returns, while the S&P 500 gained 13.41%.[282] As Dr. Szerszen recognizes, investors will bid down the price of a stock to increase the expected return to a point where the price is commensurate with the higher risk.[283] Investors' sentiment concerning utility stocks in 2012 can hardly be said to embody a perception that those stocks are a "safe haven."

b. SWEPCO Risk Factors

Although Mr. Hevert finds that a reasonable range of ROE results fall between 10.5% and 11.5%, he recommends a point estimate for SWEPCO of 11.25% in consideration of the Company's business risks compared to the proxy group.[284] In particular, SWEPCO has a relatively high degree of coal-fired generation (50% of installed generation).[285] This is the case even compared to Mr. Hevert's proxy group, which is the only one to be developed including an explicit screen to account for ownership of at least some coal-fired generation.[286] As a result, SWEPCO is exposed to the risks of coal plant retirement and the associated costs, as well as the cost of environmental compliance.[287]

The capital costs of environmental compliance are very significant for SWEPCO.[288] As explained by Ms. McCellon Allen, as a result of "a series of regulations finalized by the EPA in 2011 and early 2012, and additional regulation expected to be finalized over the next several years...,"[289] SWEPCO estimates environmental capital expenditures of approximately $600 million in 2012-2014, more than $1 billion through 2016, and $1.2 to $1.5 billion over an eight year period beginning in 2012.[290] It is clear that such elevated capital expenditure

---

[282] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 8, 51, 55; Tr. at 899-903 (electric utilities the worst performing market sector in 2012).

[283] Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 6.

[284] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 7-8, 33.

[285] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 34.

[286] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 13.

[287] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 33-35.

[288] Tr. at 912-913 (Mr. Gorman describes SWEPCO's anticipated environmental capital expenditures as "very large," "significant").

[289] Direct Testimony of Venita McCellon Allen, SWEPCO Ex. 25 at 38.

[290] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 36; Rebuttal Testimony of Venita McCellon Allen, SWEPCO Ex. 65 at 23; Tr. at 918.

expectations, particularly in the context of coal-fired power plants, represent a major investor risk factor.[291]

In considering these increased risk factors, SWEPCO's relatively weak financial profile must also be kept in mind. Its bond rating (Baa3) is at the lowest investment grade, and it has suffered downgrades from two different rating agencies during its recent generation construction cycle, with no improvement since.[292] Its current weaker bond rating has led to relatively higher debt costs than would have occurred absent the downgrades.[293] SWEPCO, moreover, has paid no dividends since 2006, while it has continuously been involved in a major capital expansion program that shows no signs of abating.[294] Applying customary screening tests, these are factors that would make SWEPCO so out of the norm that it would not even pass the test to be included in an ROE proxy group.[295] Though certain intervenor witnesses sought to distinguish SWEPCO from these tests because its parent, AEP, continued to pay dividends, this view simply ignores the fact that the role of this proceeding is to set SWEPCO's ROE on a stand-alone basis. On this basis, it is clear from the evidence that SWEPCO is riskier than the proxy groups to which it is being compared. For these reasons, Mr. Hevert was fully justified in arriving at a cost of equity for SWEPCO near the top end of his range.

2. Proxy Group

All of the ROE analysts in the case developed what they termed a comparable group of companies, to serve as a "proxy" in estimating an ROE for SWEPCO, which is not a publically traded company.[296] Mr. Hevert used a variety of appropriate screens to zero in on a sub-set of Value Line's Electric Utilities that "is highly representative of the risks and prospects faced by SWEPCO...."[297] After removing two additional companies with anomalous large recent operating losses,[298] Mr. Hevert arrived at the nine company group listed on page 16 of his direct

---

[291] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 36-38; Tr. 907-909, 912-913; Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 135-36. (fact that utilities expected to recover environmental compliance costs does not keep it from being clearly identified as key risk factor).

[292] Tr. at 904-905; Direct Testimony of Marc D. Reitter, SWEPCO Ex. 36 at 6-7.

[293] Direct Testimony of Marc D. Reitter, SWEPCO Ex. 36 at 7-8.

[294] Direct Testimony of Marc D. Reitter, SWEPCO Ex. 36 at 11-12.

[295] Tr. at 291, 923-924.

[296] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 11-16.

[297] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 12-13.

[298] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 14-15.

testimony. When he updated his ROE model estimates on rebuttal, he included one more company (PNM) that had previously met the screening tests, but did not have a set of operating data consistent with those screening tests until the time of rebuttal,[299] for a total of ten companies. Both Mr. Gorman and Mr. Parcell used the proxy group from Mr. Hevert's direct testimony (with one exception discussed below) in their ROE analyses.[300]

Several intervenor witnesses criticized Mr. Hevert's proxy group. OPUC witness Szerszen claimed the group was too small, such that it was unduly influenced by the growth projection of Otter Tail, one of the comparable companies.[301] The size of Mr. Hevert's group (10), however, is consistent with that of all the ROE witnesses save for Dr. Szerszen, who is the outlier in this respect.[302] Moreover, Mr. Hevert demonstrated that the reason he considered **median** results in addition to average (or "mean") results is because this practice significantly avoids the influence that outlier data points have on the overall model estimate.[303]

In his use of Mr. Hevert's proxy group, Mr. Gorman excluded Empire District Electric Company (Empire) because that company did not have growth estimates from the firms Mr. Gorman favors and because it had temporarily suspended its dividend.[304] Empire does, however, have earnings estimates from the reputable firms that Mr. Hevert uses (First Call consensus and Value Line).[305] Mr. Hevert further explained that Empire had restored its dividend, had continued to pay it for several consecutive quarters, had not indicated any plan to do otherwise, and otherwise exhibited a "consistent payment history."[306] Mr. Gorman acknowledged that Empire was expected to continue to pay dividends.[307] Mr. Hevert's proxy

---

[299] Tr. at 1974-1975; *see* SWEPCO's Response to Cities RFI 21-3, Cities Ex. 92.

[300] Direct Testimony of Michael Gorman, TIEC Ex. 3 at 14; Direct Testimony of David Parcell, CARD Ex. 1 at 15.

[301] Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 8-9.

[302] Mr. Gorman used Mr. Hevert's direct testimony proxy group less one, for a total of eight companies. Mr. Parcell's own group also had nine companies. Direct Testimony of David Parcell, CARD Ex. 1 at Exhibit DC-4. Mr. Hill's group has 11 companies. Direct Testimony of Stephen Hill, Cities Ex. 1, Schedule 4 at 1. Mr. Cutter's group has ten companies. Direct Testimony of Slade Cutter, Staff Ex. 2 at Attachment SC-2.

[303] Tr. at 288, 300, 303, 319-320.

[304] Direct Testimony of Michael Gorman, TIEC Ex. 3 at 14.

[305] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 21, Exhibit RBH-2.

[306] Tr. at 317-318.

[307] Tr. at 924.

group clearly comprises an appropriate basis for estimating SWEPCO's ROE. Moreover, reasonably including Mr. Hevert's mean DCF result for Empire in Mr. Gorman's constant growth DCF analysis increases Mr. Gorman's average result more than 50 basis points, to 9.9%.[308]

The same cannot be said of the intervenor and Staff witnesses' proxy groups. Only one of Mr. Cutter's companies would pass Mr. Hevert's screening tests, such that there is little if any comparability between Mr. Cutter's proxy group and SWEPCO's.[309] Mr. Hevert's rebuttal Exhibit RBH-6R shows that no other witness found four of Mr. Cutter's ten companies to be useful in estimating SWEPCO's ROE. Mr. Cutter also included T&D companies and gas distribution companies that he and other ROE experts acknowledged are typically viewed as less risky than, or not comparable to, vertically integrated companies.[310]

Finally, Mr. Cutter rejected a screening test (no recent mergers/capital expansions) that he had consistently utilized as recently as 2012, ostensibly for the purpose of getting a larger group,[311] but the company he added as a result (Duke) was not found to be useful to the ROE analysis by a single other expert.[312] At the same time, Mr. Cutter reversed course and adopted a higher market capitalization threshold ($10 billion v. $5 billion) and thereby **reduced** the potential companies in his proxy group, contrary to his consistent prior practice.[313] This practice eliminated at least some relatively higher growth rate companies from his analysis. In the final analysis, it is difficult if not impossible to identify what ROE Mr. Cutter's analysis would have yielded had he used a reasonable proxy group.[314]

---

[308] This is the overall average that results from adding Mr. Hevert's mean constant growth DCF result (13.27%) for Empire, *see* Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at Exhibit RBH-2, to the average DCF constant growth results shown in Direct Testimony of Michael Gorman, TIEC Ex. 3 at Exhibit MPG-4.

[309] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 15.

[310] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 14-15; Tr. at 911, 1597, 1671, 1676; *see also* Tr. at 1474 (gas companies do not fit Parcell screen).

[311] Tr. at 1660-1666. Many of the other ROE experts employed the "merger" screen that Mr. Cutter rejected. Direct Testimony of Stephen G. Hill, Cities Ex. 1 at 32; Direct Testimony of Michael P. Gorman, TIEC Ex. 3 at 16; Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 8.

[312] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at Exhibit RBH-5R.

[313] Tr. at 1667-1668, 1680-1681.

[314] Tr. at 1667-1670, 1680-1681.

Dr. Szersen's and Mr. Hill's proxy groups reveal similar flaws. Mr. Hevert explained in detail how Dr. Szerszen's larger group improperly trades sized for comparability.[315] In addition, both Dr. Szerszen and Mr. Hill included two companies with negative projected five year analysts' growth rates, Ameren and Entergy.[316] Ameren's significant financial difficulties, spawned by problems causing it to abandon an entire segment of its business, make its choice as a proxy company unreasonable.[317] Similarly, Entergy's ongoing business transformation (spinning off transmission assets and joining a new and untested wholesale market), combined with negative earnings, may hardly be considered to be emblematic of normal ongoing business operations.[318] More generally, negative growth rates are obviously not sustainable,[319] and as Mr. Cutter noted, in and of themselves should disqualify a company from inclusion in an ROE proxy group.[320]

3. Discounted Cash Flow (DCF) Model

The DCF model works on the theory that "a stock's current price represents the present value of all expected future cash flows. In its simplest form, the DCF model expresses the Cost of Equity as the sum of the expected dividend yield and long-term growth rate...."[321] Mr. Hevert employed two versions of the DCF Model—"Constant Growth" (in his direct testimony and updated in his rebuttal testimony) and "Multi-Stage" (in his rebuttal testimony).[322] Mr. Hevert used three different averaging periods to calculate the stock price for the dividend yield (30, 90, and 180 day average closing prices) so that the model results are not skewed by anomalous events on a given trading day, but at the same time can be said to be reasonably representative of

---

315 Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 125-129.

316 Tr. at 1084-1088, 1602-1603.

317 Tr. at 1084-1088; SWEPCO Ex. 100.

318 *See* Redacted Workpapers to the Direct Testimony of Carol Szerszen, OPUC Ex. 2B at 255 (Entergy Value Line summary); Tr. at 1088-1090.

319 Tr. at 1091.

320 Tr. at 1668.

321 Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 19.

322 Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 18-23; Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 27-33, 142.

capital market conditions over a longer term.[323] The other experts calculate dividend yields using stock price averages or data points over similar time frames.[324]

For the growth rate component, Mr. Hevert highlights (and the other experts agree) that the DCF model assumes a single growth rate over a very long term, essentially "in perpetuity."[325] To supply this growth rate estimate, Mr. Hevert uses a variety of stock analysts' earnings growth estimates. This approach is consistent with substantial scholarly research showing that analysts' growth estimates are superior to historical indicators of growth.[326] It is also consistent with the fact that "over the long term... dividend growth can only be sustained by earnings growth."[327] For each of the stock price periods, Mr. Hevert developed a range of mean and median DCF-based ROE estimates for the proxy group, at three different growth rates: a low growth rate (using only the lowest growth rate provided by any of the three analysts for each company); a mean growth rate (using the average of the three growth rates provided for each company); and a high growth rate (using only the highest growth rate provided by any of the three analysts for each company).

As updated in his rebuttal testimony to reflect the most current information, Mr. Hevert's DCF results[328] are as follows:

---

[323] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 19.

[324] Direct Testimony of David Parcell, CARD Ex. 1 at 16 (90 days); Direct Testimony of Stephen Hill, Cities Ex. 1 at 46 (six weeks); Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 17 (four months); Direct Testimony of Michael Gorman, TIEC Ex. 3 at 16 (13 weeks).

[325] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 21; Tr. at 285-287; Direct Testimony of Slade Cutter, Staff Ex. 2 at 16 (DCF model estimates the present value "of all future dividends"); Direct Testimony of David Parcell (DCF model estimates the present value of "all future cash flows"); Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 18 (growth rate must measure "long-run dividend growth"); Direct Testimony of Michael Gorman, TIEC Ex. 3 at 18 (DCF Model requires long-term growth rate).

[326] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 79; Direct Testimony of Slade Cutter, Staff Ex. 2 at 22.

[327] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 21; Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 19 ("Earnings growth, in turn, provides the bases for increased future dividends.").

[328] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 142.

