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BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 130140-EI

GULF POWER
A SOUTHERN COMPANY

TESTIMONY AND EXHIBIT

OF

PETER S. HUCK

GULF POWER COMPANY

Before the Florida Public Service Commission
Prepared Direct Testimony of
Peter S. Huck
Docket No. 130140-EI
In Support of Rate Relief
Date of Filing: July 12, 2013

Q. Please state your name, title, and business address.

A. My name is Peter Huck. I am employed by American Appraisal Associates, Inc. (American Appraisal), headquartered at 411 East Wisconsin Avenue, Milwaukee, Wisconsin, as Senior Manager of the electric and gas utility practice.

Q. Will you briefly describe American Appraisal and the nature of its services?

A. American Appraisal is a consulting firm employing more than 500 personnel in branch offices operating from major financial cities throughout Asia-Pacific, Europe, North America, and South America, including more than 10 cities throughout the United States. American Appraisal has been a leader in the valuation profession since it was founded in 1896. Its services include utility depreciation rate studies, fair market value studies of both tangible and intangible property, business enterprise and capital stock valuations, insurance appraisals, property record studies, cost segregation studies, and other services centered on the valuation and management of property. American Appraisal's clients include public utilities, power generation and energy companies, industrial companies, financial companies, and public institutions.

Q. What is your educational and professional experience?

A. I received a Bachelor of Science degree in electrical engineering in 1972 from Marquette University in Milwaukee, Wisconsin. In 1979, I received a degree of Master of Business Administration from Marquette University. In addition to formal courses, I attend and speak on a regular basis at seminars and programs relating to utility property valuation and utility depreciation rate studies.

Since joining American Appraisal in 1973, I have been continuously engaged in consulting services to utilities and other concerns in the area of depreciation rate studies and appraisals. I have been responsible for studies of utility depreciation rates, fair market value appraisals of tangible and intangible assets, business enterprise and interests, and other work for electric and gas utilities, power generation companies, and other companies. I have also been responsible for many lifing studies of intangible assets for a variety of companies.

I am registered as a professional engineer in the State of Wisconsin and an Accredited Member of the American Society of Appraisers (Machinery and Technical Specialties/Public Utilities). I have been a member of the American Gas Association Depreciation Committee. I am also a Senior Member in the Society of Depreciation Professionals.

Q. What is your experience relative to depreciation rate studies?

A. Since joining American Appraisal, I have been active in depreciation rate

studies for a variety of utility and telecommunications companies. A partial list of my electric and gas utility clients includes Gulf Power Company (Gulf or the Company), Georgia Power Company, MidAmerican Energy, Central Illinois Light Company, Mississippi Power Company, Alabama Power Company, Oglethorpe Power Corporation, Indiana and Michigan Electric Company, SEMCO Natural Gas Company, ENSTAR Natural Gas Company, Piedmont Natural Gas Company, and Carolina Power & Light.

Q. Have you previously presented depreciation rate studies before regulatory agencies?

A. I have testified before and/or submitted depreciation rate studies to the Federal Energy Regulatory Commission (FERC), the Rural Utilities Service, the Barbados Fair Trading Commission, and 13 state regulatory commissions, including Alabama, Alaska, Florida, Georgia, Illinois, Iowa, Kansas, Michigan, Minnesota, Mississippi, North Carolina, Ohio, and Virginia.

Q. Why was American Appraisal engaged by Gulf?

A. We were engaged to conduct a depreciation rate study of the depreciable electric property of Gulf at December 31, 2013 (Study Date).

Q. Will you describe your responsibility and participation in this assignment?

A. I personally participated in and directed all work performed by my firm, including the initial planning of the work, the office computations, the evaluation of the statistical analyses, and the preparation of Exhibit PSH-1.

Q. Are you sponsoring any exhibits in this case?

A. Yes, I am sponsoring Exhibit PSH-1, Gulf's Depreciation Study. The information contained therein is true and correct to the best of my knowledge and belief.

