EXHIBIT NO. ___(CRC-4T)
DOCKET NO. UE-072300/UG-072301
2007 PSE GENERAL RATE CASE
WITNESS: C. RICHARD CLARKE

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY, INC.,** **Respondent.**	**Docket No. UE-072300** **Docket No. UG-072301**

PREFILED REBUTTAL TESTIMONY (NONCONFIDENTIAL) OF C. RICHARD CLARKE ON BEHALF OF PUGET SOUND ENERGY, INC.

JULY 3, 2008

PUGET SOUND ENERGY, INC.

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PUGET SOUND ENERGY, INC.

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I. INTRODUCTION

Q. Are you the same C. Richard Clarke who provided prefiled direct testimony in this proceeding on December 3, 2007, on behalf of Puget Sound Energy, Inc. ("PSE" or "the Company")?

A. Yes. On December 3, 2007, I filed direct testimony, Exhibit No. ___(CRC-1T), and two exhibits supporting such direct testimony, Exhibit No. ___(CRC-2) and Exhibit No. ___(CRC-3).

Q. Please summarize the purpose of your rebuttal testimony.

A. This rebuttal testimony responds to the direct testimony of Public Counsel witness Charles W. King relating to depreciation issues in the area of production plant service lives, the service life for Account 365, Overhead Conductors, and the development of net salvage as part of the depreciation rate. I am also responding to direct testimony of WUTC Staff witness William H. Weinman in the area of production plant service lives.

II. SERVICE LIVES IN THE DEPRECIATION STUDY ARE PROPER

A. Production Plant Service Lives

Q. Please summarize your rebuttal testimony regarding the production plant service lives proposed by Public Counsel and Commission Staff.

A. As discussed in more detail below, I disagree with the proposal by Public Counsel and Commission Staff to adopt a 60-year service life for the Colstrip coal facilities ("Colstrip"), and I disagree with Public Counsel's recommendation for a 45-year service life for all Other Production plant. Although I believe the service lives of 29 years for Encogen and 30 years for Fredrickson are appropriate, based on my review of plant-specific information, I believe that Commission Staff's use of a 35-year service life for each of these combined cycle plants is also reasonable.

1. Colstrip

Q. Please explain the basis for your disagreement with Commission Staff and Public Counsel on their proposed sixty-year service life for Colstrip.

A. PSE has developed retirement dates and service lives for Colstrip based on a number of factors related to operations and fuel supply for the Colstrip units. In the depreciation study, I used service lives of 40–45 years, which correspond to retirement dates provided to me by the Company. In contrast, Public Counsel and

Commission Staff relied on energy statistics that aggregate service lives for a wide variety of generators (electric, coal, nuclear, oil, gas) from various industries. PSE's methodology for determining retirement dates and service lives for Colstrip is preferable to the methodology used by Public Counsel and Commission Staff.

Q. How did you develop the service life and retirement dates for Colstrip used in your depreciation study?

A. As part of the depreciation study, I met with PSE engineers and other company personnel in production plant operations to discuss the service lives and retirement dates of all production facilities. I met with Mr. Mike Jones, Manager of Colstrip Operations and Fuel, and he explained to me the circumstances surrounding the Company's determination of the retirement dates for Colstrip. Mr. Jones felt the life span for Colstrip was 40–45 years, based on the coal supply, efficiency of the units, and various environmental laws and regulations. Mr. Jones has submitted rebuttal testimony in this case in Exhibit No. ___(MLJ-15T) that expands on these circumstances.

Q. Did you review the service lives provided to you by PSE in light of other companies for which Gannett Fleming has performed depreciation studies?

A. Yes. Gannett Fleming performs depreciation studies for a number of utilities, and production plant service lives are usually established by the company; however, Gannett Fleming independently reviews these lives for reasonableness based on

experience in the industry. Gannet Fleming finds that service lives for the majority of coal production plants range from 45–60 years. The circumstances surrounding the selection of a service life depends on each individual company, its operations, environmental laws and regulations, maintenance, fuel supply, etc. Therefore, I believe the service lives PSE provided to me for Colstrip are reasonable, based on the circumstances described by Mr. Jones.