	Low Growth Rate	Mean Growth Rate	High Growth Rate
Mean Results			
30-Day Average	8.94%	10.87%	13.72%
90—Day Average	8.88%	10.82%	13.67%
180-Day Average	8.97%	10.91%	13.76%
Median Results			
30-Day Average	9.63%	10.12%	10.82%
90—Day Average	9.51%	10.03%	10.73%
180-Day Average	9.56%	10.21%	10.82%

Mr. Hevert also performed in his rebuttal testimony a multi-stage DCF analysis that addressed and corrected the flaws in the multi-stage analyses performed by several of the other witnesses. The main conceptual difference in the constant growth versus Mr. Hevert's multi-stage model is that the multi-stage model "enables the analyst to specify growth rates over three distinct stages."[329] For purposes of the multi-stage analysis, Mr. Hevert uses the combination of analyst's earnings growth projections and Value Line's projected dividend payout ratio to forecast dividends in the initial stage. He then develops a long-term growth rate based on long term average annual historical data regarding real GDP growth (3.24%), combined with the current expected inflation rate (2.48%) for the third stage long-term growth rate of 5.80%.[330] Mr. Hevert's analysis assumes that during the second stage, growth will transition to the long-term growth rate, and the Value Line projected payout ratio will transition to the long-term industry average.[331] Adjusting Mr. Gorman's multi-stage analysis to include all of Mr. Hevert's initial proxy group and analysts' growth rates, updating the model for the most recent financial data, and employing a proper long-term growth rate, the multi-stage DCF result is 10.54% (mean) and 10.46% (median).[332] Mr. Hevert's overall multi-stage DCF results are as follows.[333]

	Low Growth Rate	Mean Growth Rate	High Growth Rate
30-Day Average	10.04%	10.67%	11.64%
90—Day Average	9.97%	10.59%	11.51%
180-Day Average	10.01%	10.70%	11.61%

[329] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 Appendix A at 1.

[330] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 31.

[331] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 4.

[332] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 32.

[333] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 142.

Several areas of controversy have arisen regarding the constant growth DCF estimates. Regarding dividend yields, Cities witness Hill contends that Mr. Hevert's method of updating the dividend yield to reflect near term expected growth overstates that yield compared to recent Value Line projections.[334] To the contrary, Mr. Hevert's Rebuttal Exhibit RBH-R1 shows that the mean expected dividend yield for his proxy group ranges from 4.16% to 4.26%. Mr. Hill's Schedule 5 shows that his average dividend yield, by comparison, is 4.28%. If anything, Mr. Hevert's dividend yields are understated.

In addition, intervenor witnesses make various criticisms of Mr. Hevert's (and, by implication, Staff witness Cutter's and TIEC witness Gorman's) reliance on analysts' earnings forecasts as the measure of the growth component of the DCF Constant Growth estimate. These criticisms fall in several categories: 1) investors take more into account than just earnings estimates, including published historical data; 2) analysts' forecasts are overly optimistic; 3) the data relied on by academics to support the use of analysts' forecasts is flawed.

Mr. Hevert and Mr. Cutter, however, lay out the sound reasons why ROE analysts routinely and primarily rely on analyst earnings forecasts to estimate DCF growth. Professional security analysts use extensive and sophisticated models, research and analysis, which incorporates the historical data and growth indicators championed by intervenor witnesses, in arriving at their earnings growth estimates. Sophisticated investors, moreover, do not rely on the assumption that historical trends will be repeated, but instead look to forward-looking information, consistent with the fact that estimating the cost of equity is a prospective exercise. Additionally, empirical research has concluded consensus analyst forecasts are superior predicting valuation of stocks than forecasts derived from historical data.[335]

In addition, as Mr. Hevert explains, the DCF model's fundamental assumption is that over the long term, earnings, dividends and stock prices all grow at the same rate, consistent with the fact that over the long-term only earnings growth can sustain dividend growth. Similarly, investors tend to value stocks on the basis of price to **earnings** (P/E) ratios, again confirming the central role of earnings in determining stock value.[336]

---

[334] Direct Testimony of Stephen Hill, Cities Ex. 1 at 62-63.

[335] Direct Testimony of Slade Cutter, Staff Ex. 2 at 21-22; Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 78-79, 116-117; *see also* Direct Testimony of Michael Gorman, TIEC Ex. 3 at 17 (research shows analysts' forecasts superior to growth rates derived from historical data).

[336] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 59-60, 116.

As to supposed bias in analyst earnings growth estimates, Mr. Hevert points out that Mr. Hill has provided no analyses supporting his claims regarding overly "rosy" forecasts coming from the analysts relied on by Mr. Hevert. Moreover, recent scholarship, cited by Mr. Hevert, points to the conclusion that analyst bias has significantly declined, or disappeared since 2010, while not part of the earlier concerns regarding bias related to analysts of the utility market segment.[337]

Cities witness Hill claims that the high DCF growth rate for one of Mr. Hevert's proxy companies—Otter Tail—illustrates the hazards of relying on analysts' growth rates in determining long term growth. Mr. Hevert thoroughly refuted this critique. While Otter Tail's growth could be viewed as an outlier standing in isolation, Mr. Hevert did not treat it that way. He considered a **group of companies** with a full range of growth rates (including those that would be considered low outliers in isolation). He also considered **median** as well as mean constant growth DCF results, which finds the central tendency of a group of values, rather than the simple average of all of them.[338] Although Mr. Hevert did not advocate "cherry picking" any particular growth rate within his group, he did point out that if one were to be consistent in trying to eliminate outliers, one would also have to address unreasonably low growth rates such as 3.35% or below (3% is not sustainable long-term because it is equal to only the long term inflation rate, and thus would produce no real growth).[339] Consistently removing Otter Tail and the low growth outliers (Cleco and Idacorp) from Mr. Hevert's analysis, the median constant growth DCF result is 10.67% and the mean is 10.43%.[340] OPUC witness Szerszen argues in addition that despite all indications to the contrary, the only truly reliable indicator of long-term dividend growth are retained earnings and book value.[341] Mr. Hevert empirically tested this assertion by performing a regression analysis on a portion of Dr. Szerszen's proxy group to see if there was a relation between higher retained earnings (Dr. Szerszen's measure of fundamental growth) and higher earnings growth rates. The result was that there was a **negative** statistical relationship between the two items; "on a historical basis, earnings growth actually decreases as

---

[337] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 77-78; Tr. at 1962, 1977-1978.

[338] Tr. at 301-303,

[339] Tr. at 313-314.

[340] Tr. at 314-316; SWEPCO Ex. 90.

[341] Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 23.

the retention ratio increases."[342] Academic research supports the same conclusion.[343] In addition, Mr. Hevert's additional regression analysis of the relation between various historical and projected growth rates for the Value Line universe of utilities revealed that "the only positive statistically significant variable was projected earnings growth."[344] Both Dr. Szerszen's reliance on retained earnings over analysts' forecast as a reliable indicator of DCF growth, and her critique of analysts' earnings forecasts, are unsupported. Use of analysts' earnings forecast to estimate the DCF results (and eliminating Ameren and Entergy, the companies in Dr. Szerszen's group with negative growth rates) would result in an average growth rate of 5.6% for Dr. Szerszen's proxy group.[345] Adding the average dividend yield of 4.31% (again excluding the companies with negative growth)[346] results in a DCF-based cost of equity for Dr. Szerszen's proxy group of 9.93%.

One final claim regarding DCF growth rates that should be disposed of is the contention of TIEC witness Gorman that Mr. Hevert's Constant Growth analysis includes growth rates that are too high to be sustainable. Mr. Gorman claims that the long-term sustainable growth rate should be based on forecasts for GDP growth in the economy in general, specifically the consensus view of economists for 4.9%, published in the *Blue Chip Financial Forecast.*[347] The glaring problem with using this GDP forecast, however, is that it does not represent the very long-term growth rate required by the Constant Growth DCF model. As explained above, the DCF model requires a 150-200 year forecast of constant growth. The *Blue Chip* consensus GDP forecast, however, only goes out ten years, and therefore has no relationship to the time frame required by the Constant Growth model. As Mr. Hevert pointed out, you are leaving out 140 of the 150 forecast years needed by using the *Blue Chip* forecast.[348] Very long term GDP growth, however, has been 6.3% to 6.4%, while very long-term market appreciation has been at 7.4% on

---

[342] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 117-118.

[343] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 119.

[344] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 122-123, Exhibit RBH-26R.

[345] Tr. at 1091.

[346] Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at Schedule CAS-4.

[347] Direct Testimony of Michael Gorman, TIEC Ex. 3 at 47.

[348] Tr. at 311-312.

average. These growth rates are consistent with Mr. Hevert's range of Constant Growth growth rates, not those of intervenors and Staff.[349]

The errors of intervenors and Staff witnesses in developing long term growth rates also show up plainly in their multi-stage DCF estimates. Both Staff witness Cutter and TIEC witness Gorman utilized analysts' growth rates for years one through five of the analysis. Mr. Gorman then used the ten year *Blue Chip* consensus forecast of 4.9% for the third, or terminal, stage of growth, while Mr. Cutter used the even lower 4.5% Federal Reserve System value, for an even shorter forecast period of 5-6 years.[350] Given that the terminal stage makes up 82% of the result in the multi-stage model, a reasonable very long-term growth rate is critical.[351] Neither Mr. Gorman's ten-year forecast, let alone Mr. Cutter's 5-6 year forecast, even relate to the time frame of the terminal stage of the analysis. Instead, they relate only to the first stage.[352]

Mr. Hevert's rebuttal analysis shows that there are several benchmarks for long-term growth that are superior to those used by either Mr. Cutter or Mr. Gorman. Both of these witnesses are completely comfortable using very long-term historical information (1926 - 2011) in developing the expected market risk premium used in their CAPM estimates. Similar long term GDP growth data shows annual growth that is rarely as low as 4.5%. The same historical period that Mr. Cutter employs for his CAPM analysis shows over the long term, stock prices on average have risen 7.4% annually. By those measures, Mr. Gorman's and Mr. Cutter's use of a very short-term forecast GDP growth are very low.[353] As additional perspective, considering the most recent average ROE awarded by regulatory agencies to vertically integrated utilities – 10.12% – if you keep all of Mr. Gorman's data and assumptions the same, but solve for a growth rate sufficient to yield a 10.12% ROE, then the growth rate would need to be 5.98%, more than 100 basis points greater than Mr. Gorman's 4.9% long-term growth rate. All of this data firmly supports Mr. Hevert's estimate of a 10.46% ROE based on a more reasonable application of the multi-stage DCF model.

---

[349] Tr. at 313.

[350] Direct Testimony of Michael Gorman, TIEC Ex. 3 at 24; Direct Testimony of Slade Cutter, Staff Ex. 2 at 20-21; Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 18-19.

[351] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 18.

[352] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 19, 29.

[353] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 21.

4. Capital Asset Pricing Model (CAPM)

The CAPM Model "is a risk premium approach that estimates the Cost of Equity for a given security as a function of a risk-free return plus a risk premium...."[354] It requires a risk free rate (treasury security), to which is added a risk premium composed of the required equity risk premium on the stock market as a whole, multiplied by the "beta" of the stock of the proxy group. Beta represents the relative riskiness of a particular stock compared to the market as a whole.

As Mr. Hevert explained, recent economic conditions have affected the results of the CAPM in several ways. The risk free rate represented by treasury securities has been depressed by federal monetary policy "focused on low long-term interest rates," and because investors seek the relative safety of low-risk securities during periods of equity market volatility. In addition, as electric utility stocks have shown an increasing correlation to changes in the broader market as market volatility increases (*i.e.*, becomes more risky), the result is that the beta for these stocks is higher than it otherwise would be. Finally, due to the extraordinary loss in value of the stock market during 2008, the market risk premium (which is based on the required return on the market as a whole), measured on a historical basis, has gone down, even though other measures of risk sentiment indicate continued high levels of risk aversion.[355] Mr. Hevert's application of the CAPM, in contrast to the other witnesses, takes into consideration these unusual market circumstances.

First, he used both a current 30-year Treasury bond yield, and a projected yield as an alternative, to capture the forward looking aspects of the cost of equity determination. Second, rather than use a historical market risk premium (MRP), in light of the conditions described above, he estimated a forward looking ("ex ante") market risk premium, using two different approaches. First, he calculated the weighted average ROE of the S&P 500 based on the constant growth DCF Model and subtracted from that the 30-year Treasury yield, to arrive at "the market DCF-derived ex-ante MRP estimate."[356] Mr. Hevert's second forward looking market risk premium calculation used the **constant** Sharpe Ratio, which is the ratio of the historical market risk premium and historical market volatility. He then calculated the expected

---

[354] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 23.

[355] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 24.

[356] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 25, Exhibit RBH-2.

market risk premium as the product of the Sharpe Ratio and **expected** market volatility, which he estimated using data from thirty and ninety day volatility indices of the Chicago Board Options Exchange (CBOE).[357]

Finally, Mr. Hevert developed beta coefficients based on several sets of market data. To increase the CAPM data points available for consideration, he used two different sets of betas. First, he used the betas published by Value Line (based on five years of data) and Bloomberg (based on two years of data). He also calculated beta coefficients over a more recent period of time "to provide a more current view as to investors' perspective with respect to the systematic risk represented by the proxy group companies."[358] In this way, Mr. Hevert could consider CAPM results based on the most recent 12 months of data, which reflects the increasing trend for the utility sector to mirror the (higher) volatility and risk of the broader stock market. Mr. Hevert's calculated beta yields a result very much in line with the Bloomberg and Value Line data.[359]

The summary of Mr. Hevert's CAPM results is shown below (Table 5 to his direct testimony):

	Sharpe Ratio Derived Market Risk Premium	Bloomberg Derived Market Risk Premium	Capital IQ Derived Market Risk Premium
Calculated Beta Coefficient			
Current 30-Year Treasury (2.98%)	9.35%	10.98%	11.08%
Near Term Projected 30-Year Treasury (3.58%)	9.95%	11.58%	11.69%
Bloomberg Beta Coefficient			
Current 30-Year Treasury (2.98%)	8.99%	10.53%	10.62%
Near Term Projected 30-Year Treasury (3.58%)	9.59%	11.13%	11.23%

[357] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 26-27.

[358] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 27.