Q. Will you summarize the scope of your testimony?

A. The depreciation study that I support sought to determine the appropriate book depreciation factors and rates to be applied to Gulf's depreciable plant to enable recovery of the plant investment, adjusted for net removal, over its remaining useful life. The study covers all of Gulf's depreciable electric plant in service as forecasted at December 31, 2013. My testimony covers the recommendations I have made to the Company with respect to depreciation (capital recovery) rates. The reported analyses, opinions, and conclusions outlined represent my impartial and unbiased professional analyses, opinions, and conclusions and those of American Appraisal. I will describe the study procedures and explain the results of the study.

Q. Briefly, what are your recommendations?

A. I have advised Gulf to adopt revised depreciation rates based on my analysis of service life and net removal. The recommended depreciation rates for each Gulf plant account are detailed on pages 1 and 2 under Tab 4 of the Depreciation Study, Exhibit PSH-1, which was prepared under my supervision. Comparisons of existing and recommended depreciation rates and annual depreciation based on plant and reserve balances as of December 31, 2013, are also on pages 1 through 3 under Tab 5 of the

Depreciation Study, Exhibit PSH-1. My recommendations are based on study and analysis undertaken for the purpose of developing reasonable and appropriate depreciation rates for the depreciable electric property of the Company as of December 31, 2013. The methods employed and the analysis made used accepted industry practice and were consistent with the depreciation methods and analysis that were used in Gulf's previous depreciation rate studies, which were filed with and approved by the Florida Public Service Commission (FPSC or Commission).

Q. Briefly explain the purpose of depreciation.

A. In the accounting sense, depreciation is the recovery of the capital cost of property, allowing for net removal, at an orderly rate over the life of the property. In this context, the term "capital recovery" is frequently used in place of the term "depreciation." A principal reason for recognizing depreciation is to provide a systematic and rational reflection of the consumption of capital in cost of service or expenses when determining net income.

The importance of full and timely capital recovery is obvious. For example, if the current rate of capital recovery of investment is lower than an appropriate rate, costs of serving current customers will be shifted to and paid by future customers. Conversely, if the current depreciation rate is higher than appropriate, current customers will be paying for the costs of serving future customers. Depreciation expense is an accepted element of utility cost of service, and appropriate capital recovery is accomplished by

periodic study and the inclusion of adequate depreciation expense in cost of service and the resulting rates.

Q. What is the definition of depreciation you have used in this study?

A. My definition of depreciation is the same as that used by the FERC and the National Association of Regulatory Utility Commissioners. The definition of depreciation used is as follows:

> Depreciation, as applied to depreciable electric plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities.

In the accounting sense, depreciation is the recovery of capital cost of property, allowing for net removal, at an orderly rate over the life of the property.

Q. In the study performed for Gulf, did you consider all of the factors mentioned in the definition of depreciation?

A. Yes, I did.

Q. What method was used to calculate the depreciation rates?

A. As required under FPSC Rule 25-6.0436, depreciation rates were calculated for all accounts using the capital recovery method known as the Remaining Life Method, the same method employed in Gulf's previous studies.

Q. Describe the Remaining Life method.

A. The Remaining Life Method, a straight-line depreciation method, recovers the original cost, adjusted for net removal and the depreciation reserve, over the average remaining life of the plant according to the formula:

$$\text{Annual Depreciation Rate} = \frac{100\% + \text{Net Removal\%} - \text{Depreciation Reserve\%}}{\text{Average Remaining Life}}$$

The basic assumptions used in determining depreciation rates by the Remaining Life Method are that the property will be retired in a specified average remaining life and that the future amount of net removal, based on salvage and cost of removal, is known now. Of course, neither assumption can be verified until all of the property units have been retired.

While the remaining life is an assumption, it can be estimated with increased accuracy as the assets age because the date of ultimate retirement can be estimated with more certainty. Importantly, the Remaining Life Method is flexible in its ability to adapt to changed

conditions, consistent with the depreciation objective of providing full capital recovery on a timely basis. For these reasons, I recommend that Gulf's depreciation rates continue to be calculated based on the commonly used and accepted Remaining Life Method.

