14 A. Yes, Mr. Spanos argues, “an increase in a utility’s annual depreciation accrual does not  
15 produce an increase in its net income.”<sup>3</sup> That may be true looking at *accrual basis net*  
16 *income*, but it is completely wrong when *cash basis net income* is considered. A \$1.00  
17 increase to depreciation expense produces a dollar for dollar \$1.00 increase to a utility’s  
18 cash basis net income. Again, this is obvious.

19 **Q. PLEASE DISCUSS YOUR EXHIBIT – JSG-3.**

20 A. The top portion of Exhibit JSG-3 compares three depreciation methods for a \$100 single  
21 asset plant account with a 5-year life. It shows straight-line ASL depreciation,  
22 accelerated ELG depreciation and decelerated depreciation. The straight-line  
23 depreciation method produces a 50 percent depreciation reserve at 2.5 years, i.e. midway

---

<sup>3</sup> Rebuttal, p.6.

1 through the asset's life. The accelerated ELG depreciation produces a 70 percent  
2 depreciation reserve level at 2.5 years and the decelerated method produces a 30 percent  
3 depreciation reserve at 2.5 years.

4 **Accumulated Reserve Levels at 50% of Life**

5 **Straight-line ASL** **50%**

6 **Accelerated ELG** **70%**

7 **Decelerated** **30%**

8 **Q. DO THESE COMPARISONS DEMONSTRATE ANYTHING BEYOND THE**  
9 **AMOUNTS OF THE RELATIVE RESERVE LEVELS?**

10 A. Yes, they demonstrate at least two relevant facts. First, the 20 percent difference between  
11 the accelerated 70 percent reserve level and the straight-line 50 percent reserve level is  
12 the deficiency Mr. Spanos creates by switching from the straight-line method to the  
13 accelerated method. Second, it is obvious that the accelerated depreciation expense  
14 stream, which starts high and then declines, creates intergenerational *inequities* while the  
15 straight-line method is in harmony with intergenerational equity.

16 **Q. WHAT IS SHOW IN THE MIDDLE SECTION OF EXHIBIT-JSG-3?**

17 A. The middle section of JSG-3 compares group level depreciation rates since group  
18 depreciation is at the heart of Mr. Spanos's objections to my proposals. The table  
19 contains three columns relating to a 5-year average service life for a vintage group of  
20 assets. The assets within the vintage group are retired in equal annual amounts over a 5-  
21 year average service life. Since this is a group of assets, some elements of the group will  
22 retire prior to 5 years and other elements will survive longer than 5 years. Again, even  
23 though we are dealing with a group rather than a single asset, the straight-line ASL



1 depreciation rate remains at a constant 20 percent. On the other hand, the accelerated  
2 ELG rates start high and then go below the straight-line ASL rates. This is the same  
3 pattern as shown in the single asset comparisons.

4 **Q. WHAT DOES THE BOTTOM PORTION OF THE EXHIBIT SHOW?**

5 A. Below the Method Comparison is the Ratemaking Comparison. There I have used the  
6 single asset comparisons combined with a 3 percent rate of return to calculate annual  
7 revenue requirements for the straight-line ASL Method and the accelerated ELG Method.  
8 The straight-line revenue requirements sum to \$109.00 versus the accelerated revenue  
9 requirement that sums to \$107.00.

10 Mr. Spanos essentially points to the \$2.00 difference between the two revenue  
11 requirement streams to demonstrate that accelerated depreciation is better because of a  
12 lower revenue requirement overall.

13 He alleges that from a present value point of view, ratepayers should be indifferent  
14 because when I use the 3 percent rate of return to discount the two streams, they both net  
15 to \$100. The exhibit shows this.

16 However, Mr. Spanos fails to acknowledge that a discount rate is a judgmental matter.  
17 The ratepayers' discount rate is not the Company's 3.0 percent rate of return. The  
18 ratepayers' discount rate is much higher – more akin to credit card interest rates in the 12  
19 to 18 percent range. Assuming arguendo that the ratepayers' discount rate is the 18  
20 percent annual rate they pay the utilities for late payments (1.5% per month or 18% per  
21 year), the accelerated ELG revenue requirements further penalize ratepayers as shown by  
22 the additional \$5.68 economic cost in the lower right-hand corner of my exhibit.

1   **Q.   MR. SPANOS RESPONDS TO YOUR ARGUMENT THAT DEPRECIATION IS**  
2   **RETAINED FOR NON-UTILITY PURPOSES AS “SIMPLY WRONG AS A**  
3   **FACTUAL MATTER” PLEASE COMMENT.**

4   A.   Utilities may retain the cash flow they collect through depreciation for either utility or  
5       non-utility purposes.

6   **Q.   PLEASE SUMMARIZE YOUR RESPONSE TO MR. SPANOS.**

7   A.   Mr. Spanos has not supported a switch to ELG.

8   **Q.   DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

9   A.   Yes, it does.

**BEFORE THE PENNSYLVANIA PUBLIC  
UTILITY COMMISSION**

Pennsylvania Public Utility Commission, *et. al.* : R-2016-2537349, *et al.*  
:   
v. :   
:   
Metropolitan Edison Company :

Pennsylvania Public Utility Commission, *et. al.* : R-2016-2537352, *et al.*  
:   
v. :   
:   
Pennsylvania Electric Company :

Pennsylvania Public Utility Commission, *et. al.* : R-2016-2537355, *et. al.*  
:   
v. :   
:   
Pennsylvania Power Company :

Pennsylvania Public Utility Commission, *et. al.* : R-2016-2537359, *et al.*  
:   
v. :   
:   
West Penn Power Company :