[359] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 28-29.

Value Line Beta Coefficient			
Current 30-Year Treasury (2.98%)	9.01%	10.56%	11.23%
Near Term Projected 30-Year Treasury (3.58%)	9.62%	11.16%	11.26%

Mr. Hevert updated his CAPM results in his rebuttal testimony, but limited the methodologies employed to those less controversial among the other parties (excluding Sharpe Ratio-based MRP and calculated beta). The updated results are as follows:

	Bloomberg Derived Market Risk Premium	Capital IQ Derived Market Risk Premium
Bloomberg Beta Coefficient		
Current 30-Year Treasury (2.85%)	10.00%	9.99%
Near Term Projected 30-Year Treasury (3.15%)	10.30%	10.29%
Value Line Beta Coefficient		
Current 30-Year Treasury (2.85%)	10.32%	10.31%
Near Term Projected 30-Year Treasury (3.15%)	10.62%	10.62%

Several intervenor and staff witnesses perform CAPM analyses that they contend use more reliable inputs than Mr. Hevert uses, and they lodge a variety of criticisms of Mr. Hevert's approach. What stands out most from the CAPM estimates of the other witnesses, however, is that they yield results so unreasonably low that these witnesses uniformly reject their use. Staff witness Cutter explained that to be useful in ROE analysis, the results of a particular model should be corroborative of other model results; close or overlapping results are indicators of useful models, while broadly divergent results are not.[360] All of the CAPM results of the other witnesses flunk this test, as they explicitly or implicitly acknowledge.

Mr. Cutter acknowledged that his CAPM result of 6.22% was too low to be an acceptable or corroborative estimate of ROE, though he performed the estimate using standard historical inputs.[361] Mr. Parcell similarly acknowledged that his testimony (excluding his traditionally

[360] Direct Testimony of Slade Cutter, Staff Ex. 2 at 10; Tr. at 1657-1658.

[361] Tr. at 1657-1659.

derived CAPM result of 6.1% to 6.3% from his reasonable range of results) reflects that the CAPM result is an "outlier," when it was 250 basis points below what he considered a reasonable range.[362] Mr. Gorman also agreed that his 8.2% CAPM estimate, though performed according to standard inputs, was simply too low to be considered in his ultimate ROE recommendation.[363] These CAPM estimates are unreasonably low because of the unique economic conditions which Mr. Hevert identifies, and which other witnesses acknowledge.[364] Moreover, these CAPM estimates are below—in most cases far below—the lowest returns ever authorized for an electric utility.[365] Only Mr. Hevert's CAPM estimate accounts for the current economic environment, and only Mr. Hevert's CAPM estimate is corroborative of his other models and his overall ROE range.

In addition, the criticisms of Mr. Hevert's CAPM Model by the other witnesses should be rejected. First, Mr. Hevert's beta coefficients are reasonable.[366] They are based on a range of recent historical periods (five years, two years, and the most recent twelve months). This range of data points, based on multiple different time periods, addresses both Mr. Hill's own concern that traditional beta calculations suffer from being based on stale data and Mr. Gorman's claim that Mr. Hevert's calculated beta, viewed in isolation, utilized too short a period of data.[367] In addition, financial services such as Bloomberg provide investors with ready access to data for various analytical periods that permit sophisticated investors and analysts to calculate and consider beta for specific periods in making their investment decisions, contrary to Mr. Hill's view that such data is not available to investors.[368]

---

362 Tr. at 1469, 1472-1473.

363 Tr. at 942. Dr. Szerszen's CAPM estimate, 8% - 8.52%, and Mr. Hill's estimate—7.93%, are similar to Mr. Gorman's, and also well below the ROE that they believe should be adopted in this case.

364 *E.g.*, Direct Testimony of Michael Gorman, TIEC Ex. 3 at 38; Direct Testimony of Slade Cutter, Staff Ex. 2 at 29.

365 Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 83.

366 Dr. Szerszen adopted those betas in her analysis. Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 26.

367 Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 84.

368 Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 85.

Second, Mr. Hevert's MRP estimates (both DCF-based and Sharpe Ratio-based) are reasonable, and the concerns expressed by intervenor witnesses [369] are unsupported. At the outset, note that the benchmarks pointed to by these witnesses reflect historical indicators that do not reflect current market conditions, and which caused the other ROE experts to reject their own CAPM estimates. Moreover, Mr. Hevert's MRP parameters are reasonable even compared to historical information related to the MRP. Though Mr. Gorman claims that the *ex ante* DCF-based total return on the market used by Mr. Hevert in determining the MRP is too high, the actual average total market return from 1926 to 2011 was 11.80%, well higher than Mr. Gorman's 9.8% estimate. Moreover, throughout that historical period, the record shows that total market returns and MRPs at the level estimated by Mr. Hevert (13.47% and 13.61%), and higher, occurred very frequently, indicating a high probability of recurrence. In fact, they represent the 50th percentile of actual returns observed from 1926 to 2011.[370] There is no basis in the record for assuming that a simple average of all the years 1926-2011, such as used by Messrs. Gorman and Hill, will provide a more accurate MRP estimate than Mr. Hevert's forward looking estimate, which also finds support in the historical data. Dr. Szerszen's reservations regarding the use of analysts' growth forecasts (the basis for Mr. Hevert's DCF-based MRP) have been addressed above. Further, she offers no empirical support whatsoever for her claim that a 10% total return should be used to determine the market risk premium to be used in the CAPM Model.[371]

Cities witness Hill also claims, based on reference to AEP's anticipated pension returns and to discussions in financial literature, that investors expect market risk premiums to be lower than in the past. Mr. Hill's theories regarding pension funding expectations have not been accepted in any regulatory jurisdiction that he could point to, while Mr. Hevert fully explained why the "expected returns" associated with pension portfolios are irrelevant to determining an investor's "required return" on a particular security.[372]

Moreover, Mr. Hill's recitation of an article addressing CFO expectations for market risk premiums was incomplete and misleading. As Mr. Hevert pointed out, the CFOs surveyed

---

[369] Direct Testimony of Michael Gorman, TIEC Ex. 3 at 50; Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 27.

[370] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 37.

[371] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 130.

[372] Tr. at 1593-1597, 1605-1606; Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 104-110.

distinguished their **required** return (the focus of this case) from their expected risk premium, with the former being substantially higher. In particular, the mean "hurdle rate," which represents the required return on equity, was 13.50% in the CFO study.[373] Mr. Hill's citation to a Graham and Harvey article pointing to a market risk premium of 4.48% was also incomplete, as it reflected investment strategies not pertinent to estimating cost of equity, and in any event showed a larger statistically valid range of potential market risk premiums in excess of 10%.[374]

Finally, witnesses Gorman, Hill, and Szerszen object to Mr. Hevert's use of the Sharpe Ratio-based MRP, contending that the volatility measures used by Mr. Hevert in this estimate are for too short a period, and that those volatility indices do not correlate to volatility in MRPs. Contrary to Mr. Hill's claim, there is a clear empirical relationship between the referenced volatility index (VIX) and the expected equity risk premium. The relationship is documented in the Graham and Harvey finance article relied on by Mr. Hill.[375] Furthermore, while the VIX and VXV volatility indices are short in duration (one- and three-month indices), this criticism ignores that Mr. Hevert's point of reference for purposes of the market risk premium is the **forward contract** average for the VIX.[376]

5. Bond Yield Plus Risk Premium Model

This ROE estimation model is based on the principle that equity investors require a premium over the return they would have earned as a bondholder in exchange for the additional risk associated with equity ownership. One way to measure this differential is to compare authorized returns awarded to utilities to the yield on a representative class of bonds. As performed by Mr. Hevert, the required equity risk premium is the difference between the authorized ROE and the then-prevailing level of the long-term (*i.e.*, 30-year) Treasury yield. Contrary to Mr. Hill's erroneous claim, Mr. Hevert's approach also accounts for the difference in interest rates between the filing of the rate cases surveyed and the date of the final order in these cases.[377] Mr. Hill is also off base in criticizing Mr. Hevert's data base. It is very robust,

---

[373] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 109.

[374] Tr. at 1979-1980.

[375] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 88-89.

[376] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 129-130.

[377] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 30; Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 99.

consisting of 1,350 cases over 32 years, with an average of 41 decisions a year, which is easily large enough to overcome the effect of any "outliers."[378]

One other critical aspect of Mr. Hevert's analysis is that it recognizes and adjusts for the well-established fact that the equity risk premium is inversely related to the level of interest rates; that is, as interest rates go down, equity risk premiums go up, and vice versa.[379] Staff witness Cutter agrees that this relationship exists and it critical to correctly performing the bond yield Plus Risk Premium Model.[380] Chart 1 to Mr. Hevert's direct testimony depicts this statistically significant relationship over time. Unless this relationship is accounted for, simply applying the long-term average equity risk premium (4.31%) would significantly understate the Cost of Equity; for example, resulting in a suggested ROE of only 7.89%.[381] As properly adjusted, Mr. Hevert's Bond Yield Plus Risk Premium estimate yields a cost of equity of 10.34% and, as adjusted for more current data on rebuttal, a cost of equity of 10.25%.[382]

The Risk Premium Plus Bond Yield estimates of the other experts, however, are flawed and understate the cost of equity. Both Mr. Gorman and Dr. Szerszen reject the established inverse relationship between interest rates and risk premiums, though their own analyses clearly show its existence in the data sets they use.[383] Mr. Gorman's analysis heightens the problem by throwing out his three highest and lowest risk premium observations, since this has the effect of eliminating the 2011-2012 results that most closely reflect current market conditions.[384]

The result of these witnesses' use of simple averages to determine the risk premium, without accounting for the inverse relationship, is that they are emphasizing the impact of time periods where interest rates were much higher, and risk premiums were much lower, than is now

---

[378] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 100.

[379] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 31-32.

[380] Direct Testimony of Slade Cutter, Staff Ex. 2 at 23-24.

[381] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 32.

[382] Direct Testimony of Robert B. Hevert, SWEPCO Ex. 35 at 33; Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 144.

[383] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 44, 133-134.

[384] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 42-43. Mr. Gorman's analysis is also biased downward because it gives 25% weight to the ROEs at the low end of his range, which are below the lowest ROEs ever authorized since 1980 and which are ROE levels he rejected in other elements of his analysis. Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 42; Tr. at 931-933, 942-943.

the case.[385] If the inverse relationship between interest rates and risk premiums is to be ignored, then the estimate should at least be based on current market conditions, and on consideration of interest rates and authorized returns from a consistent time frame. Employing this approach, if consistent 2011-2012 data is used to calculate the ROE estimate, Mr. Gorman's data would show a range of 9.71% to 10.43% and an overall average 10.07%, numbers somewhat lower than Mr. Hevert's regression based estimate, but still more in line with recent authorized returns.[386] Application of the same approach to Dr. Szerszen's most recent data results in an ROE of 10.76%.[387]

Finally, Mr. Parcell compares Mr. Hevert's 10.43% ROE estimate for the Bond Yield Plus Risk Premium Model to recent authorized returns, and notes that Mr. Hevert's 11.25% ROE recommendation is higher, and also that ROEs authorized by regulators at that level have been exceptional in recent years.[388] Mr. Hevert explained, as discussed above, why he went to the upper part of his range based on SWEPCO-specific factors in recommending an 11.25% ROE. That said, Mr. Hevert's reasonable **range** of ROE estimates extends from 10.5% to 11.5%.[389] If Mr. Parcell's chart at page 32 of this testimony were revised to state the number of authorized returns that fall between 10% and 11% (i.e., all of the decisions each year other than the ones highlighted by Mr. Parcell), it would show the following:

	No. of Decisions	**ROE Between 10% and 11.25%**
2005	24	16
2006	26	17
2007	38	23
2008	37	30
2009	40	34
2010	61	41
2011	43	20

[385] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 46.

[386] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 45.

[387] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 134.

[388] Direct Testimony of David C. Parcell, CARD Ex. 1 at 32.

[389] Rebuttal Testimony of Robert B. Hevert, SWEPCO Ex. 74 at 6, 145; Tr. at 1975-1976.

From this listing it should be obvious that Mr. Hevert's range of reasonable ROE outcomes is in the mainstream of what has been authorized by regulatory agencies in the time frame surveyed by Mr. Parcell.

6. Conclusion

Mr. Hevert's ROE range (10.5% to 11.5%) and recommended result (11.25%) are consistent with the ROEs awarded in recent times by retail regulators in other states, and which are representative of the competitive return to which SWEPCO is entitled under the *Hope* and *Bluefield* standards. This is particularly the case given SWEPCO's particular risk factors. Mr. Hevert's recommendations are well supported by his DCF, CAPM, and Bond Yield Plus Risk Premium Models, which in turn are based on inputs that are well supported by market data, academic research, and empirical analysis. The intervenor and Staff analyses, on the other hand are flawed due to inappropriate proxy groups, understated and/or erroneous growth rates and risk premiums, and other inputs, as well as other methodological errors. The Commission should adopt Mr. Hevert's recommended ROE of 11.25% or, at a minimum, should adopt an ROE within the reasonable range of 10.5% to 11.5 % identified by Mr. Hevert.

B. Cost of Debt [PO Issue 5]

The Company's cost of debt, calculated per the instructions and requirements of the Commission's Rate Filing Package (RFP), is 5.96%.[390] OPUC witness Dr. Carol Szerszen raises the sole objection made by any party to the Company's calculation of its cost of debt. Dr. Szerszen contends that the unamortized losses ($27,903,089) and yearly amortization ($3,552,120) associated with the Company's interest rate risk management agreements and insurance premiums[391] should be removed from cost of debt, lowering the cost of debt from 5.962% to 5.693%.[392] Contrary to Dr. Szerszen's claims, SWEPCO's cost of debt, including the costs of these agreements, is consistent with Commission requirements, and the costs are reasonable and necessary.