Q. Briefly outline the steps in performing the depreciation study you are sponsoring.

A. The major steps involved in the depreciation rate study are the following:

(1) Gathering of plant accounting data including vintage investment and dated retirements, annual additions, retirements, balances, and salvage and cost of removal amounts;

(2) Processing the data against established retirement experience patterns using either computerized simulation or actuarial techniques to determine historical service life indications;

(3) Evaluating the statistical retirement experience to determine service lives and retirement experience patterns (mortality dispersion curves);

(4) Applying the life span analysis to Production plant locations to determine average remaining lives and depreciation rates;

(5) Considering other factors affecting depreciation, such as changing technology, regulatory and environmental requirements, and customer demands;

(6) Determining the average remaining lives of the depreciable electric plant;

(7) Analyzing net removal experience and determination of future net removal; and

(8) Calculating the annual depreciation amounts and depreciation rates from the depreciation factors.

The elements needed to make the depreciation rate calculation are a result of analysis and study. The study procedures outlined above, the collection of data, analysis of data, application of informed judgment, and calculation of depreciation rates are generally accepted practice in the utility industry and are the same procedures as employed for prior Gulf depreciation rate studies.

Q. What data is gathered in the first step of the study?

A. The data gathered in the initial step of the study is certain property accounting data of each plant account or Production location. This property accounting data includes data used to determine historical life indications, such as annual additions and retirements or vintage investment and dated

retirements. Vintage investment of the Production locations is used in the life span method. Historical salvage and cost of removal data is obtained in order to analyze estimated future net removal. This data is the typical property accounting data used in electric depreciation rate studies, including Gulf's previous studies.

Q. What is the goal of the second and third steps in performing the study, applying lifing techniques and determining service life indications?

A. The goal of the historical service life analysis is to determine the best estimate of future service life. Statistical analyses of actual turnover experiences with the depreciable assets provide indications of service life. This actual experience, along with other considerations related to the life of the assets (if appropriate), such as the nature of the assets and the life experiences of other utilities, form the basis of the determination of service life.

The foregoing techniques are applied to all plant accounts except those of Production. The lives of Production plant locations are determined using the life span method, which I explain later in my testimony.

Electric utility depreciation is primarily determined on a group basis because large numbers of property units with similar service lives (e.g., poles and conductors) can be grouped into particular asset categories. In contrast to item depreciation, where each asset is individually depreciated over a

specified life, group depreciation is based on the use of average service lives for each group of assets.

Q. How did you process the accounting data to determine historical service life indications?

A. When the retirement dates and the installation dates of depreciable assets were known, I used a standard actuarial technique, known as the Retirement Rate method, to determine historical service life indications. This actuarial data was available for Gulf's Transmission and General plant accounts, as well as the two substation plant accounts of Distribution. In the Retirement Rate method, the vintage investment and annual dated retirements are combined by age interval to develop retirements and investment exposed to retirement by age interval. Retirement rates are then calculated by age interval, which provide a measure of the probability of retirement by age interval. The observed survivor curve is developed from the retirements rates. Because the observed survivor curve seldom reaches zero percent surviving, a curve fitting analysis is applied that smoothes and completes the observed survivor curve. The curve fitting is made with the aid of a system of known retirement patterns called the Iowa-type survivor curves. This system of known retirement patterns was developed at Iowa State University many years ago and is a generally accepted curve shape system within the industry. Based on the curve fitting analysis, the most applicable Iowa survivor curve and average service life are selected for the property account.

Q. Was the actuarial method the only method you used to analyze historical service life indications?

A. No, it was not. When the retirement dates and the installation dates of depreciable assets were not known, I used a standard statistical technique known as the simulated method, specifically the Simulated Plant Record (SPR) method, to determine the historical service lives of the assets or asset categories. This is an accepted method in the industry. The SPR method of life analysis was applied to the majority of the Distribution plant accounts. These simulated techniques, which are sometimes called semi-actuarial methods, are commonly used and generally accepted life analysis techniques.

For purposes of Gulf's depreciation study, the specific SPR technique known as the balance method was relied upon. SPR methods are used to determine (i) historical service lives applicable to groups of assets and (ii) the pattern of retirement dispersion for a group of assets. Historical annual additions, retirements, and balances for the assets must be known to perform the balance method of SPR analysis.

