Exhibit No.___(JJS-1T)
Docket UE-13____
Witness: John J. Spanos

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of PACIFICORP, d.b.a. Pacific Power & Light Company, For an Order Authorizing a Change in Depreciation Rates Applicable to Electric Property	)	Docket UE-13____

PACIFICORP

DIRECT TESTIMONY OF JOHN J. SPANOS

January 2013

Q. Please state your name and address.

A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania.

Q. Are you associated with any firm?

A. Yes. I am associated with the firm of Gannett Fleming, Inc.

Q. How long have you been associated with Gannett Fleming, Inc.?

A. I have been associated with the firm since college graduation in June, 1986.

Q. What is your position with the firm?

A. I am a Senior Vice President.

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

A. I am testifying on behalf of PacifiCorp d/b/a Pacific Power & Light Company (PacifiCorp or the Company).

Qualifications

Q. Please state your qualifications.

A. Please refer to Exhibit No. __ (JJS-2) for my qualifications.

Purpose of Testimony

Q. What is the purpose of your testimony in this proceeding?

A. I sponsor the Depreciation Study performed for PacifiCorp attached hereto as Exhibit No. __ (JJS-3) ("Depreciation Study"). The Depreciation Study sets forth the calculated annual depreciation accrual rates by account as of December 31, 2011. Based on the Depreciation Study, I recommend depreciation rates using the projected December 31, 2013 plant and reserve balances for approval. The proposed rates appropriately reflect the rates at which PacifiCorp's assets should be depreciated over their useful lives and

are based on the most commonly used methods and procedures for determining depreciation rates.

Depreciation Study

Q. Please define the concept of depreciation.

A. Depreciation refers to the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which can be reasonably anticipated or contemplated, against which the Company 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 the requirements of public authorities.

Q. Did you prepare the Depreciation Study filed by PacifiCorp in this proceeding?

A. Yes. I prepared the Depreciation Study submitted by PacifiCorp with its filing in this proceeding. My report is entitled: "Depreciation Study - Calculated Annual Depreciation Accruals Related to Electric Plant as of December 31, 2011." This report sets forth the results of my Depreciation Study for PacifiCorp.

Q. In preparing the Depreciation Study, did you follow generally accepted practices in the field of depreciation valuation?

A. Yes.

Q. Are the methods and procedures of this Depreciation Study consistent with past practices?

A. The methods and procedures of this study are the same as those utilized in past studies of this Company as well as others before this Commission. Depreciation rates are determined based on the average service life procedure and the remaining life method.

Q. Please describe the contents of your report.

A. My report is presented in three parts: Part I, Introduction, presents the scope and basis for the Depreciation Study; Part II, Methods Used in Study, includes descriptions of the basis of the study, the estimation of survivor curves and net salvage and the calculation of annual and accrued depreciation; and Part III, Results of Study, presents a description of the results, a summary of the depreciation calculations, graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations.

The table on pages III-4 through III-19 of the Depreciation Study presents the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2011, the book depreciation reserve and the calculated annual depreciation accrual and rate for each account or subaccount. The section beginning on page III-20 presents the results of the retirement rate and simulated plant analyses prepared as the historical bases for the service life estimates. The section beginning on page III-580 presents the results of the salvage analysis. The section beginning on page III-840 presents the depreciation calculations related to surviving original cost as of December 31, 2011. Finally, the section in the Appendix presents the recommended depreciation rates and parameters as of December 31, 2013.

Q. Please explain how you performed your Depreciation Study.

A. I used the straight line remaining life method of depreciation, with the average service life procedure. The annual depreciation is based on a method of depreciation accounting that seeks to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each unit, or group of assets, in a systematic and reasonable manner.

Q. How did you determine the recommended annual depreciation accrual rates?

A. I did this in two phases. In the first phase, I estimated the service life and net salvage characteristics for each depreciable group, that is, each plant account or subaccount identified as having similar characteristics. In the second phase, I calculated the composite remaining lives and annual depreciation accrual rates based on the service life and net salvage estimates determined in the first phase.

Q. Please describe the first phase of the Depreciation Study, in which you estimated the service life and net salvage characteristics for each depreciable group.

A. The service life and net salvage study consisted of compiling historical data from records related to PacifiCorp's plant; analyzing these data to obtain historical trends of survivor characteristics; obtaining supplementary information from management and operating personnel concerning practices and plans as they relate to plant operations; and interpreting the above data and the estimates used by other electric utilities to form judgments of average service life and net salvage characteristics.