Company Schedule K-3 shows the calculation of the cost of debt consistent with Commission Rate Filing Package requirements.[393] P.U.C. SUBST. R. 25.231(c)(1)(C)(i) requires

---

[390] Direct Testimony of Marc D. Reitter, SWEPCO Ex. 36 at 6; SWEPCO Ex. 4, Schedule K-3.

[391] Rebuttal Testimony of Marc D. Reitter, SWEPCO Ex. 75 at 8. Dr. Szerszen refers to these costs as "interest rate swaps." Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 34.

[392] Redacted Direct Testimony of Carol Szerszen, OPUC Ex. 2 at 34.

[393] SWEPCO Ex. 4, Schedule K-3.

that the cost of debt be "the actual cost of debt at the time of issuance, plus adjustments for premiums, discounts, and refunding and issuance costs." SWEPCO's debt calculation, utilizing the Commission-required form, includes among the adjustments a calculation providing for the amortization of the cost of the risk management agreements (identified in the schedule as "Hedging Costs and Insurance Premiums").[394] Dr. Szerszen identifies no respect in which SWEPCO's calculation is at odds with the Commission requirement to present the "actual cost of debt."

Mr. Reitter's testimony further demonstrates that the costs are reasonable. He explains that in the face of volatility in the interest rate markets, interest rate risk management agreements are appropriate as a means to manage interest rate risk.[395] For example, while ten-year treasury securities started out 2011 at above 3%, due to the federal reserve's "quantitative easing" policy, the interest rate has now fallen below 2%. Yet, the rates are now trending up again.[396] While OPUC attempted to make the point during Mr. Reitter's cross-examination that interest rate volatility had decreased of late, Mr. Reitter clarified that the agreements had been entered into prior to that point in time.[397] Absent such agreements, utilities and their customers would be exposed to unanticipated increases in the interest rate of a bond at the time of issuance, substantially driving up its cost and thus the overall cost of debt. Given the large amount of capital requirements in the utility business, interest rate risk management agreements are used by utilities across the country as a prudent hedge against interest rate volatility. Moreover, SWEPCO and AEP ensure that the costs of these agreements are reasonable by determining the pricing for these contracts through competitive bidding.[398] Finally, the majority of the risk management costs are associated with the pro forma adjustment for SWEPCO's most recent debt issuance, which ***reduced*** SWEPCO's cost of debt by 16 basis points and currently stand as the lowest coupon senior unsecured bond in the SWEPCO debt portfolio.[399]

---

394 SWEPCO Ex. 4, Schedule K-3 at 1 of 2 (see calculation of adjusted cost of debt at bottom of schedule).

395 Tr. at 343.

396 Tr. at 342-343.

397 Tr. at 338.

398 Rebuttal Testimony of Marc D. Reitter, SWEPCO Ex. 75 at 9-10.

399 SWEPCO Ex. 4 at Schedule K-3 at 1 of 2; Direct Testimony of Marc D. Reitter, SWEPCO Ex. 36 at 5; Tr.at 345-346.

C. Capital Structure / Overall Rate of Return [PO Issue 4]

Company witness Reitter presented SWEPCO's adjusted test year capital structure, as follows:[400]

Description	Adjusted Capitalization	Percent of Total Capitalization	Cost of Capital Rate	Weighted Average Cost of Capital
Long-Term Debt	$1,907,962,962	50.90%	5.96%	3.03%
Preferred Stock	0	0.00%	0.00%	0.00%
Common Stock Equity	1,840,182,667	49.10%	11.25%	5.52%
Total	$3,748,145,630	100.00%		8.55%

Issues regarding proposed adjustments to the Company's cost of equity and cost of debt are addressed immediately above. TIEC witness Gorman proposes one other adjustment to capital structure, contending that the Commission should reduce SWEPCO's equity balance by the amount of equity associated with "non-utility assets" that he alleges is included in the Company's capital structure ($27,917,000).[401] Mr. Gorman's adjustment should be rejected.

First and foremost, the adjustment is incorrect because the non-utility assets were never included in the capital structure by SWEPCO in the first place. As Mr. Reitter explains:

> These companies are non-consolidating subsidiaries, have no effect on SWEPCO's capital structure, and therefore were excluded from rate filing package Schedule K-1. The amounts Mr. Gorman highlights are simply investments SWEPCO has made in those entities and are not contained within the capital structure the Company has requested in this case.[402]

In addition, even erroneously assuming that the non-utility assets had been included in SWEPCO's capital structure, Mr. Gorman's adjustment to capital structure to remove those assets is inaccurate and incomplete. As Mr. Reitter explained, one would have to remove both the debt and equity component of the non-utility assets in order to insulate SWEPCO's utility capital structure from their effects. If this were done, a reduction to the debt balance of $21,604,000 would need to accompany the reduction to the equity balance, and the overall result

---

[400] Direct Testimony of Marc D. Reitter, SWEPCO Ex. 36 at 6.

[401] Direct Testimony of Michael Gorman at 11-12, TIEC Ex. 3 at Exhibit MPG-1.

[402] Rebuttal Testimony of Marc D. Reitter, SWEPCO Ex. 75 at 11.

is that Mr. Gorman's unsupported adjustment would not have a material effect on the balance between debt and equity in SWEPCO's capital structure.[403]

IV. Operating & Maintenance Expenses [PO Issues 18, 19, 21, 23]

A. Turk O&M

SWEPCO proposes to include $17.6 million in cost of service for the non-fuel-related operation and maintenance (O&M) costs associated with the Turk Plant.[404] Including these costs in rates as a post-test year adjustment is necessary now that the Turk Plant has been placed in service and producing power for SWEPCO's customers, as discussed above in Section II.A.4.a.

Mr. Franklin explained how SWEPCO calculated these costs.[405] SWEPCO used actual existing plant operational knowledge, and then applied that knowledge to Turk's design. Because nearly the full complement of Turk employees had been hired, those costs related to positions, salaries, and benefits were well understood and could be accurately forecasted.[406]

A detailed study was undertaken to develop a Turk budget reflecting ongoing O&M costs. This budget was developed mainly by leveraging SWEPCO's operational knowledge of the Pirkey and Oklaunion (which is owned by SWEPCO affiliate Public Service Company of Oklahoma) Power Plants. Both Pirkey and Oklaunion have ideal characteristics to use as a proxy for Turk—they are the youngest single-unit, solid-fuel plants in the western AEP region and are retrofitted with flue-gas desulfurization (FGD) systems. Adjustments were made to existing plant O&M values to account for differences in fuel, major equipment, and operational conditions. In addition, because the Pirkey and Oklaunion Plants have a long operating history of which SWEPCO is highly knowledgeable, SWEPCO was able to rely on that experience to estimate the Turk annual O&M expense.[407] Indeed, Mr. Franklin spent 11 years at Pirkey as the maintenance

---

[403] Rebuttal Testimony of Marc D. Reitter, SWEPCO Ex. 75 at 11.

[404] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 39-40. The $17.6 million mentioned by Mr. Franklin includes direct O&M amounts only. The $19.9 million Turk O&M cost sponsored by Mr. Hamlett (Direct Testimony of Randall W. Hamlett, SWEPCO Ex. 34 at 15, 29) included, in addition, approximately $2.3 million in fuel-related costs. See Schedule B-1.4 at 1 of 2 (SWEPCO Ex. 2) and Volume 11 of 16 Rate Filing Package WP/B-1.4.4 (SWEPCO Ex. 10A).

[405] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 39-40; Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 27-29; Tr. at 2142-2144.

[406] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 40.

[407] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 40; Tr. at 2143.

superintendent, and the Turk Plant manager, Tim Gross, came from Oklaunion. There was a lot of personal experience at those plants on which to draw.[408]

All these things considered, SWEPCO's Turk O&M cost estimate merits confidence. Only CARD witness Kollen questioned the O&M cost level that SWEPCO proposes. He recommended that SWEPCO's requested level of Turk O&M expense be reduced by 25%. The rationale for this recommendation is a comparison of SWEPCO's Turk O&M request to that of other power plants on an overall level of dollars per megawatt of installed capacity ($/MW). The comparative plants are (1) other SWEPCO solid-fuel units and (2) a Kentucky coal-fired plant that entered service in 2011 and is called Trimble Country 2 (TC2).[409] Mr. Kollen did not calculate that Turk's O&M was 25% higher than these other plants, only that it was higher. He then arbitrarily proposed his 25% disallowance of Turk O&M costs, without properly accounting for the differences between Turk and the plants he compared it against.

Mr. Franklin explained why Mr. Kollen's recommendation should be rejected. First, SWEPCO properly used Pirkey and Oklaunion to develop the estimate.[410] The characteristics of those units, as described above, make them ideal sources of information to develop an estimate for Turk. Second, Mr. Kollen's reliance on the TC2 power plant is misplaced. Unlike Turk, TC2 is part of a multiple unit (including two coal-fired units) power plant that captures significant O&M economies-of-scale savings compared to a one-unit plant. In fact, these precise economies of scale were touted by the TC2 owners when they applied to certify the plant and described O&M costs.[411] Cities' witness Norwood, an engineer, likewise acknowledged the common sense notion that multiple units can achieve economies of scale that a single unit cannot. He even used Turk O&M costs as a proxy for another coal plant O&M projection.[412] But this common sense notion of economies of scale was lost on Mr. Kollen, who is an accountant, not an engineer.[413] Mr. Franklin, who has had power plant management

---

[408] Tr. at 2143-2144.

[409] Direct Testimony of Lane Kollen, Cities Ex. 3 at 29-32.

[410] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 27-29.

[411] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 29-31.

[412] Tr. at 1019-1021.

[413] Direct Testimony of Lane Kollen, Cities Ex. 3 at 1 of Attachment 1.

responsibility going back to 1993, has by far the better and more-informed argument on Turk O&M costs.

B. Gas-Fired Generation

Three facts stand out about SWEPCO's generation fleet—it is diverse, it is large, and it combines many aging units with three new ones. SWEPCO's generation fleet includes coal, lignite and gas-fired power plants. SWEPCO has 25 generation units, of which seven use solid fuel and 18 use gas. The newest additions to the fleet are the coal-fired Turk (December 2012) and the gas-fired Stall (2010) and Mattison (2007). But before those three newest units were added, the last addition occurred in 1986 (Dolet Hills). Eight of the gas-fired units were added in the 1940s or 1950s, and two in the early 1960s. Turk aside, the vintage of the solid-fuel units ranges from 27 (Dolet Hills) to 36 (Welsh 1) years. Thus, apart from the three new unit additions, SWEPCO has an aging fleet.[414]

Given the combination of (1) the large size and ripe age of SWEPCO's fleet and (2) the recent addition of three new units, it is inevitable that the costs to operate and maintain that fleet will increase above historical levels. This increase in costs has been occurring and will continue despite SWEPCO's best efforts to control it. Yet the recommendations of intervenor witnesses ignore this fact.

Two SWEPCO witnesses address the O&M of SWEPCO's fleet. Mr. Franklin supported the O&M costs necessary to reliably meet customers' demands.[415] Mr. Gedeon described the specific O&M practices and procedures and how those have translated into effective fleet performance.[416]

To operate and maintain its fleet, SWEPCO incurred test year non-fuel production O&M costs of $135,944,080.[417] Mr. Franklin extensively explained the budget controls in place to make sure that O&M costs are reasonable (including by reference to comparative cost trends and benchmarking studies).[418] He concluded not only that SWEPCO's generation O&M expenses are lower overall than others in the industry, but also that overall, SWEPCO's generation O&M

---

[414] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 11.

[415] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 8-13 (generation fleet and its characteristics); 27-39 (generation O&M procedures and costs).

[416] Direct Testimony of Russell A. Gedeon, SWEPCO Ex. 63.

[417] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 27.

[418] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 28-34.

expenses are well-managed, prudent and reasonable.[419] He also affirmed that the test year costs are representative of the ongoing level of O&M for SWEPCO.[420]

Mr. Gedeon followed by showing what the O&M costs have been spent on. He describes SWEPCO's specific O&M practices and procedures and how they have helped achieve reasonable results in power plant performance.[421]

Together, Mr. Franklin and Mr. Gedeon show how the O&M funds are money well spent. Indeed, no witness challenged the prudence of SWEPCO's generation O&M costs or procedures. But two witnesses nonetheless recommended cost disallowances. Cities' Mr. Norwood recommended a disallowance based on what he thought were extraordinary outages and resulting costs at some gas-fired units. TIEC's Mr. Pollock recommended a disallowance based on an arithmetic average involving planned outage expenses and another one involving Welsh 2 and the restrictions on its output arising from the Turk air permit. Mr. Norwood's recommendation is addressed in this section of this brief, and Mr. Pollock's are addressed in the next two sections of this brief.

Mr. Norwood recommends a non-fuel O&M cost disallowance of $6.98 million on a total company basis.[422] Specifically, he proposes that SWEPCO's rates be set based on the average O&M expense level incurred at the Lieberman and Wilkes plants over the 2008-2011 period. His rationale is that he believes there was an "extraordinary level" of test year outages at these two plants that contributed to high O&M expenses.[423] Thus, he would disallow costs that SWEPCO prudently incurred during the test year.[424] But Mr. Norwood did not claim that these costs resulted from imprudent or unreasonable practices or policies by SWEPCO.[425] As he put it, "So this is normalization, not a prudence adjustment."[426]

Mr. Norwood's recommendation should be rejected on two grounds.

---

[419] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 39.

[420] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 31.

[421] Direct Testimony of Russell A. Gedeon, SWEPCO Ex. 63.