Q. How did Public Counsel and Commission Staff develop their recommended 60-year service life for Colstrip?

A. Both Mr. King and Mr. Weinman relied on energy statistics from the Electric Information Administration ("EIA") for their conclusions. Specifically, they both relied on a report of 18,300 working and retired generators in the U.S., from industries including not only utilities but also private industry and government organizations. The generators included in their surveys are made up of oil, gas, electricity, coal, renewable, nuclear, and alternative fuels.

Q. Do you think this is a reasonable method to establish service lives for Colstrip?

A. I do not believe that Public Counsel's and Commission Staff's methodology is reasonable when there is relevant data available that is specific to PSE's coal plants. The information Mr. King and Mr. Weinman utilized is extremely broad. Operations, environmental practices, maintenance practices, and fuel supply all vary depending on the entity operating the plant. Such statistics come from many

different plants run by utilities, private companies and government agencies. These statistics cover plants run on many different fuel types. To suggest that information based on these statistics is a better method of establishing service lives for a specific coal plant is wrong, especially when there is relevant information available concerning PSE's coal plants.

Q. Were there other factors Public Counsel and Commission Staff used in recommending 60-year service lives?

A. Yes. Both Public Counsel and Commission Staff suggested that because PacifiCorp, another owner in Colstrip, recently settled a rate case using a 60-year life for that plant, a 60-year life should be appropriate for PSE as well.

Q. Do you agree with this logic as a reason to use 60-year service lives for PSE?

A. No. A settlement is a compromise and does not establish precedent regarding proper engineering service lives. PacificCorp is a small owner in Colstrip Units 3 and 4, owning only a 10% share of the plants. Mr. Weinman's statement, "PacifiCorp engineers do not have an issue with 60-year lives for Colstrip and must believe the plants will have a coal supply in the future" is based on an assumption and does not take into consideration any external factors that likely contributed to PacifiCorp's acceptance of a 60-year life for Colstrip. In fact, PacifiCorp's engineers may not even be aware of the final terms of the settlement agreement, which includes the agreed-to service lives for PacifiCorp's depreciation study.

2. Public Counsel's Proposal for Other Production Facilities

Q. Please explain Public Counsel's recommendations for Other Production facilities?

A. Public Counsel witness Mr. King has proposed an increase to the service life to 45 years for all Other Production except the wind farms and Crystal Mountain.

Q. What service life did you use for Other Production plant?

A. I developed the service lives for Other Production plant similarly to how I developed the life for Colstrip. I met with engineers and other company personnel, and they explained to me their rationale for the service life for each plant. The lives for the combustion turbines were 35 years, except for Encogen and Frederickson 1, which were 29 and 30 years, respectively. I compared these service lives with the service lives for comparable facilities used in the industry and by other companies for which Gannett Fleming performed depreciation studies. The majority of the companies in these comparisons reported service-lives in the range of 30–40 years. This is consistent with the life PSE was recommending. Considering industry standards, similar plants, and information from PSE personnel regarding the service life for each unit, I felt comfortable using the Company's recommendations, and I continue to believe they are appropriate.

Q. How did Public Counsel establish its recommendation of 45 years for all plants?

A. Public Counsel witness Mr. King primarily used the same statistics he used for establishing service lives for steam plant as for all plants, but he instead used data from retirements of combustion turbines since 1899 and ran various band analyses on these statistics. His analyses indicated that the plants in the survey survive an average of 46.5 years. This was his basis for his recommendation to extend the life for all other production to 45 years.

Q. Do you agree with this analysis?

A. No. The statistics that Mr. King relied on include many different types of plants. Mr. King did not consider any of the specific information that was provided by the Company in its establishment of the plant-specific service life. Considering the operation, environmental, maintenance, leases, contracts, and other information for a particular generation unit, as PSE did in this case, is a more appropriate method to determine the service life of that specific plant than using a generalized survey of other plants, as Mr. King used. In the depreciation study, I used 35-year service lives for other production (except wind, Encogen and Frederickson 1, which are discussed below) based on information provided to me by the Company on each specific generating unit; this is a preferable methodology and should be accepted by the Commission.