Q. What historical data did you analyze for the purpose of estimating service life characteristics?

A. I analyzed the Company's accounting entries that record plant transactions during the period 1937 through 2011, however, the earliest year of data varied by account. The transactions included additions, retirements, transfers, sales, and the related balances.

Q. What method did you use to analyze these service life data?

A. I used the retirement rate method for most plant accounts. This is the most appropriate method when retirement data covering a long period of time is available because this

method determines the average rates of retirement actually experienced by the Company during the period of time covered by the Depreciation Study.

Q. Please describe how you used the retirement rate method to analyze PacifiCorp's service life data.

A. I applied the retirement rate analysis to each different group of property in the study. For each property group, I used the retirement rate data to form a life table which, when plotted, shows an original survivor curve for that property group. Each original survivor curve represents the average survivor pattern experienced by the several vintage groups during the experience band studied. The survivor patterns do not necessarily describe the life characteristics of the property group; therefore, interpretation of the original survivor curves is required in order to use them as valid considerations in estimating service life. The Iowa-type survivor curves were used to perform these interpretations.

Q. Did you use any other methods to analyze service life data?

A. Yes. For most distribution assets in Utah and Idaho, the Company accounting records have not maintained the vintage of each transaction. Therefore, the simulated plant record method was utilized to determine life characteristics.

Q. What is an "Iowa-type survivor curve" and how did you use such curves to estimate the service life characteristics for each property group?

A. Iowa-type curves are a widely-used group of survivor curves that contain the range of survivor characteristics usually experienced by utilities and other industrial companies. The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observing and classifying the ages at which

various types of property used by utilities and other industrial companies had been retired.

Iowa-type curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves were used in this study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements.

The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa system to which the property group belongs, and the relative height of the mode. For example, the Iowa 60-R2 indicates an average service life of sixty years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a relatively low height, 2, for the mode (possible modes for R type curves range from 1 to 5).

Q. What approach did you use to estimate the lives of significant facilities structures such as production plants?

A. I used the life span technique to estimate the lives of significant facilities for which concurrent retirement of the entire facility is anticipated. In this technique, the survivor characteristics of such facilities are described by the use of interim survivor curves and estimated probable retirement dates.

The interim survivor curves describe the rate of retirement related to the replacement of elements of the facility, such as, for a building, the retirements of plumbing, heating, doors, windows, roofs, etc., that occur during the life of the facility. The probable retirement date provides the rate of final retirement for each year of installation for the facility by truncating the interim survivor curve for each installation

year at its attained age at the date of probable retirement. The use of interim survivor curves truncated at the date of probable retirement provides a consistent method for estimating the lives of the several years of installation for a particular facility inasmuch as a single concurrent retirement for all years of installation will occur when it is retired.

Q. Has Gannett Fleming used this approach in other proceedings?

A. Yes, we have used the life span technique in performing depreciation studies presented to and accepted by many public utility commissions across the United States and Canada. This technique is currently being utilized by PacifiCorp in the same manner recommended in this case.

Q. What are the bases for the probable retirement years that you have estimated for each facility?

A. The bases for the probable retirement years are life spans for each facility that are based on judgment, the life assessment study and incorporate consideration of the age, use, size, nature of construction, management outlook and typical life spans experienced and used by other electric utilities for similar facilities. Most of the life spans result in probable retirement years that are many years in the future. As a result, the retirements of these facilities are not yet subject to specific management plans. Such plans would be premature. At the appropriate time, detailed studies of the economics of rehabilitation and continued use or retirement of the structure will be performed and the results incorporated in the estimation of the facility's life span.

Q. Did you physically observe PacifiCorp's plant and equipment as part of your Depreciation Study?

A. Yes. I made field reviews of PacifiCorp's property as part of this study during May and June 2012 to observe representative portions of plant. Field reviews are conducted to become familiar with Company operations and obtain an understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements. This knowledge as well as information from other discussions with management was incorporated in the interpretation and extrapolation of the statistical analyses.

Q. Please describe how you estimated net salvage percentages.

A. I estimated the net salvage percentages by incorporating the historical data for the period 1992 through 2011 and considered estimates for other electric companies. The net salvage percentages are based on a combination of statistical analyses and informed judgment. The statistical analyses consider the cost of removal and gross salvage ratios to the associated retirements during the 20-year period. Trends of these data are also measured based on three-year moving averages and the most recent five-year indications.

Q. Were the net salvage percentages for generating facilities based on the same analyses?

A. Yes, for the interim analyses. The net salvage percentages for generating facilities were based on two components, the interim net salvage percentage and the final net salvage percentage. The interim net salvage percentage is determined based on the historical indications from the period, 1992-2011, of the cost of removal and gross salvage amounts as a percentage of the associated plant retired. The final net salvage or dismantlement component was determined based on the assets anticipated to be retired at the concurrent date of final retirement.