[422] Tr. at 1021.

[423] Redacted Direct Testimony of Scott Norwood, CARD Ex. 4 at 18-19.

[424] Tr. at 1022.

[425] Tr. at 1022-1023.

[426] Tr. at 1022.

First, he does not adequately appreciate the consequences stemming from the large size and age of SWEPCO's generation fleet. As noted above, SWEPCO has 24 generation units (excluding Turk). Mr. Norwood agreed that this is a fairly significant number of units.[427] Mr. Franklin explained the consequence of this number of units and why Mr. Norwood's approach is too narrow:

> SWEPCO's generation O&M is planned on a fleet level, with the understanding that outages and major expenditures occur less frequently on a plant or unit level than they do on a fleet level. In other words, the pattern of O&M expenses will vary among the multiple units from year to year, with one unit having higher expenses in some years and lower in others, while the reverse will be true for the same years for another unit. That is why O&M expenses for the fleet should be used for setting rates.[428]

Thus, what might be characterized as an unusual event at one unit at one time will not be unusual for the large fleet as a whole over time. It is not that the same event will occur at multiple units, but the pattern of unusual events will be such that they can be expected to occur. Mr. Franklin gave two examples he knows will occur in 2013—a $6 million Dolet Hills turbine generator overhaul, and a $2 million project at the Wilkes plant (for a boiler chemical clean, hotspot repairs and other boiler work). Those two total about $8 million over the typical or average O&M expense levels for those facilities and nearly $2 million above the amount Mr. Norwood would disallow.[429]

As for the age of SWEPCO's fleet, Mr. Franklin described this as the "first and foremost challenge SWEPCO faces in the near future." The age of the fleet will necessitate larger capital investments.[430] For the older and smaller gas-fired units, it will also be necessary to spend more on them in the future.[431] Indeed, Mr. Norwood agreed that SWEPCO has some old units,[432] and that the Lieberman plant itself is in the winter of its useful life.[433] He also agreed that the older

---

[427] Tr. at 1024.

[428] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 8.

[429] Tr. at 2159-2160.

[430] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 12.

[431] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 13.

[432] Tr. at 1025.

[433] Tr. at 1028.

generating units become, the more O&M spending is required on them.[434] Yet he failed to apply this reasoning to analyze the entirety of SWEPCO'S fleet.

Second, Mr. Norwood is too selective. O&M costs did go up from historical levels, but two of the main reasons were the addition of Mattison in 2007 and Stall in 2010.[435] Indeed, solid-fuel plant O&M costs decreased by $5.8 million from 2009 to 2011.[436] Yet Mr. Norwood made no attempt to "normalize" the solid-fuel O&M costs by an upward adjustment to the test year costs. His strategy can be summed up as: "I see no basis for a prudence disallowance, so I'll cherry pick some units with higher than historical O&M costs and keep my peace on the rest of the fleet, including those units with lower than historical costs."

SWEPCO prudently incurred the test year O&M costs for its generation fleet. Because much of its fleet is aging yet some of the units are quite new, O&M costs have increased and will continue to increase. Mr. Norwood's recommendation, which is so contrary to these facts, should be rejected.

C. Planned Outage Expense

Like Mr. Norwood, TIEC's Mr. Pollock never questioned the prudence of SWEPCO's generation non-fuel O&M costs or practices (described in the immediately preceding section of this brief). And like Mr. Norwood, he nonetheless recommends that prudently incurred test year costs be disallowed by focusing on one isolated metric. Mr. Pollock recommends a $6.85 million (total company) disallowance.[437] His rationale is that the test year planned outage costs are too high compared to average costs going all the way back to 2006. His quantification was derived by reducing (or increasing) test year expenses to within 5% of the 2006-2011 average expense.[438]

Mr. Pollock's recommendation should be rejected. First, like Mr. Norwood, he isolates just one component of overall O&M costs and activities to derive a means of disallowing prudently incurred costs. In fact, it is apparent from column 5 (titled "Adjustment") in his Exhibit JP-9 that far and away the biggest share of his adjustment is for the Lieberman and

---

[434] Tr. at 1025.

[435] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 9, 30.

[436] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 31.

[437] Redacted Direct Testimony of Jeffry Pollock, TIEC Ex. 1 at 38.

[438] Redacted Direct Testimony of Jeffry Pollock, TIEC Ex. 1 at 38.

Wilkes plants, similar to Mr. Norwood's recommendation. Mr. Pollock's analysis is thus subject to the same flaws as Mr. Norwood's recommendation discussed above in Section IV.B.

Second, Mr. Pollock excludes the Mattison, Stall and Turk units from his analysis.[439] Yet as Mr. Franklin explained, this exclusion is inappropriate because planned outages are budgeted on a fleet basis.[440] As Schedule H-6.2c shows, in 2013 there are five planned outages at Mattison, five at Stall (including a 30-day major overhaul) and two at Turk.[441]

Third, Mr. Pollock's statistical method is best described as whimsical. He reaches all the way back to 2006, when the planned outage costs in his table were approximately $20 million. Why go back five years before the test year and seven years before the rate year for this calculation? There is no attempt at justification. Nor, more importantly, does Mr. Pollock attempt to justify the 5% bandwidth he uses. This is a classic case of plucking statistical parameters from the air and assuming they have intrinsic merit that need not be explained.

Last, Mr. Pollock overlooks the age of SWEPCO's fleet, and how this will tend to require increases in O&M costs, as explained above in Section IV.B. By excluding the new Mattison, Stall and Turk plants from his analysis, he merely emphasizes this point. As Mr. Franklin concluded, "SWEPCO also expects the level of expense needed for its small gas plants to increase over time in order to keep aging units viable."[442]

Mr. Pollock's recommendation should be rejected as the product of questionable methods and contrary to the realities of SWEPCO's generation fleet.

D. Welsh Unit Two

In addition to his proposed disallowance for planned outage expenses, Mr. Pollock proposes one other generation non-fuel O&M cost disallowance for Welsh Unit 2. As discussed above in Section II.A.3.a., Welsh Unit 2 is limited to a 60% of its annual capacity once Turk begins commercial operation under the Turk litigation settlements that Ms. McCellon-Allen discusses.[443] Mr. Pollock proposes a $599,663 (total company) reduction in O&M costs to reflect the 60% capacity factor restriction compared to the test year 76.9% capacity factor. His

---

[439] Redacted Direct Testimony of Jeffry Pollock, TIEC Ex. 1 at 37, Exhibit JP-9.

[440] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 33.

[441] Schedules H through I, SWEPCO Ex. 3 at 2, 3.

[442] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 34.

[443] Direct Testimony of Venita-McCellon-Allen, SWEPCO Ex. 25 at 33.

underlying rationale is that variable O&M expenses should be reduced because of the reduction in Welsh Unit 2's output.[444]

Mr. Franklin identified the two flaws in Mr. Pollock's recommendation. First, Mr. Pollock assumes that all of the Welsh 2 capacity would be sold into the market. Second, the variable O&M costs Mr. Pollock uses are from an estimate used for economic dispatch of SWEPCO's units in the market, not the actual O&M costs for which SWEPCO seeks recovery in this case.[445]

Accordingly, Mr. Pollock's recommendation to reduce Welsh 2 O&M should be rejected.

E. 2010 Severance Costs [PO Issue 15]

To address the negative impacts the recession was having on energy consumption, in 2010 AEP sought to further streamline business operations where possible. To accomplish this, SWEPCO and the AEP system undertook a program to reduce on-going payroll costs through sustainable headcount reductions critically examining work processes, organizational structures and employment levels to produce sustainable cost savings.[446] A key component of the cost reduction was a severance program initiated in April 2010 impacting all companies in the AEP organization including SWEPCO. The number of SWEPCO employees who accepted the severance package was 164. In addition, 938 AEPSC employees accepted the severance package.[447] The impact of the program resulted in an annual O&M savings for SWEPCO of $6.8 million, and $7.8 million for AEPSC costs billed to SWEPCO.[448]

SWEPCO customers obviously benefit from the severance program because, as a result of the streamlined processes and other operational changes, fewer employees translate into a lower cost to provide service. When only avoided O&M salaries and fringe benefit costs are considered, SWEPCO customers realize annual cost savings of $14.7 million as shown in Exhibit BFM-1 of Brenda F. Meyers' Direct Testimony.[449] This estimate is conservative because it does not include any non-payroll employee cost savings such as travel, training and

---

[444] Redacted Direct Testimony of Jeffry Pollock, TIEC Ex. 1 at 39-40.

[445] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 35.

[446] Direct Testimony of Venita McCellon-Allen, SWEPCO Ex. 25 at 13; and Direct Testimony of Brenda F. Meyers, SWEPCO Ex. 37 at 6-10.

[447] Direct Testimony of Brenda F. Meyers, SWEPCO Ex. 37 at 6.

[448] Direct Testimony of Venita McCellon-Allen, SWEPCO Ex. 25 at 13.

[449] Direct Testimony of Brenda F. Meyers, SWEPCO Ex. 37 at 7.

professional membership dues. Furthermore, the $14.7 million annual cost savings produced by the severance program are sustainable and will continue to be realized by customers in future years, although the exact amount will vary. When the severance costs, amortized over a five year period, are compared to the O&M savings produced by the severance program, customers realize an annual savings of approximately $8.5 million. After the five year period, which allows recovery of the cost to achieve the savings, the full savings flow into rates as a reduction to customer costs.[450]

SWEPCO requests recovery of the total severance program cost incurred by SWEPCO of $30,626,878, which is comprised of direct SWEPCO severance costs of $17,856,045, and allocated AEPSC severance costs of $12,770,833. The Company proposes to recover the entire $30.6 million cost of the severance program by amortizing $6,125,376 per year into cost of service over a five-year period. The portion allocated to the Texas jurisdiction for the severance program cost amortization is $2,083,057 per year.[451]

CARD and Staff recommend an adjustment to remove the entirety of the costs of the 2010 severance program from SWEPCO's requested recovery. Both argue that SWEPCO is seeking to recover the cost of the program in prospective rates and that this cost has already been recovered through rates currently in effect. They also maintain SWEPCO retained the financial benefit of all cost savings generated by the severance program during this period.[452]

CARD and Staff err in their assertions that SWEPCO has already enjoyed a financial benefit through recovery of the cost savings generated by the severance program. Rather than profiting from cost savings benefits, SWEPCO utilized the Texas portion of the expense reductions to partially offset the Texas portion of the operating cost and return at SWEPCO's Stall plant.[453] As Ms. Meyers explained in her Rebuttal Testimony, AEP senior management publicly announced the severance program in April 2010. Shortly following this announcement, on April 26, 2010 SWEPCO informed Staff and representatives of CARD, TIEC, Cities and IBEW that it would seek to utilize expense reductions from the program to allow a delay to seeking additional recovery of the Stall Plant then being sought in the Company's limited issue

[450] Direct Testimony of Brenda F. Meyers, SWEPCO Ex. 37 at 7-10.

[451] Rebuttal Testimony of Brenda F. Meyers, SWEPCO Ex. 76 at 4.

[452] Redacted Direct Testimony Second Errata of Mark Garrett, CARD Ex. 5C at 15-18; Redacted Direct Testimony of Joe Luna, Staff Ex. 3 at 18-19.

[453] Rebuttal Testimony of Brenda F. Meyers, SWEPCO Ex. 76 at 5-6.

PUCT Docket No. 37565[454] proceeding. The offset allowed full Stall Plant cost recovery delay until this case.[455]

Following the meeting with Staff and the intervenor representatives, SWEPCO filed on April 27, 2010 a motion to dismiss its PUCT Docket No. 37565 request for a limited issue rate proceeding to address recovery of the Stall Plant, specifically referencing the severance plan as a change occurring within the company making the filing no longer applicable.[456] The Commission dismissed the matter on May 5, 2010.[457] Thus, as it informed Staff and intervenor representatives, SWEPCO followed through with its intention to use severance savings to partially offset unrecovered Stall plant operating costs and return on the plant.

Importantly, the savings attributable to the Texas jurisdiction have only partially offset the Texas share of the Stall plant operating costs and return, with the operating costs and return on the Stall plant exceeding the severance plan savings for SWEPCO total company and the Texas jurisdiction by $105.1 million and $34.3 million, respectively. When the revenue received from the partial recovery of the Stall plant in PUCT Docket No. 37364 is included in the calculation, SWEPCO still has unrecovered costs and return of $21.4 million.[458]

TIEC and CARD also argue that SWEPCO did not have authority from the Commission to defer the costs of its 2010 Severance Program in a regulatory asset for subsequent recovery, and proposes to recover these selected costs incurred outside the test year.[459] However, there is no requirement that a utility seek pre-approval of a deferral before the utility incurs the cost. In fact, Commission precedent indicates the contrary. In PUCT Docket No. 39741, addressing Entergy Texas, Inc.'s (ETI) request to defer operation and maintenance expenses related to its proposed transition to membership in the Midwest Independent Transmission System Operator, the Commission determined that it has the authority to issue an order to allow the deferral of costs that have been incurred prior to that order when it is necessary to carry out a provision of

---

[454] *See Application of Southwestern Electric Power Company for Declaratory Ruling Approving a Limited Issue Ratemaking Proceeding and Request for Good Cause Exception*, Docket No. 37565 (Oct. 13, 2009).

[455] Rebuttal Testimony of Brenda F. Meyers, SWEPCO Ex. 76 at 5-6.

[456] Docket No. 37565, Motion to Dismiss at 1 (April 27, 2010).

[457] Docket No. 37565, Order No. 5, Granting Request to Withdraw and Dismissing Docket (May 5, 2010).

[458] Rebuttal Testimony of Brenda F. Meyers, SWEPCO Ex. 76 at 6.