3. Commission Staff's Proposal Regarding Service Lives for Encogen and Fredrickson

Q. Please address the recommendation of Commission Staff to extend the service lives for Encogen and Frederickson 1.

A. Encogen and Frederickson 1 are combined cycle plants, and PSE estimated retirement dates based on service lives of 29 and 30 years, respectively. Commission Staff recommends using a service life of 35 years for Encogen and Fredrickson 1. PSE does not oppose extending the service lives for these plants to 35 years to match the Other Production facilities.

Q. What is the impact of these changes on your depreciation study recommendations?

A. Changing the service life for Encogen and Frederickson 1 will decrease electric depreciation expense by $1.6 million. In Exhibit No. ___(CRC-5), I have provided revised pages incorporating the changes to the service lives for Encogen and Fredrickson 1, discussed above. Exhibit No. ___(CRC-5) represents revisions to pages III-4 through III-8 from my Exhibit No. ___(CRC-3).

B. Service Lives for Account 365, Overhead Conductors and Devices

Q. Please discuss Public Counsel's recommendation for Account 365, Overhead Conductors and Devices.

A. Public Counsel witness Mr. King proposes increasing the average service life for

Account 365, Overhead Conductors and Devices, from 40 years to 45 years. Mr. King's recommendation is based on the concept that more tree trimming will take place in the future and that therefore there will be fewer retirements of overhead conductors and thus a longer average equipment service life. Public Counsel's recommendation to extend the average service life five years is arbitrary and fails to provide any support for a correlation between tree trimming and service life. "Mr. King himself admits that he "cannot predict the precise effect of the enhanced tree trimming program" on the service life of Account 365 facilities".

Q. Do you agree with Public Counsel's recommendation?

A. No, I do not. Public Counsel's recommendation to extend the average service life of overhead conductors and devices is speculative at best, as discussed by Ms. McLain in her prefiled rebuttal testimony. I have had many meetings with personnel at numerous companies, and no one has ever mentioned lack of tree trimming as a cause for retirement of conductor. My meetings with PSE personnel were no different. Load growth, relocations, upgrades, and obsolescence are causes of conductor retirement, not lack of tree trimming. Mr. King has no quantification or justification for his recommendation, and the Commission should reject Public Counsel's proposal.

III. PUBLIC COUNSEL'S APPROACH FOR SETTING REMOVAL COSTS IS UNSOUND AND SHOULD BE REJECTED

Q. Do you agree with Public Counsel's proposed methodology regarding the allocation of net salvage to depreciation rates?

A. No, as discussed in more detail below, Public Counsel proposes a net present value approach and a five-year historical averages approach, both of which are contrary to the approach used in most jurisdictions and contrary to the approach accepted by this Commission. Further, the methodologies proposed by Public Counsel contain serious flaws because they fail to generate sufficient allowances to cover the cost of removing plant at the end of its life span and thus require future customers who have not used the retired plant to pay for the removal of the plant.

Q. Mr. King claims that you did not describe the procedure you used for allocating removal costs. Do you agree?

A. No. In my Depreciation Study, Exhibit No. ___(CRC-3), I describe my salvage analysis in Part II, Methods Used in The Estimation of Depreciation. In the same report, there is a 77-page summary of net salvage percentages. In my direct testimony, Exhibit No. ___(CRC-1T), I describe the criteria I used to develop net salvage amounts and even provide an example. The Commission Staff had no problem understanding my methodology and did not appear to have any objection.

