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SECTION I: INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jacob Pous and my business address is 12113 Roxie Drive, Suite 110, Austin, Texas 78729.

Q. WHAT IS YOUR OCCUPATION?

A. I am a principal in the firm of Diversified Utility Consultants, Inc. ("DUCI"). A copy of my qualifications appears as Appendix A.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN PUBLIC UTILITY PROCEEDINGS?

A. Yes. Appendix A also includes a list of proceedings in which I have previously presented testimony. In addition, I have been involved in numerous utility rate proceedings that resulted in settlements before testimony was filed. In total, I have participated in well over 300 utility rate proceedings in the United States and Canada. In particular, I have submitted testimony on the topic of depreciation in over 100 cases, and I have analyzed PacifiCorp's last two depreciation studies. Also worthy of note is that I have testified on the topic of depreciation, on behalf of the staff of five different state regulatory commissions.

Q. WHAT IS YOUR PROFESSIONAL BACKGROUND?

A. I am a registered professional engineer. I am registered to practice as a Professional Engineer in the State of Texas, as well as numerous other states.

Q. ON WHOSE BEHALF ARE YOU PROVIDING THIS TESTIMONY?

A. My recommendations are made on behalf of the Committee of Consumer Services ("CCS").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address the reasonableness of Rocky Mountain Power's ("RMP" or the "Company") depreciation request as filed before the Utah Public Service Commission ("Commission") in Docket No. 07-035-13.

SECTION II: SUMMARY

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The Company has requested a total Company annual level of depreciation expense in the amount of $378,627,133.[1] I have received and analyzed RMP's request and underlying support. This represents a decrease in depreciation expense of $30.6 million on a total company basis and $10 million decrease on a Utah basis.[2] Based on my analysis of RMP's 2006 depreciation study, direct testimony and exhibits, and responses to data requests, I recommend various adjustments to the life and net salvage parameters. As shown in CCS Exhibit 2.1 these recommendations result in an annual level of Utah depreciation expense of approximately $150 million, or a Utah reduction of approximately $10 million based on depreciable plant as of December 31, 2006.[3] The following is a brief synopsis of each adjustment that I recommend.

- **Production Plant Life spans** – The Company's proposal to increase the life span for most of its coal-fired generating units to 64-years is reasonable. However, the Company's proposal for simple-cycle combustion turbines ("CT") and combined-cycle combustion turbines CT ("CCCT") are too short. Relying on longer life spans for these generating units is more appropriate. The impact of this adjustment is a reduction of approximately $500,000 based on allocated plant to Utah as of December 31, 2006.

[1] PacifiCorp's 2006 Depreciation Study ("2006 Study") at Schedule 1.
[2] Direct Testimony of RMP witness, Henry E. Lay, pg. 3, lines 50-59.
[3] The Company operates in several jurisdictions. Its investment in production, transmission, general and mining plant is allocated to each jurisdiction using various system allocation factors. The allocation factors are listed on Exhibit RMP_(HEL-1) and generally range from 39.6% to 42.6%.

- **Production Plant Net Salvage** – The Company proposes various negative net salvage values for its steam production generating units. These values are based on demolition cost studies performed between 1990 and 2004 for other utilities. This information was obtained and compiled by Mr. Roff, the Company's outside depreciation consultant. The Company's primary proposal to double its terminal net salvage level is based on a fatally flawed analysis and must be rejected. Based on various analyses discussed later, retaining the existing $25/kW negative net salvage for steam production plant is appropriate. Use of a $25/kW net salvage for steam production plant results in an approximate $2.4 million reduction to the depreciation expense based on plant allocated to Utah as of December 31, 2006.
- **Interim Additions** – For the first time the Company proposes to include interim additions into the calculation of production plant depreciation rates. Interim additions represent future estimated plant additions that may not transpire. It is inappropriate to include interim additions in depreciation analyses until after they occur. The impact of removing proposed interim additions is a reduction of $900,000 to the Utah jurisdiction based on plant as of December 31, 2006.
- **Mass Property Net Salvage** – The Company performed a historical net salvage analysis for its various mass property (i.e., transmission, distribution and general plant) accounts. Correction of the net salvage value proposed for 11 mass property accounts results in $23.4 reduction to depreciation expense allocated to Utah as of December 31, 2006. A review of the Company's testimony, exhibits, workpapers and responses to request demonstrates that the Company has manipulated its historical data and failed to properly relate the historical retirements with the existing plant in service. In particular, the Company inconsistently removed the historical activity relating to retirements where an outside party caused and compensated the Company for the event. This situation is normally identified as a reimbursed retirement. Correcting the flawed analysis performed by Mr. Roff and recognizing a limited level of

reimbursed retirements results in more appropriate mass property net salvage levels.

- **Combined Impact** – As shown on CCS Exhibit 2.1 page 1, the combined impact of the various recommendations is not the summation of the individual components. The life span and net salvage adjustments for production plant interact with one another. Therefore the combined impact of my recommendations results in a $27,377,373 reduction to depreciation expense based on direct and allocated plant to Utah as of December 31, 2006.

The Company's proposed functional depreciation rates and my corresponding rates are set forth below.