In the balance method, the actual known book balances for a specific span of years, say 10 years, are used in a computer application to derive simulated balances over that same time period. Iowa-type survivor curves, which are well-recognized and widely used empirical representations of typical retirement patterns, are applied to the historical annual additions. Simulated retirements and resulting balances for each of the last 10 years

are then computed, allowing the analyst to determine a specific historical service life for each retirement dispersion pattern for a particular asset group. These simulated balances will equal total actual balances over the 10-year period, even though for any given year the actual and simulated balances will not be exactly equal. This calculation is repeated for each of the several Iowa-type curves and for different bands of balance years and study dates. The simulated balance method of life analysis gives indications of both historical service life and the pattern of retirement dispersion.

Q. Do these analyses alone determine the service life of the property?

A. No, they do not. The computerized studies of past service lives are a vital first step to the depreciation rate study, but are not conclusive in and of themselves. The depreciation analyst must study the results and exercise informed judgment in selecting the best measure of past average service life and retirement dispersion. This judgment is then modified to reflect future conditions as they affect expectations in service lives. A pure mathematically driven procedure is never the solely correct approach to the life analysis of a utility property.

Q. For purposes of Gulf's depreciation study, were all service lives and retirement patterns determined by the statistical analyses you have just described?

A. No. Certain property accounts do not have sufficient retirement activity either to make a quantitative analysis or to provide reliable indications of

historical life. In such instances, the depreciation rate characteristics have been determined from a consideration of the type and nature of the property, the average service life currently used for depreciation by the Company, the service lives experienced by other utilities, and comparison with depreciation characteristics of similar property, as well as giving due consideration to available historical life experience.

Also, these standard quantitative analyses of historical life cannot be relied upon to give accurate life indications for Production. This property has location-life characteristics; that is, each location consists of a relatively large percentage of the total account investment, and retirements are usually small and interim in nature prior to the location's ultimate retirement. The Production plant accounts were, therefore, analyzed using a technique based on the forecast of the retirement date, known as the life span method.

Q. Briefly describe the life span method, the analysis of which is the fourth stage in your performance of Gulf's depreciation study.

A. In a life span method, each location's life span is the time between the initial in-service date of a unit and its forecasted date of retirement. The primary life span of the plants units of Steam Production used in this analysis was 65 years. The life span of Other Production's Smith Combined Cycle ("CC") was 40 years.

The estimated retirement dates of the generating facilities used in the study were provided by the Company. I reviewed the retirement dates of Steam Production and Other Production provided to me in light of prior Gulf studies and our experience of Production plant life spans used in the electric utility and power generation industries and found them reasonable and appropriate for purposes of Gulf's depreciation.

Remaining life of a generating unit is calculated by subtracting the date of the study from its estimated retirement date. The remaining life, however, must be decreased for future interim retirement activity, as we cannot presume that the total existing investment will remain in service until the ultimate retirement date. Future interim retirements were developed from the application of interim retirement rates, which were generally based on Company historical data. The interim retirement rate method used in this study is a generally accepted method used throughout the electric utility industry, including some electric utilities in Florida.

Q. Turning now to the next step of the study, how did you establish the remaining life of the plant?

A. Remaining life is a function of service life retirement pattern and the distribution of the investment by year of installation, that is, the age of the investment. The remaining life for each plant account can be readily calculated from the actual or estimated age distribution of the property investment once the average service life is determined and the Iowa-type curve of retirement dispersion is established.

For Production, remaining life was based on the difference between the retirement date of the investment and the Study Date, adjusted for interim retirement activity, in the life span method, as briefly described above.

Q. What is the next step in the study process?

A. The next step is an analysis of salvage and cost of removal to determine the net removal for each account.

Q. How did you go about making the net removal analysis?

A. Salvage and cost of removal experience of Gulf's depreciable property were studied as a percent of original cost of the plant retired. The data are examined for trends by computing annual percentages and percentages for selected bands of years. In general, the salvage and cost of removal data made available to me was on a historical basis from 1981 through the Study Date. For the Production locations, net removal used in the life span method was based on Gulf's net removal of interim retirement experience. The historical information and analysis specific to Gulf, the nature of the property, and knowledge of current industry experience and trends were used to develop the recommended net removal quantifications.

Q. Were all the net removal amounts determined by the analysis you just described?

A. No, they were not. While my net removal analysis included net removal of interim retirements for Production, it excluded the net removal of the ultimate or final retirement of the plant units. That net removal was

determined separately in a dismantlement study prepared for Gulf using the method that was used by the Company in prior studies.