Q. Please summarize your testimony regarding net salvage.

A. The portion of the annual depreciation accrual rates and amounts proposed by PSE in this proceeding that is related to net salvage is reasonable and in accordance with sound ratemaking principles. Depreciation is the loss in service value, and service value is the difference between original cost and net salvage value. Thus, net salvage should be part of the straight-line remaining life depreciation accrual. Net salvage costs should be recovered from customers served by the plant that results in the expenditure of the net salvage costs. The use of a straight-line remaining life accrual over the life of the asset accomplishes this equity. The estimates of net salvage percentages used in developing the net salvage accrual are very reasonable and likely understate the future net salvage costs that will occur. It is appropriate for the net salvage accrual to exceed the current net salvage costs during a period of system growth and prior to reaching a steady state for the plant. Considerations of customer equity with regard to the matching of depreciation expense with the consumption of service value should control. Future customers should not be forced to pay for the cost of service provided to current customers, which will be the result if Public Counsel's proposal is accepted.

Q. Is the method you used to develop net salvage rates an accepted methodology?

A. Yes. The methodology that I used to develop net salvage rates is the traditional

method, consistent with the methodology utilized by almost every utility in the United States and Canada and accepted by most every state commission and the Federal Energy Regulatory Commission ("FERC"). The process I applied to determine salvage rates was the same in this depreciation study as was used in PSE's most recent rate proceeding and the same process that has traditionally been approved by the Commission.

Q. Please explain Public Counsel's salvage rate recommendation.

A. Public Counsel witness Mr. King used my estimates of future net salvage costs to derive net present value removal costs for the gas plant. In other words, he used the same estimate of net salvage as I used, but he discounted that estimate to today's price level, relying on one part of the financial accounting requirements set forth in Statement of Financial Accounting Standards No. 143 ("FAS 143"). He then determined his recommended net salvage amounts using the higher of (1) the net present value removal costs, or (2) five-year historical averages. As Mr. Stranik points out in his rebuttal testimony, neither Mr. King nor Mr. Majoros build in the cost of the accretion associated with the present value calculation that is required under FAS 143.

In all but two of the electric distribution accounts, he used historical five-year averages to develop net salvage amounts. For the other two electric distribution accounts, the electric transmission plant, and gas plant, Mr. King used the net present value removal costs. Both of the methodologies used by Mr. King are

flawed because customers will pay for future costs of removal at current price levels. This approach is unreasonable and will result in less-than full recovery of salvage costs. Future customers will be required to make up the difference and to pay for removal of plant they do not use.

Mr. King and others in his firm, Snavely King Majoros O'Connor and Lee, Inc. ("Snavely King"), have recently proposed this type of methodology in several depreciation cases. This methodology is a radical change from traditional salvage rate analyses and unfairly forces future ratepayers to pay for the cost of providing service to current ratepayers. In other proceedings of which I am aware, Snavely King has attempted to achieve similar results by using methods such as a cash basis or expensing approach, a sinking fund approach, and a normalized net salvage allowance. All of these methodologies understate cost of removal.

Q. You mentioned that Mr. King claims that FAS 143 supports his position on net salvage rates. Does FAS 143 prescribe depreciation methodologies for ratemaking for a regulated utility such as PSE?

A. No. The recent accounting pronouncements stated in FAS 143 and FERC Order No. 631 do not affect the regulatory policies of this Commission. The intent and implementation of both these accounting standards are addressed by Mr. Jan Umbaugh in Exhibit No. ___(JAU-1T). The effect of FAS 143 and FERC Order No. 631 and their impact on depreciation is discussed by Mr. William Stout in Exhibit No. ___(WMS-1T).

Q. Have the methods proposed by Public Counsel in this proceeding been widely accepted by state commissions?

A. No, they have not. The vast majority of state commissions, including the Washington Utilities and Transportation Commission, apply the traditional method for determining net salvage rates that I am using in this case. Mr. Stout has discussed the reluctance of other state commissions to accept any of Snavely King methodologies..

Q. What are your concerns with the net present value approach to determine net salvage rates used by Mr. King and proposed by Public Counsel?

A. The net present value accrual, the approach recommended by Public Counsel in this proceeding, is an attempt to remove inflation from the estimated future net salvage. The sum of the accruals based on the net present value of future net salvage will be significantly less than the amount required to retire assets at the end of their lives. As I stated earlier, Mr. King makes no provision in his analysis for this shortfall. Further, if the service value of the asset is to be adjusted to current price levels, then the future net salvage and the historical original cost should both be adjusted. This is described in more detail in the testimony of Mr. William Stout.