Q. Have you included a dismantlement component into the overall recovery of generating facilities?

A. Yes. A dismantlement component has been included to the net salvage percentage for steam and other production facilities. There is a separate decommissioning reserve for small hydro facilities which are soon to be retired, as the dismantlement component for hydro facilities in the study is zero.

Q. Can you explain how the dismantlement component is included in the Depreciation Study?

A. Yes. The dismantlement component is part of the overall net salvage for each location within the production assets. Based on studies for other utilities and the cost estimates of PacifiCorp, it was determined that the dismantlement or decommissioning costs for steam production facilities is best calculated on a $/KW factor based on surviving plant at final retirement. These amounts at a location basis are added to the interim net salvage percentage of the assets anticipated to be retired on an interim basis to produce the weighted net salvage percentage for each location. The detailed calculation for each location is set forth on pages III-582 through III-587 of Exhibit No. __ (JJS-3).

Q. Please describe the second phase of the process that you used in the Depreciation Study in which you calculated composite remaining lives and annual depreciation accrual rates.

A. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group, using the straight line remaining life method, and using remaining lives weighted consistent with the average service life procedure.

Q. Please describe the straight line remaining life method of depreciation.

A. The straight line remaining life method of depreciation allocates the original cost of the property, less accumulated depreciation, less future net salvage, in equal amounts to each year of remaining service life.

Q. Please use an example to illustrate how the annual depreciation accrual rate for a particular group of property is presented in your Depreciation Study.

A. I will use Account 353, Station Equipment, as an example because it is one of the largest depreciable mass accounts and represents approximately 8 percent of depreciable plant.

The retirement rate method was used to analyze the survivor characteristics of this property group. Aged plant accounting data was compiled from 1924 through 2011 and analyzed in periods that best represent the overall service life of this property. The life tables for the 1924-2011 and 1982-2011 experience bands are presented on pages III-112 through III-117 of the report. The life table displays the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page III-112 shows $1,782,441 retired at age 0.5 with $1,633,945,595 exposed to retirement. Consequently, the retirement ratio is 0.0011 and the surviving ratio is 0.9989. These life tables, or original survivor curves, are plotted along with the estimated smooth survivor curve, the 57-S0 on page III-111.

The net salvage percent is presented on pages III-624and III-625. The percentage is based on the result of annual gross salvage minus the cost to remove plant assets as compared to the original cost of plant retired during the period 1992 through 2011. The 20-year period experienced $9,597,197 ($4,971,903 - $14,569,099) in net salvage for $106,802,184 plant retired. The result is negative net salvage of 9 percent

($9,597,197/$106,802,184). Although recent trends have shown indications more negative, it was determined that based on industry ranges and Company expectations, that negative 5 percent was the most appropriate estimate.

My calculation of the annual depreciation related to the original cost at December 31, 2011, of electric plant is presented on pages III-1052 through III-1054. The calculation is based on the 57-S0 survivor curve, 5 percent negative net salvage, the attained age, and the allocated book reserve. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual. These totals are brought forward to the table on page III-15.

Conclusion

Q. Was the Depreciation Study filed by PacifiCorp in this proceeding prepared by you or under your direction and control?

A. Yes.

Q. Can you summarize the results of your Depreciation Study?

A. Yes. The depreciation rates as of December 31, 2011 appropriately reflect the rates at which the value of PacifiCorp's assets have been consumed over their useful lives to date. These rates are based on the most commonly used methods and procedures for determining depreciation rates. The life and salvage parameters are based on widely used techniques and the depreciation rates are based on the average service life procedure and remaining life method. Therefore, the depreciation rates set forth on pages III-4 through III-19 of Exhibit No. __ (JJS-3) represent the calculated rates as of December 31, 2011.

Q. Does your Depreciation Study recommend new depreciation rates based on December 31, 2013 plant and reserve balances?

A. Yes. The depreciation accrual rates set forth in the Appendix represent the rates most applicable in this proceeding. These rates utilize all the same methods and procedures as described in the Depreciation Study, but apply the parameters to the projected December 31, 2013 plant and reserve balances. The projected plant balance as of December 31, 2013 and the bring forward of the book reserve from December 31, 2011 to December 31, 2013 properly established the most reasonable rate base when the rates will go into effect. Thus, the rates in the Appendix are the recommended depreciation accrual rates.

Q. Does this conclude your direct testimony?

A. Yes.