Q. Explain how the depreciation rate is calculated with the remaining life method.

A. Reference is made to the calculations shown on pages 1 through 42 under Tab 6 of the Depreciation Study, Exhibit PSH-1, for such a demonstration. When all the elements of the depreciation rate calculation are known, the annual depreciation rate for each account or location can be calculated. First, the investment amount to be recovered as of the Study Date and representing future depreciation is calculated as a percent. The amount to be recovered is the plant investment balance or 100 percent, plus the net removal percent, less the accumulated depreciation reserve percent as of the Study Date.

The depreciation rate on a straight line basis using the remaining life method is the amount to be recovered divided by the average remaining life. The recommended annual depreciation, as shown in Exhibit PSH-1, is then calculated by multiplying the plant investment balance by the depreciation rate.

The calculation of the depreciation can be demonstrated using Account 362 – Station Equipment as shown on page 25 under Tab 6 of the Depreciation Study, Exhibit PSH-1. The amount to be recovered is the plant balance of 100 percent plus net removal of 8 percent less the

accumulated depreciation reserve of 25.2 percent, or 82.8 percent. That amount to be recovered of 82.8 percent is divided by the average remaining life of 36.2 years to result in the recommended depreciation rate of 2.3 percent, rounded. The depreciation of Account 362 is then calculated by multiplying the plant balance of $239,656,818 by depreciation rate of 2.3 percent, or $5,512,107.

Q. Briefly, what are the results of your recommendations?

A. My overall depreciation recommendations are summarized on pages 1 through 3 under Tab 5 of the Depreciation Study, Exhibit PSH-1.

The difference in Steam Production depreciation is largely due to Plant Crist. Its recommended depreciation rate is greater than the present rate because of the combined effects of the substantial increase in plant balance of approximately $360,000,000 since the prior study that will have a relatively shorter life for its recovery, effects of the interim retirements, and an increase of 5 percentage points in the net removal of interim retirements.

The recommended depreciation rate of Smith CC was also significantly greater than the present depreciation rate. Its depreciation rate increase was largely due to the effects of interim retirements and its relatively lower accumulated depreciation reserve.

The recommended depreciation rates of Transmission, Distribution, and General are largely similar to the present rates. The recommended average

service lives of the accounts of these functional groups were increased by one to two years on average from the prior study. Recommended net removal was typically somewhat more negative than in the prior study, which tends to offset the increase in average service lives.

Q. Why should the Commission accept the depreciation rates you recommend for Gulf?

A. The depreciation rates I have recommended are required to recover the total cost of plant, allowing for net removal, over the remaining useful life of the plant. The recommended depreciation rates, based on an accepted capital recovery method, are a result of our analysis and study of the facts and conditions known to be in existence at the time of the study.

The techniques employed to derive the analyses and to calculate depreciation are accepted practices. The depreciation methods, techniques, calculations, and rates are consistent in all material respects with the previous Gulf depreciation rate studies, which have been approved by the Commission. The recommended depreciation rates are reasonable and appropriate for Gulf's capital recovery.

Q. Does that conclude your testimony?

A. Yes, it does.

AFFIDAVIT

STATE OF WISCONSIN)
)
COUNTY OF MILWAUKEE)

Docket No. 130140-EI

Before me the undersigned authority, personally appeared Peter S. Huck, who being first duly sworn, deposes, and says that he is the Senior Manager of American Appraisal Associates, Inc., a Wisconsin corporation, and that the foregoing is true and correct to the best of his knowledge, information, and belief.

Peter S. Huck
Senior Manager

Sworn to and subscribed before me this 8th day of July, 2013.

Paula D. Bost
Notary Public, State of Wisconsin

NOTARY PUBLIC PAULA D. BOST STATE OF WISCONSIN

Commission No. _____

My Commission Expires July 24, 2016

Gulf Power's 2013 Depreciation Study was filed on May 24, 2013 in Docket No. 130151 and is incorporated herein by reference. Gulf's 2013 Depreciation Study is identified in the Commission's records as Document Numbers 02867-13 and 02868-13.