Q. For most of the electric distribution accounts, Mr. King used five-year historical averages in determining net salvage rates. Could you comment on this approach?

A. The amount of net salvage that should be included in the annual cost of service and collected from current customers is a portion of the net salvage related to the current plant in service as a result of allocating these costs to each year of service rendered by such plant. The amount should not reflect only the current net salvage costs. Current net salvage costs are related to plant that previously rendered service. Allocating net salvage costs during the life of the related plant is more appropriate and equitable and is in accord with authoritative texts. The following excerpt from page 18 of the 1996 NARUC publication, *Public Utility Depreciation Practices,* addresses this concept:

> Under presently accepted concepts, the amount of depreciation to be accrued over the life of an asset is the original cost less net salvage. Net salvage is the difference between the gross salvage that will be realized when the asset is disposed of and the cost of removing it. Positive net salvage occurs when gross salvage exceeds cost of removal, and negative net salvage occurs when cost of retirement exceeds gross salvage. Net salvage is expressed as a percentage of plant retired by dividing the dollars of net salvage by the dollars of original cost of plant being retired. The goal of accounting for net salvage is to allocate the net cost of an asset to annual accounting periods, making due allowance for the net salvage, positive or negative, that will be obtained when the asset is retired. This concept carries with it the premise that property ownership includes the responsibility for the property's ultimate abandonment or removal. Hence if current users benefit from its use, they should pay their pro rata share of the costs involved in the abandonment or removal of the property and also receive their pro rata share of the benefits of the proceeds realized.

Therefore, pursuant to regulatory accounting policy, depreciation is intended to include a component for net salvage. It is important to note that no reference is made in the above passage to present values or discounted methods. The passage describes how to calculate a net salvage allowance.

Q. Is this the method you followed in your calculation of net salvage?

A. Yes. The description above describes the same method I followed and is the same method approved by the Commission in past proceedings.

Q. Please give an example of the inequity of calculating net salvage based on current costs.

A. One example is in connection with the dismantling of a generating plant. In such case, the retirement costs are only going to occur at the end of the life of the generation plant. There may be some salvage and cost of removal occurring annually, but those would be associated with the interim retirement of pumps, motors and other such equipment. Applying Public Counsel's proposed methodology, the current customer would pay these incremental salvage costs based on average prices over the past five years. When the day comes to retire the generating station, there will be a major retirement cost, even if the Company removes the plant and replaces it with another. Continuing with Public Counsel's proposal, such costs would have to be borne by future customers who may have never received any benefit from the retired generating plant. Such a result is inequitable. The customer receiving the benefit should pay the cost of service of

that plant.

Q. Did you allow for dismantlement costs in your depreciation study?

A. Yes, I did.

Q. Did Mr. King take exception to your estimates?

A. Yes, he did. Because PSE does not have a specific dismantling study for any of its plants, I applied the amounts included in PSE's last depreciation study as a proxy for future dismantling costs. This is described in my Prefiled Direct Testimony, Exhibit No. ___(CRC-1T). I compared these estimates to other dismantling studies I am familiar with, and the estimates appear reasonable, if not conservative. Mr. King states that costs such as entire site clearing and dismantlement criteria should not have been used as assumptions. However, as stated in my direct testimony and Exhibit No. ___(CRC-3), I did not apply any such costs as site clearing to my study; rather, I merely used current approved net salvage rates as proxies for future costs.

Q Did Mr. King use your net salvage estimates for dismantlement in his analysis?

A. Yes, he did.

IV. CONCLUSION

Q. Please summarize your conclusions.

A. PSE's proposals should be accepted because (1) its proposed service lives for Colstrip and Other Production plant are based on PSE-specific data and information rather than broad generalizations, (2) Public Counsel's recommendation for Account 365 Overhead Conductors is unsupported and unwarranted, and (3) the net salvage methodology proposed by PSE is the traditional industry standard, as opposed to Public Counsel's inequitable and radical methodology.

Q. Does this conclude your testimony?

A. Yes it does.