[459] Redacted Direct Testimony Second Errata of Mark Garrett, CARD Ex. 5C at 19; Redacted Direct Testimony of Jeffry Pollock, TIEC Ex. 1 at 57-58.

PURA.[460] In particular, the Commission in its Preliminary Order in PUCT Docket No. 39741 stated that:

> [t]he Commission possesses authority under PURA § 14.151 to prescribe utility accounting records, including any record that the commission "considers necessary to carry out" [PURA]." In addressing a predecessor to this section in *State v. Public Utility Commission*, the Texas Supreme Court stated that "the Commission possesses "broad authority in setting and defining a utility's system of accounts" and the "power to prescribe forms of books and accounts 'which in the judgment of the Commission may be necessary to carry out any of the provisions of' PURA." In that case, the court held that "the Commission has authority under PURA to authorize utilities to defer costs incurred during the regulatory lag period." (citations omitted)[461]

Accordingly, contrary to TIEC's and CARD's arguments, the statutory foundation exists pursuant to PURA §14.151 that provides the Commission explicit authority to order a change in accounting practice such as the creation of a regulatory asset. SWEPCO has demonstrated the requisites to defer recovery of the severance program costs under the Commission's precedent in PUCT Docket No. 39741.

SWEPCO has incurred the program costs prior to the Commission's order in this matter. Now, consistent with the Commission's precedent, SWEPCO seeks to carry out the major statutory policy objective to provide the Company an opportunity to recover its severance program expenses pursuant to PURA § 36.051 and 36.003(a).

SWEPCO has demonstrated that it prudently carried out the severance program in order to streamline business operations to produce sustainable cost savings during a crucial and difficult economic environment. The Company then utilized the Texas portion of the cost savings realized from the severance program to partially offset and moderate the impact of the Texas portion of the operating cost and return at the Stall plant. In doing so, the Company decided to forego its limited issue proceeding and now seeks to ensure recovery of its severance program expenditures through just and reasonable rates. SWEPCO's request is entirely consistent with and carries out the major policy objectives in PURA §§ 36.003(a) and 36.051

---

[460] Rebuttal Testimony of Brenda F. Meyers, SWEPCO Ex. 76 at 6; see also *Application of Entergy Texas, Inc. for Authority to Defer Expenses Related to its Proposed Transition to Membership in the Midwest Independent Transmission System Operator*, Docket No. 39741, Preliminary Order (Nov. 22, 2012).

[461] Rebuttal Testimony of Brenda F. Meyers, SWEPCO Ex. 76 at 6; see also Docket No. 39741, Preliminary Order at 3-4.

that allow a utility the opportunity to recover its expenses through a rate that is just and reasonable.

F. Vegetation Management

A vegetation management program for distribution and transmission lines is critical to maintaining reliability and serving customers.[462] As Ms. McCellon-Allen put it:

> The number one cause of outages within SWEPCO's Texas service territory continues to be vegetation, both inside and outside of the right of way. During the test year, vegetation accounted for approximately 33 percent of all outages in SWEPCO's Texas service territory.[463]

Unlike much of Texas, the area of northeast Texas that SWEPCO serves is heavily forested. Thus, managing the large amount of heavy vegetation around SWEPCO's distribution and transmission system in the area is challenging. The photographs in Exhibit AMS-6 of Mr. Smoak's direct testimony and Exhibit AMS-1R of Mr. Smoak's rebuttal testimony graphically demonstrate the density of the vegetation SWEPCO confronts.[464] SWEPCO's distribution system in Texas encompasses approximately 9,500 square miles and includes approximately 7,900 miles of primary overhead and approximately 700 miles of primary underground facilities operated at voltages from 4 kV to 34 kV.[465] Much of these distribution facilities are located in and impacted by the heavy vegetation in the northeast Texas portion of SWEPCO's service area. The network of SWEPCO transmission lines consists of approximately 3,900 circuit miles, with voltages ranging from 69 kV to 345 kV in an area located within the Piney Woods Region, which is a heavily forested area of 54,400 square miles of eastern Texas, northwestern Louisiana, and southwestern Arkansas. The Piney Woods Region also includes many state and national forests, which consist primarily of several species of pines and hardwoods, such as hickory and oak.[466] Persistent, troublesome vegetation is thus a fact of life in SWEPCO's service area.

To confront this challenge, during the test year SWEPCO spent $4.7 million on distribution vegetation management (putting aside funds spent under a surcharge agreed to in

---

[462] Direct Testimony of Albert M. Smoak, SWEPCO Ex. 38 at 16.

[463] Direct Testimony of Venita McCellon-Allen, SWEPCO Ex. 25 at 58.

[464] Direct Testimony of Albert M. Smoak, SWEPCO Ex. 38 at 16; Rebuttal Testimony of Albert M. Smoak, SWEPCO Ex. 77 at 9.

[465] Direct Testimony of Albert M. Smoak, SWEPCO Ex. 39 at 5.

[466] Direct Testimony of Charles D. Matthews, SWEPCO Ex. 39 at 28.

Docket No. 37364 and discussed below), and $3.2 million on transmission vegetation management.[467] No party in this proceeding contests SWEPCO's requested recovery of its transmission and distribution base rate amounts spent during the test year. While these costs were reasonable and necessary for reliability, SWEPCO also believes and proposes that more should be approved and spent on these two critical tasks.

Specifically, for distribution vegetation management, SWEPCO is requesting a base rate amount of $6.8 million total--or $2.1 million above the test year level of $4.7 million. For transmission vegetation management, SWEPCO is requesting an increase to base spending of $1 million above the $3.2 million test year amount. This amount for transmission represents total SWEPCO transmission vegetation spending across all three states in SWEPCO's service territory, with Texas customers paying for about 38% of the $1 million increase.[468]

SWEPCO is not proposing to recover any of these costs through a rider or separate tariff. Instead, SWEPCO proposes to recover them through normal base rates, on the understanding that all funds approved in this case will be spent on the assigned tasks. As described below, SWEPCO is also receptive to being required to report on how the funds have been used.

Cities and OPUC both recommend adjustments to remove from SWEPCO's request the recovery of the amounts of $2.1 million and $1 million for transmission and distribution vegetation, respectively, on a total company basis that are above the test year level costs.[469] As further addressed below, SWEPCO has demonstrated that these requested amounts above the test year levels are reasonable and necessary to carry forward critical planning towards continued improvement of reliable service that benefits customers.

Distribution

SWEPCO's distribution vegetation management proposal builds upon the success of a vegetation management program approved in Docket No. 37364. That case authorized a one-year $10 million surcharge to improve distribution reliability over a two-year period, beginning

---

[467] Direct Testimony of Albert M. Smoak, SWEPCO Ex. 38 at 4; Direct Testimony of Charles D. Matthews, SWEPCO Ex. 39 at 29.

[468] Direct Testimony of Venita McCellon-Allen, SWEPCO Ex. 25 at 57; Direct Testimony of Albert M. Smoak, SWEPCO Ex. 38 at 15, Direct Testimony of Charles D. Matthews, SWEPCO Ex. 39 at 29.

[469] Direct Testimony of Lane Kollen, Cities Ex. 3 at 28-29; Redacted Direct Testimony of Karl Nalepa, OPUC Ex. 1 at 37-38.

May 2010. SWEPCO used these funds to trim the vegetation on specific circuits on its Texas distribution system.[470]

Mr. Kollen on behalf of Cities and Mr. Nalepa on behalf of OPUC both contend that SWEPCO has not and would not be able to achieve any distribution reliability improvements if it received additional vegetation management funds.[471] They both cite the fact that although SWEPCO received the $10 million vegetation management surcharge as part of the settlement agreement in PUCT Docket No. 37364, overall system reliability has decreased, and therefore any additional vegetation management funds approved in the current case would not reduce vegetation-related outages or benefit customers.[472] However, Cities and OPUC are being short-sighted with their adjustments based on their mischaracterization of past reliability metrics.

Contrary to Cities' and OPUC's assertions, the results of the program implemented via Docket No. 37364 surcharge have been significant, resulting in improved overall reliability on the targeted circuits and a decrease in outages caused by trees, both inside and outside rights of way. SWEPCO showed a 55% improvement in outage duration (SAIDI), and a 61% improvement in outage frequency (SAIFI) for those circuits that were trimmed. The before/after statistics show that the number of interruptions went from 511 to 376 (a 57% reduction) and the customers affected went from 46,254 to 14,067 (a 70% reduction).[473] Approximately 1,100 circuit miles had been fully cleared through the end of the test year under the surcharge program. This represents over 14% of SWEPCO's approximately 7,900 miles of overhead distribution circuits in Texas.[474] In addition to the reliability improvements, the overall safety and working conditions for SWEPCO employees and the public were improved for the targeted circuits.[475] Unfortunately, Mr. Nalepa and Mr. Kollen fail to see how these proven facts can translate into improved future reliability if SWEPCO's request is granted.

---

[470] Direct Testimony of Albert M. Smoak, SWEPCO Ex. 38 at 12-13.

[471] Direct Testimony of Lane Kollen, Cities Ex. 3 at 26-29; Redacted Direct Testimony of Karl Nalepa, OPUC Ex. 1 at 33-38.

[472] Direct Testimony of Lane Kollen, Cities Ex. 3 at 26-29; Redacted Direct Testimony of Karl Nalepa, OPUC Ex. 1 at 33-38.

[473] Direct Testimony of Albert M. Smoak, SWEPCO Ex. 38 at 12-13; Rebuttal Testimony of Albert M. Smoak, SWEPCO Ex. 77 at 5.

[474] Direct Testimony of Albert M. Smoak, SWEPCO Ex. 38 at 12-13; Rebuttal Testimony of Albert M. Smoak, SWEPCO Ex. 77 at 5.

[475] Rebuttal Testimony of Albert M. Smoak, SWEPCO Ex. 77 at 6.

To be clear, SWEPCO spent a total of $10.4 million in O&M for vegetation management during the test year. This total, however, includes $5.7 million via the surcharge and $4.7 million otherwise, or in "base" spending. The surcharge amount has been excluded from the test year amount, to recognize the expiration of the PUCT Docket No. 37364 surcharge program.[476]

Even putting aside the surcharge, SWEPCO has steadily increased its spending on vegetation management over the past few years--$1.7 million during the PUCT Docket No. 37364 test year, $2.2 million in 2009, $3.1 million in 2010 and $4.7 million in 2011.[477] But even including that increased spending and the surcharge program, this level of spending will provide only limited reliability improvements. SWEPCO believes that a four-year vegetation management cycle is the best long-term solution. Because of the related expense, however, SWEPCO is not proposing such a program at this time. Instead, the $6.8 million SWEPCO proposes is less than half of what would be needed for a four-year cycle. Nonetheless, SWEPCO's modest proposal will benefit SWEPCO customers by achieving reliability improvements on a larger portion of the system, similar to that achieved on the previously targeted circuits using the vegetation management surcharge.[478]

Transmission

SWEPCO witness Charles Matthews explained SWEPCO's transmission system vegetation management program, which is primarily to maintain the right of way in the heavily forested region. Most of the transmission circuit outages related to vegetation are caused by trees from outside the right of way. All transmission lines with voltages equal to or greater than 200 kV and any lower voltage lines designated by the Regional Reliability Organization as critical to the reliability of the electric system in the region are required to be inspected on a cycle basis, and fall under the mandatory NERC Reliability Standards. Since the last rate case in Docket No. 37364, SWEPCO has focused resources on these lines that are governed by the stringent NERC standards.[479]

---

[476] Direct Testimony of Albert M. Smoak, SWEPCO Ex. 38 at 13.

[477] Direct Testimony of Albert M. Smoak, SWEPCO Ex. 38 at 13-14.

[478] Direct Testimony of Albert M. Smoak, SWEPCO Ex. 38 at 14-15; Rebuttal Testimony of Albert M. Smoak, SWEPCO Ex. 77 at 6.

[479] Direct Testimony of Charles D. Matthews, SWEPCO Ex. 39 at 28-29; Rebuttal Testimony of Charles D. Matthews, SWEPCO Ex. 78 at 6-7.

Similar to their recommended adjustments to SWEPCO's distribution vegetation management request, Mr. Kollen and Mr. Nalepa urge the Commission to reject the Company's request for recovery of any costs above the level of test year expense.[480] OPUC and Cities simply look towards SWEPCO's historical spending and past metrics to develop a short-sighted disallowance recommendation[481] that does not recognize that a strategy for an action plan to achieve future desired results must be developed and carried forward with adequate funding.[482]

The increased transmission vegetation management funding of $1 million per year above test year amounts will help SWEPCO not only complete end-to-end maintenance on the lines that do not fall under the NERC standards but also identify and remove danger trees from outside the ROW. This effort will benefit customers by improving transmission circuit performance reliability. While a $1 million increase will not provide sufficient funding to transition these circuits that do not fall under the NERC standards to a cycle-based program, it will nonetheless improve funding for the transmission vegetation management program, which is a critical function in maintaining a reliable transmission grid. This is particularly true when many of the system facilities are located in a heavily forested area like the Piney Woods Region.[483]

Reporting on vegetation management

As part of the distribution management surcharge approved in PUCT Docket No. 37364, SWEPCO agreed to provide periodic reports to the Commission and interested parties on the results of vegetation management efforts.[484] The information in the reports included lines trimmed, progress made, and funds spent. Exhibit AMS-6 to Mr. Smoak's direct testimony is the final surcharge report that SWEPCO prepared and submitted. SWEPCO offers to continue that reporting to ensure the appropriate application of vegetation management funds.