**EXHIBIT ACCOMPANYING THE  
SURREBUTTAL TESTIMONY  
OF  
JAMES S. GARREN  
ON BEHALF OF  
OFFICE OF CONSUMER ADVOCATE**

**August 31, 2016**

Rules: Each Method Must Allocate 100% over Life

Results:

- Straight-line method - 50% accumulated at mid-life
- Accelerated method - more than 50% accumulated at mid-life
- Decelerated method - less than 50% accumulated at mid-life

METHOD COMPARISON - SINGLE UNIT									
Theory Assuming \$100 Original Cost									
ASL Straight Line 5-year life				ELG Accelerated SOYD 5-year Life				Decelerated SOYD 5-year Life	
Year	SL	SL Rate	Accumulated Depreciation Year End	Accumulated at 2.5 years	Accelerated SOYD	Accelerated Rate	Accumulated Depreciation Year End	Decelerated SOYD	Accumulated Depreciation Year End
1	1/5	20.00000%	20.00000%	20.00000%	5/15	33.33333%	33.33333%	1/15	0.066667
2	1/5	20.00000%	40.00000%	40.00000%	4/15	26.66667%	60.00000%	2/15	0.133333
3	1/5	20.00000%	60.00000%	50.00000%	3/15	20.00000%	80.00000%	3/15	0.200000
4	1/5	20.00000%	80.00000%	80.00000%	2/15	13.33333%	93.33333%	4/15	0.266667
5	1/5	20.00000%	100.00000%	100.00000%	1/15	6.66667%	100.00000%	5/15	0.333333
Sum						100.00000%			1.000000

VINTAGE GROUP PROCEDURE COMPARISON ASL V ELG

5-Year Straight Line Curve			
Age	ASL Depreciation Rate	ELG Depreciation Rate	
A	B	C	
0	20.0000%	38.7895%	
0.5	20.0000%	28.7895%	
1.5	20.0000%	18.7895%	
2.5	20.0000%	13.7895%	
3.5	20.0000%	10.4562%	
4.5	20.0000%	7.9562%	
5.5	20.0000%	5.9563%	
6.5	20.0000%	4.2897%	
7.5	20.0000%	2.8613%	
8.5	20.0000%	1.6114%	
9.5	20.0000%	0.5003%	

Conclusion: ELG is Accelerated Depreciation

RATEMAKING COMPARISON - SINGLE UNIT ASL v. ELG									
ASL Straight Line Revenue Requirement					ELG Accelerated SOYD Revenue Requirement				
Plant	Accumulated Depreciation	Net Plant	Return at 3%	Deprecition Expense	Revenue Requirement	Accumulated Depreciation	Net Plant	Return at 3%	Deprecition Expense
0	0	100.00	3.00	20	23.00	0	100.00	3.00	33.33
1	20.00	80.00	2.40	20	22.40	33.33	66.67	2.00	26.67
2	40.00	60.00	1.80	20	21.80	60.00	40.00	1.20	20.00
3	60.00	40.00	1.20	20	21.20	80.00	20.00	0.60	13.33
4	80.00	20.00	0.60	20	20.60	93.33	6.67	0.20	6.67
5	100.00	-	-	0	-	100.00	-	-	-
Total		300.00	9.00	100.00	109.00		233.33	7.00	100.00
									107.00
NPV 3%									\$100.00
NPV 18% - Additional Economic Cost to Ratepayers									\$100.00
Conclusion: Accelerated Depreciation is Not in the Ratepayers' Best Interests									(\$5.68)

**Basic Example**  
**ELG Rates for a Vintage**  
**5 Year Straight Line Curve**

Age	Surviving Investment 5SL Curve	Amount Retired	Age of Retired	Accruals	
				For Each Group	All Groups

A	B	C	D	E=C/D	F=Sum E (A to End)	
0.0	1.000	0.050	0.50	0.100	0.388	<b>0.387895363</b>
0.5	0.950	0.100	1.00	0.100	0.288	<b>0.273500595</b>
1.5	0.850	0.100	2.00	0.050	0.188	<b>0.159711059</b>
2.5	0.750	0.100	3.00	0.033	0.138	<b>0.103421522</b>
3.5	0.650	0.100	4.00	0.025	0.105	<b>0.067965319</b>
4.5	0.550	0.100	5.00	0.020	0.080	<b>0.043759116</b>
5.5	0.450	0.100	6.00	0.017	0.060	<b>0.026803512</b>
6.5	0.350	0.100	7.00	0.014	0.043	<b>0.015014537</b>
7.5	0.250	0.100	8.00	0.012	0.029	<b>0.007153733</b>
8.5	0.150	0.100	9.00	0.011	0.016	<b>0.002417464</b>
9.5	0.050	0.050	10.00	0.005	0.005	<b>0.00025033</b>
		1.000		0.388	1.338	1.088


BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission, <i>et. al.</i>	:	R-2016-2537349, <i>et al.</i>
	:	
v.	:	
	:	
Metropolitan Edison Company	:	
Pennsylvania Public Utility Commission, <i>et. al.</i>	:	R-2016-2537352, <i>et al.</i>
	:	
v.	:	
	:	
Pennsylvania Electric Company	:	
Pennsylvania Public Utility Commission, <i>et. at.</i>	:	R-2016-2537355, <i>et. al.</i>
	:	
v.	:	
	:	
Pennsylvania Power Company	:	
Pennsylvania Public Utility Commission, <i>et. al.</i>	:	R-2016-2537359, <i>et al.</i>
	:	
v.	:	
	:	
West Penn Power Company	:	

VERIFICATION

I, James S. Garren, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement No. 5-SR, are true and correct and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Signature:

  
James S. Garren

Consultant Address: Snavelly King Majoros & Associates, Inc.  
PO Box 727  
Millersville, MD 21108

DATED: August 31, 2016