SWEPCO commits that if its vegetation funding proposals are accepted, it will spend those increased amounts on distribution and transmission vegetation management. Ms. McCellon-Allen affirmed how SWEPCO "would welcome specific, ordering language

---

[480] Direct Testimony of Lane Kollen, Cities Ex. 3 at 26-29; Redacted Direct Testimony of Karl Nalepa, OPUC Ex. 1 at 33-38.

[481] Direct Testimony of Lane Kollen, Cities Ex. 3 at 28-29; Redacted Direct Testimony of Karl Nalepa, OPUC Ex. 1 at 33-38.

[482] Rebuttal Testimony of Charles D. Matthews, SWEPCO Ex. 78 at 6.

[483] Direct Testimony of Charles D. Matthews, SWEPCO Ex. 78 at 29-30.

[484] *Application of Southwestern Electric Power Company for Authority to Change Rates*, Docket No. 37364 Final Order at FoF No. 20-21 (April 16, 2010).

specifying that the requested increase will be used solely for increased vegetation management."[485]

G. Credit Line Fees

Credit line fees are SWEPCO's share of the cost of the credit facilities that AEP must have in place to provide it with the liquidity support necessary to operate the utility money pool.[486] Staff witness Mr. Luna erroneously claims that SWEPCO has failed to justify these costs as reasonable and necessary.[487] To the contrary, Company witness Reitter explains at length the reasonableness and necessity, and the benefits to SWEPCO and its customers of SWEPCO's use of the money pool, which allows SWEPCO and the other participants "to minimize the cost of its short-term borrowings and maximize the returns from its short-term investments."[488] This evidence is not challenged by the testimony of Staff or that of any other party to this case. In addition, in response to discovery from Staff, SWEPCO provided substantial amounts of additional information, including the line of credit agreements, budgeted amounts for line of credit fees, explanation of the increases in credit line fees, and treatment of credit line fees in prior ratemaking proceedings.[489]

The credit line fees are simply SWEPCO's share of a reasonable cost that must be incurred in order for the money pool to successfully operate. AEP's operation of the money pool depends on the establishment of a short term credit rating, which in turn requires "appropriate liquidity support"—*i.e.*, a means to fund the money pool's lending operations external to that provided by AEP. The lines of credit, and SWEPCO's payment of its share of the associated fees, allow SWEPCO to avoid external borrowing on its own at higher rates, as well as the need to establish its own stand-alone line of credit to support such borrowing, also at increased overall cost.[490]

Mr. Luna also expresses concern over the recent escalation in credit line fees, and further contends that SWEPCO and AEP did not meet FERC documentation requirements for money

---

[485] Direct Testimony of Venita McCellon-Allen, SWEPCO Ex. 25 at 58.

[486] Rebuttal Testimony of Marc D. Reitter, SWEPCO Ex. 75 at 11.

[487] Redacted Direct Testimony of Joe Luna, Staff Ex. 3 at 13.

[488] Direct Testimony of Marc D. Reitter, SWEPCO Ex. 36 at 18-21.

[489] SWEPCO Exhibits 92, 93, 108, 109.

[490] Rebuttal Testimony of Marc D. Reitter, SWEPCO Ex. 75 at 12.

pool costs.[491] Both of these claims should be rejected. First, the increases in the level of the fees is the unavoidable result of the 2008-09 financial crisis, which caused the financial markets to first grind to a halt, then to "recalibrate" in a manner which led to much higher costs for companies securing bank credit. AEP renewed its credit facilities in 2010 and 2011, and thus was exposed to these higher costs.[492] Second, Mr. Luna's claims regarding documentation (as to which he makes no connection with his proposed disallowance) are simply wrong. Mr. Reitter's rebuttal testimony lays out in detail the pertinent FERC requirements, and how SWEPCO and AEP met those requirements. It also explains in detail how SWEPCO responded to Mr. Luna's discovery requests on this topic, which requested only production of specific documentation that does not constitute the complete universe of FERC-required documentation that Mr. Luna's testimony attempts to call into question.

H. Obsolete Inventory

The Commission's rate filing package for generating utilities recognizes that obsolete inventory is an expense of doing business. Specifically, the instructions for Schedule E-1.2 call for an explanation of the utility's "obsolete, damaged, or no longer used inventory policies," including a description of how broad categories are determined to be obsolete and when items are written off. As a general matter, if operating personnel determine that the material is no longer needed to support plant-in-service, the material is written off and harvested through the asset recovery process.[493]

It should not be considered unusual that the dollar value of material written off varies from year to year. One reason inventory is deemed no longer needed is the inventory is no longer needed to support a particular piece of equipment due to replacement. Due to the varying age of equipment that is in-service, the amount of spare inventory deemed no longer needed will vary as old equipment is replaced.[494] During the test year, SWEPCO followed its material usability guidelines to determine when material was no longer needed.[495]

---

[491] Direct Testimony of Joe Luna, Staff Ex. 3 at 13-15.

[492] Rebuttal Testimony of Marc D. Reitter, SWEPCO Ex. 75 at 13.

[493] Rebuttal Testimony of Randall W. Hamlett, SWEPCO Ex. 73 at 56-57.

[494] Rebuttal Testimony of Randall W. Hamlett, SWEPCO Ex. 73 at 57.

[495] *See* Rebuttal Testimony of Randall W. Hamlett, SWEPCO Ex. 73 at 56.

Cities witness Mr. Kollen and Staff witness Mr. Luna observe that the test year costs for obsolete inventory exceed previous years and recommend a reduction. But rates "are to be based upon an electric utility's cost of rendering service to the public during a historical test year, adjusted for known and measurable changes." [496] Mr. Kollen recommends an adjustment to the test year level of expense to reflect a five-year average. Mr. Kollen's recommendation amounts to an unfounded request for a known and measurable adjustment to test year expenses.

Mr. Luna requests a reduction to the test year expenses that amounts to the sum of the three largest items expensed during the test year. His recommendation, too, is unfounded. The expense items at issue were made up of the expensing of a set of induced draft fan blades and liner shipped to the Pirkey Power Plant.[497] As described in SWEPCO's direct testimony, since the original design and construction of the Pirkey Plant, industry practice and induced draft fan design have improved, and the decision was made to upgrade to a more recent design. The fans were replaced during a six week planned outage in the fall of 2011.[498]

I. Depreciation Expense [PO Issue 21]

In its initial testimony, SWEPCO calculated depreciation expense on plant investment as of December 31, 2011, of $146,446,250 on a total Company basis. On rebuttal, SWEPCO reduced the requested depreciation expense on plant as of December 31, 2011, to $145,632,317 on a total Company basis by incorporating two modifications. [499] The first was acceptance of a revision to the service life for Account 364–Distribution Poles which CARD witness Jacob Pous recommended. The second consisted of modifying the net salvage rate requested for Account 390–General Structures from the rate of negative 7% initially requested to a rate of negative 3%. SWEPCO recommended that all other proposals and recommendations made by the intervenors not be adopted. The contested depreciation issues relate to the lives of certain SWEPCO generating facilities, the production plant net salvage calculation, lives and net salvage for certain distribution accounts, lives and net salvage for certain transmission accounts, and the treatment of the depreciation reserve for production plant.

---

[496] P.U.C. SUBST. R. 25.231(a).

[497] Rebuttal Testimony of Randall W. Hamlett, SWEPCO Ex. 73 at Exhibit RWH-4R.

[498] Direct Testimony of Russell A. Gedeon, SWEPCO Ex. 63 at 29.

[499] Rebuttal Testimony of David A. Davis, SWEPCO Ex. 81 at 6-7, 65-66.

1. Production Plant

a. Production Plant Lives

The contested issues related to production plant lives concern: (i) the estimated lives of the Turk, Stall, Dolet Hills and Welsh Unit 2 power facilities, and (ii) the inclusion of interim retirements in the calculation of the lives of all of SWEPCO's generating plants in the depreciation study.

i. Turk, Stall, Dolet Hills and Welsh 2 plant lives

b. Turk plant life

For Turk, SWEPCO proposed an expected useful operating life of 40 years.[500] CARD witness Jacob Pous and Cities witness Lane Kollen proposed 60 years.[501]

The rationale for SWEPCO's 40-year proposal for Turk is straightforward. SWEPCO only recently changed the projected lives of its coal units to beyond 40 years. This change was made as the units aged and current conditions, along with testing, revealed that they should be capable of operating further into the future.[502] But Turk has no such track record yet. Therefore, 40 years is a reasonable assumption based on current information.

Relying on the smear tactic that it is time to end utilities' underestimating of life spans for high-cost generation facilities, Mr. Pous contends that SWEPCO has not supported its 40-year proposal.[503] As Mr. Franklin explained, however, Mr. Pous does not cite one fact, other than the historical operation of older units built in a different regulatory atmosphere, to undercut a 40-year life for Turk. Mr. Franklin makes the credible point that an increasingly stringent environmental compliance regime places in doubt the ability of plants built today to have the same service life as those built three decades ago.[504] This is simply a prudent recognition of the changes that time has brought and that Mr. Pous refuses to acknowledge.

Mr. Kollen contends that using 40 years for Turk, as opposed to 60 years, somehow amounts to "treating the Turk plant as inferior compared to all of the Company's other solid-fuel

---

[500] Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 18-19; Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 12-16.

[501] Direct Testimony of Jacob Pous, CARD Ex. 2 at 11; Direct Testimony of Lane Kollen, Cities Ex. 3 at 57-58.

[502] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 18.

[503] Direct Testimony of Jacob Pous, CARD Ex. 2 at 10-12.

[504] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 12-13.

units."[505] But no such thing is true. First, given the increasingly rigorous regulatory regime, it is the superiority of Turk's technology that SWEPCO believes will enable it to operate for 40 years. Second, assuming a 40-year service life is consistent with how SWEPCO planned Turk. In its CCN case, Turk was presented on the basis of a 30-year life span. Procurement of equipment specified that major pieces of equipment should have 40-years design lives.[506] For these reasons, a 40-year service life for Turk is reasonable in this case and using current information.

c. Stall plant life

For Stall, SWEPCO proposed an expected useful life of 35 years.[507] CARD's Mr. Pous proposed 40 years,[508] and Cities Mr. Kollen 45 years.[509]

Stall is a "2 by 1" combined cycle power plant. Two combustion turbines generate electricity. The waste heat from those combustion turbines feeds two heat recovery steam generators (HRSG) that drive a steam turbine.[510] The 35-year expected life is based on the expected repair cycle of the HRSG—the HRSG will require major work approximately every 18 to 20 years; and in the second repair cycle in 35-40 years, it will be more economical to replace the generation unit rather than replace the HRSG.[511]

Mr. Pous' main point is that, given the 18 to 20 year repair cycle for the HRSG, it is more reasonable to use the high end of 20 years (resulting in a 40-year life) instead of the shorter range that Mr. Franklin uses.[512] Mr. Franklin explained that the repair cycles are based on hours of operation and number of starts, not a fixed number of years. Based on how Stall has been and will be utilized (it has been operating more than originally planned), he concluded that a 35-year expected life better matches the likely repair cycle.[513]

---

505 Direct Testimony of Lane Kollen, Cities Ex. 3 at 57-58.

506 Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 14-15.

507 Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 17; Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 20-26.

508 Direct Testimony of Jacob Pous, CARD Ex. 2 at 3.

509 Direct Testimony of Lane Kollen, Cities Ex. 3 at 55-56.

510 Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 9.

511 Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 17; Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 20.

512 Direct Testimony of Jacob Pous, CARD Ex. 2 at 15.

513 Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 21.

Mr. Pous also tries to bolster his analysis by using estimated service lives at other plants (including the combined cycle Comanche plant owned by SWEPCO affiliate Public Service Company of Oklahoma) and other companies.[514] Mr. Franklin convincingly discusses the differences among those facilities (for example, age and usage) and how, for example, Public Service Company of Oklahoma owns another combined-cycle plant that has a planned life of 35 years, the same as Stall.[515]

Mr. Kollen's strongest point on this issue is his acknowledgment that "I am not a power plant engineer."[516] Yet he then opines as if he were. He contends that if it is economical to do the first major [turbine] overhaul and rebuild, then it is logical to conclude that it will be economical to do another overhaul and rebuild."[517] As Mr. Franklin explained, however, the first major HRSG repair cycle and the second one are far different in scope—with the latter requiring the replacement of the HRSG.[518] In addition, Mr. Kollen mistakenly tries to make a point about the Stall HRSG repair cycle by referring to a discovery response about the Mattison plant, which is a simple cycle combustion turbine, not combined cycle, facility. There is a major difference between the two that Mr. Kollen fails to understand, as Mr. Franklin explains.[519]

d. Dolet Hills plant life

For Dolet Hills, SWEPCO proposed an expected useful life of 40 years.[520] Both Mr. Pous and Mr. Kollen proposed 60 years.[521]

Mr. Franklin explained how his proposed 40-year service life is based on the unique fuel situation at Dolet Hills--the service life should and does match the availability of fuel. Dolet Hills is fueled by nearby lignite reserves as a mine-mouth operation. Currently, CLECO (the majority owner and plant operator), holds enough reserves to fuel the plant until 2026, which equates to a 40-year service life. SWEPCO's 40-year proposal matches the expected useful life

---

514 Direct Testimony of Jacob Pous, CARD Ex. 2 at 16.

515 Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 22-24.

516 Direct Testimony of Lane Kollen, Cities Ex. 3 at 55.

517 Direct Testimony of Lane Kollen, Cities Ex. 3 at 55-56.

518 Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 25.

519 Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 25-26.

520 Direct Testimony of Paul W. Franklin, SWEPCO Ex. 32 at 18; Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 16-20.

521 Direct Testimony of Jacob Pous, CARD Ex. 2 at 3; Direct Testimony of Lane Kollen, Cities Ex. 3 at 46-53.

recently approved for CLECO and Dolet Hills by the LPSC.[522] Mr. Franklin aptly concluded that, "In the end it is difficult to dispute the logic that when a power plant runs out of fuel, it will not produce power."[523]

While Mr. Pous and Mr. Kollen do not dispute Mr. Franklin's common-sense notion head-on, they try to circumvent it, all to no avail.

Mr. Pous claims that SWEPCO did not prove the negative—SWEPCO did not demonstrate that another lignite mine could not be found or that Dolet Hills could not be converted to another fuel source.[524] This method of logic is just a back-door approach to support his speculation that future events might or could occur that would result in Dolet Hills operating for 60 years. But at this point in time, they are just that—speculation.[525]

The bulk of Mr. Kollen's argument is a broad-side attack on SWEPCO's good faith. SWEPCO proposed a 60-year service life in its last rate case and now has not described (to Mr. Kollen's satisfaction) any changed conditions to warrant a shorter life.[526] The changed conditions are Mr. Franklin's appreciation of both the fuel situation and CLECO's use of a 40-year useful life.[527] The ALJs were twice able to take Mr. Franklin's measure at the hearing and could surely see that there is no reason to doubt his honesty about this matter.

e. Welsh Unit 2 life

A useful life for Welsh Unit 2 ending in 2016 was used in SWEPCO's depreciation studies for the reasons addressed in Sections II.A.1.b, II.A.3, and II.A.8 *supra*. Because SWEPCO maintains records of investment in production plant by plant, rather than by unit, a study was conducted to determine the amount of Welsh plant investment attributable to Unit 2 that would be retired in 2016.[528] As SWEPCO witness Randall W. Hamlett stated, the study was necessary because simply prorating, or attributing a third of each investment account balance to Unit 2, would not capture factors such as plant investment which is common to all three Units and would need to continue operating after Unit 2 ceased operations, certain equipment at Unit 2

[522] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 16-17.

[523] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 20.

[524] Direct Testimony of Jacob Pous, CARD Ex. 2 at 14.

[525] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 18.

[526] Direct Testimony of Lane Kollen, Cities Ex. 3 at 47-53.

[527] Rebuttal Testimony of Paul W. Franklin, SWEPCO Ex. 71 at 19.

[528] Direct Testimony of Randall W. Hamlett, SWEPCO Ex. 34 at 55-56, Exhibit RWH-4.

that will remain in service after it is retired, and certain Unit 2 equipment that will be converted to capitalized spare parts available for Unit 1 and Unit 2.[529]

Mr. Davis utilized the results of this study in computing the effect on the requested depreciation rates for the Welsh plant arising as a consequence of the retirement in 2016 of Welsh Unit 2.[530] In calculating the depreciation rates for the Welsh plant in this case, Mr. Davis developed a single rate for the entire plant which included the effect of the retirement of Unit 2 in 2016.[531]

Mr. Kollen objected to SWEPCO's assumption that Welsh Unit 2 will retire in 2016.[532] He did not contest the calculations Mr. Davis made in the depreciation study to incorporate the retirement in 2016, rather he challenged the conclusion that retirement in 2016 is reasonable. Mr. Kollen recommended that the Commission initiate a separate proceeding to conduct a detailed evaluation of the retirement of Unit 2 and that until the Commission had the opportunity to conduct that detailed evaluation, it should reject the retirement of Unit 2 in 2016 as being reasonable and instead set depreciation rates in this case based on a 60-year life for the unit.[533]

For the reasons discussed in Sections II.A.1.b., II.A.3., and II.A.8. *supra*, retirement of Welsh Unit 2 in 2016 is prudent and reasonable and should be reflected in the depreciation study. The initiation of an additional separate proceeding to consider this matter is not warranted, and SWEPCO's depreciation rates in this proceeding should be based on retirement of Unit 2 in 2016.

i. Inclusion of interim retirements in developing the lives of SWEPCO's generating plants

SWEPCO included interim retirements in the calculation of the average remaining lives of SWEPCO's generating plants in its depreciation study.[534] As SWEPCO witness David A. Davis testified:

- The inclusion of interim retirements is a requirement in the calculation of a depreciation rate since these retirements recognize that retirements of components

---

529 Direct Testimony of Randall W. Hamlett, SWEPCO Ex. 34 at 55.

530 Direct Testimony of David A. Davis, SWEPCO Ex. 43, Exhibit DAD-2 at 124-129.

531 Direct Testimony of David A. Davis, SWEPCO Ex. 43, Exhibit DAD-1 at 17.

532 Direct Testimony of Lane Kollen, Cities Ex. 3 at 40-45.

533 Direct Testimony of Lane Kollen, Cities Ex. 3 at 45-46.

534 Direct Testimony of David A. Davis, SWEPCO Ex. 43, Exhibit DAD-1 at 6; Rebuttal Testimony of David A. Davis, SWEPCO Ex. 81 at 32-39.

of a generating plant such as pumps, motors, pulverizers, etc. will occur between the time of the depreciation study is prepared and the final retirement of the plant.[535]

- The interim retirements SWEPCO included in the calculation of production plant average remaining life included **only** retirement on property existing at the date of the depreciation study (December 31, 2011); no **future** additions or retirements of **future** additions are included in SWEPCO's calculations.[536]
- The interim retirements included in SWEPCO's depreciation study for production plant are based on SWEPCO data for the nine-year period 2003-2011 set forth in Exhibit DAD-2, pp. 6-14, to Mr. Davis' direct testimony.[537]

Page 114 of Exhibit DAD-2 illustrates how SWEPCO used the historical retirement data to adjust the average remaining life of production plan accounts. It shows that for FERC Account 311 Structures and Improvements, interim retirements averaging $39,690 per year were included.[538] This annual amount is based on the historical data for Account 311 shown on Exhibit DAD-2, pp. 6-14.[539] Over the projected remaining life of the Pirkey plant, the interim retirements to Account 311 add $1.3 million to the amount for this account at the Pirkey plant which the depreciation rates need to recover. The effect of taking this amount into account mathematically reduces the average remaining life for FERC Account 311 at the Pirkey plant from 33.5 years to 33.29 years. In other words, depreciating FERC Account 311 investment as of December 31, 2011 of $105,959,651 over 33.29 years will produce the result at year 33.5 of recouping the expected amount of investment of $107,269,421 required to be recovered, which includes the $1.3 million of expected interim retirements associated with the $106 million of plant in service at December 31, 2011. A similar analysis was done for each other account of depreciable production plant.[540]

While not taking the position that what Mr. Davis did would not be proper from a depreciation perspective, CARD witness Jacob Pous recommended that the interim retirements

---

[535] Rebuttal Testimony of David A. Davis, SWEPCO Ex. 81 at 32.

[536] Rebuttal Testimony of David A. Davis, SWEPCO Ex. 81 at 32.

[537] Rebuttal Testimony of David A. Davis, SWEPCO Ex. 81 at 33-34; Direct Testimony of David A. Davis, SWEPCO Ex. 43, Exhibit DAD-2 at 6-14.

[538] 18 CFR pt. 101, Account 311 (Apr. 4, 2012) (At the request of CARD, official notice has been taken of the FERC Chart of Accounts in 18 CFR pt. 101).

[539] Direct Testimony of David A. Davis, SWEPCO Ex. 43, Exhibit DAD-2 at 6-14.

[540] Direct Testimony of David A. Davis, SWEPCO Ex. 43, Exhibit DAD-2 at 79-134.

included in Mr. Davis' depreciation study should be rejected.[541] The sole reason given by Mr. Pous for this recommendation was that the Commission took the position in Docket No. 39896, the recent ETI rate case, that production plant interim retirements should not be included in the calculation of production plant average remaining lives.

In his rebuttal testimony, Mr. Davis demonstrated that the Docket No. 39896 precedent upon which Mr. Pous relied was not applicable to how Mr. Davis utilized production plant interim retirements because the facts in this proceeding are different from and not comparable to the facts in the ETI proceeding.[542] Mr. Davis explained that interim retirements need to be included in the average remaining life calculation, that he only included interim retirements on the historical December 31, 2011 plant investment, that no future additions or retirement of future additions were included in his calculations, that interim retirements recognize that there will be components of plant that will retire before the end of the expected life of a plant, and that SWEPCO relied on historical data for the 2003-2011 period as the basis for the interim retirements.[543]

Mr. Davis also stated that his depreciation study did not use "the interim retirement method" which is what he understood the Commission rejected for the production plant depreciation rate calculation in Finding of Fact No. 100 in Docket No. 39896.[544] Instead, as described above, Mr. Davis used a life span method which the National Association of Regulatory Utility Commissioners (NARUC) publication Public Utility Depreciation Practices (August 1996), at page 141, endorses as an accepted alternative to the actuarial method and is consistent with the "retirement (actuarial) rate method" the Commission endorsed in Finding of Fact No. 100 in Docket No. 39896.[545]

One of the prior precedents cited in PUCT Docket No. 39896 as support for rejecting the inclusion of interim retirements in the calculation of production plant average remaining lives is

---

[541] Direct Testimony of Jacob Pous, CARD Ex. 2 at 37, 40.

[542] Rebuttal Testimony of David A. Davis, SWEPCO Ex. 81 at 32.

[543] Rebuttal Testimony of David A. Davis, SWEPCO Ex. 81 at 32-34; *see also* Direct Testimony of David A. Davis, SWEPCO Ex. 43, Exhibit DAD-2 at 6-14, 79-134.

[544] Rebuttal Testimony of David A. Davis, SWEPCO Ex. 81 at 35-36.

[545] Rebuttal Testimony of David A. Davis, SWEPCO Ex. 81 at 36-38.

PUCT Docket No. 14965.[546] In PUCT Docket No. 14965, the rejection of interim retirements was treated in conjunction with the issue of interim additions, and both were rejected.[547]

Unlike the case for the utility in PUCT Docket No. 14965, SWEPCO has **not** included any interim **additions** in its production plant average life calculations and has only included interim retirements based entirely on **historical** data.[548] SWEPCO's use of interim retirements in the production plant average lives in this case is, therefore, comparable to that made for other depreciation calculations, and in fact, for most other cost of service items—namely that in the absence of a known reason to conclude otherwise, the past is a reasonable indicator of what will occur in the future. SWEPCO's inclusion of interim retirements in the production plant average life calculations, accordingly, is consistent with what is normally accepted as being "known and measureable."

Moreover, in PUCT Docket No. 39896, as was the case in PUCT Docket No. 14965, the utility sought to use a generic or historically used production plant net salvage rate and then adjust that rate upward, rather than as SWEPCO has done in this case to base the net salvage calculation on plant-specific data for its own generating facilities.[549] This aspect of SWEPCO's approach to depreciation is discussed in more detail in Sections IV.I.1.b.i. and iii. *infra* and results in a requested production plant overall net salvage rate of negative 3.4%. As discussed there, SWEPCO's approach refines the calculations and delineation of the required elements of production plant depreciation using plant–specific engineering studies which imposes additional demands to ensure properly taking into account factors which depreciation professionals agree should be included in developing the production plant depreciation calculation, including interim retirements.[550]

SWEPCO's approach to production plant depreciation is factually distinct from the situations addressed by the Commission in prior cases such as PUCT Docket Nos. 39896 and 14965. SWEPCO urges the ALJs to evaluate the merits of what SWEPCO has done in this case

---

[546] Docket No. 14965, Second Order on Rehearing; *see id.*, Proposal for Decision at 209 (Jan. 21, 1997) ("the Judges conclude that depreciation costs should not take into account interim additions or retirements or future net salvage costs greater than [negative] five percent.").

[547] Docket No. 14965, Proposal for Decision at 209 (Jan. 21, 1997).

[548] Rebuttal Testimony of David A. Davis, SWEPCO Ex. 81 at 32.

[549] Docket No. 39896, Proposal for Decision at 127 (Jul. 2, 2012); Docket No. 14965, Proposal for Decision at 2008-09 (Jan. 21, 1997).

[550] *See, e.g.*, Docket No. 39896, Proposal for Decision at 124-25 (Jul. 2, 2012).

based on the record evidence and the material factual differences between how SWEPCO calculated production plant depreciation and what was done in prior Texas cases, such as Docket No. 39896 and 14965. Based on the nature of what SWEPCO has done in calculating of production plant depreciation in this case, it is apparent that no substantive justification has been raised to reject Mr. Davis' inclusion of interim retirements in the calculation of production plant average lives, and the differing facts of this case from prior precedent mean that the prior precedent should not control the decision on the matter in this case. The record evidence establishes that SWEPCO's approach of including interim retirements in the calculation of production plant average remaining life is consistent with accepted depreciation practices, is based entirely on historical data from SWEPCO's records, and differs factually from what was excluded in prior cases since it represents a mathematical adjustment to the life span analysis of each production plant account's average remaining life as opposed to making the adjustment using an "interim retirement rate method."

The preponderance of the record evidence supports SWEPCO's inclusion of interim retirements in the calculation of production plant average remaining lives as being reasonable and proper, and the ALJs should adopt this aspect of SWEPCO's production plant depreciation calculation.

f. Production Plant Net Salvage

SWEPCO requested an overall production plant net salvage rate of negative 3.4%. The contested issues related to production plant net salvage relate to: (i) the plant demolition studies conducted for SWEPCO's power plants; (ii) the escalation of production plant removal costs to the expected retirement date; and (iii) the inclusion of net salvage on interim retirements in the production net salvage calculation.

i. SWEPCO plant demolition studies

Rather than using a generic production plant net salvage rate or one that historically has been used, SWEPCO calculated its production plant net salvage using engineering studies of the cost to demolish and remove each of its power plants. These calculations took into account the specific attributes of each plant and were performed by Sargent & Lundy, LLC (S&L), a