Functions	Existing	RMP	CCS
Steam Production	3.14%	2.01%	1.87%
Hydro Production	2.42%	2.82%	2.82%
Other Production	3.42%	3.56%	3.13%
Transmission	2.12%	2.15%	1.65%
Distribution - Utah	2.55%	3.17%	2.25%
General – Utah	4.38%	4.38%	4.21%
Mining - Utah	5.87%	3.52%	3.52%

SECTION III: DEPRECIATION GENERAL

Q. HOW DOES THE FEDERAL ENERGY REGULATORY COMMISSION DEFINE DEPRECIATION?

A. The Federal Energy Regulatory Commission ("FERC") defines depreciation as follows:

> 'Depreciation,' as applied to depreciable plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of 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.[4]

Q. WHAT FORMULAS ARE USED IN DETERMINING DEPRECIATION RATES?

A. There are two general formulas for calculating a depreciation rate. The whole life and the remaining life technique are the most commonly used formulas. The whole life technique is as follows:[5]

$$\text{Depreciation Rate (\%)} = \left[\frac{\frac{\text{Original Cost - Net Salvage}}{\text{Average Service Life}}}{\text{Original Cost}} \right]$$

The remaining life technique for calculating depreciation rates is as follows:

$$\text{Depreciation Rate (\%)} = \left[\frac{\frac{\text{Original Cost-Accumulated Provision for Depreciation-Net Salvage}}{\text{Remaining Life}}}{\text{Original cost}} \right]$$

The two formulas should equal each other when the difference between the theoretical reserve and the actual Accumulated Provision for Depreciation ("APFD") are recovered over the remaining life of the investment under the whole life formula

Q. WHAT IS THE DEFINITION OF NET SALVAGE REFERENCED IN THE FORMULAS ABOVE?

A. Net salvage, as defined by the FERC, is the gross "salvage value of property retired less the cost of removal."[6] Net salvage can either be positive in cases where gross salvage exceeds cost of removal or negative in cases where cost of removal is greater than the value of gross salvage.

[4] Title 18 Code of Federal Regulations ("CFR"), Part 101, Definition 12.

[5] A theoretical depreciation reserve calculation is developed and compared to the actual accumulated provision for depreciation in conjunction with the whole life technique. If the differential is significant, an amortization of the differential for some period of time may be recommended.

[6] CFR, Part 101, Definition 19.

Q. HOW DOES FERC DEFINE SALVAGE AND COST OF REMOVAL?

A. "Salvage" and "cost of removal" are defined in the CFR as follows:

> Salvage value means the amount received for property retired, less any expenses incurred in connection with the sale or in preparing the property for sale; or, if retained, the amount at which the material recoverable is chargeable to Materials and Supplies, or other appropriate amount.[7]
>
> Cost of removal means the cost of demolishing, dismantling, tearing down or otherwise removing electric plant including the cost of transportation and handling incidental thereto.[8]

In other words, "net salvage" is simply the value received for the sale, reuse, or reimbursement of retired property (gross salvage) less the cost of retiring such property (cost of removal), whether the retirement reflects demolition of the item of plant or only the accounting transaction for retiring an item of property in place (abandonment).

Q. ARE THERE ADDITIONAL CONSIDERATIONS IN DEPRECIATION BEYOND THE DEFINITIONS?

A. Yes, The definitions provide only a general outline of the overall utility depreciation concept. In order to properly reflect depreciation expense in a utility's revenue requirement in a rate proceeding, a depreciation system must be established. A depreciation system includes the following elements: method; procedure; and technique.

Q. BRIEFLY DESCRIBE WHAT IS MEANT BY "METHOD".

A. Method identifies whether a straight-line, liberalized, compound interest, or other type of calculation is being performed. The straight-line method is normally employed for utility depreciation proceedings.

[7] CFR Part 101, Definitions 35.
[8] *Id.* at Definition 10.

Q. BRIEFLY DESCRIBE WHAT IS MEANT BY "PROCEDURE".

A. "Procedure" identifies a calculation approach or grouping. For example, procedures can reflect the grouping of only a single item, items by vintage (year of addition), items by broad group or Average Life Grouping ("ALG"), and Equal Life Groupings ("ELG"). The vast majority of electric and gas utilities use the ALG procedure and RMP's proposed rates rely on this procedure.

Q. PLEASE BRIEFLY DESCRIBE WHAT IS MEANT BY "TECHNIQUE".

A. There are two main techniques with various sub-groupings. The two main techniques are the whole life technique and the remaining life technique. The whole life technique simply reflects calculation of a depreciation rate based on the whole life of plant (e.g., a ten year life would imply a ten percent depreciation rate over the life of the plant). Alternatively, the remaining life technique recognizes that depreciation is a forecast or estimation process that is never precisely accurate and requires "true-ups" in order to limit recovery to 100% of what a utility is entitled to over the entire life of the investment. Therefore, as time passes, the remaining life technique attempts to recover the remaining un-recovered balance over the remaining life or other period of time. Most utilities rely on a remaining life technique in utility rate matters.

Q. DO THE METHODS, PROCEDURES, AND TECHNIQUES INTERACT WITH ONE ANOTHER?

A. Yes. Different depreciation rates will result depending on what combination of method, procedure, and technique is employed. The difference will occur even when beginning with the same average service life ("ASL") and net salvage values.

Q. HOW DOES NET SALVAGE AFFECT THE CALCULATION OF DEPRECIATION?

A. The intent of the depreciation process is to allow the Company to recover 100% of investment less net salvage. Therefore, if net salvage is a positive 10%, then the utility should only recover 90% of its investment through annual depreciation charges, under the theory that it will recover the remaining 10% through net

salvage (e.g., sale of scrap, return to stores, etc.) at the time the asset retires (e.g., 90% + 10% = 100%). Alternatively, if net salvage is a negative 10%, then the utility should be allowed to recover 110% of its investment through annual depreciation charges so that the negative 10% net salvage that is expected to occur at the end of the property's life will still leave the utility whole (i.e., 110% - 10% = 100%).

Q. PLEASE SUMMARIZE THE GENERAL CONCEPT OF DEPRECIATION FOR UTILITIES.

A. The concept of depreciation utilized for utility ratemaking has evolved over time. Currently, there are still many different combinations of methods, procedures, and techniques employed in the development of utility depreciation rates. The issue regarding the correct depreciation system along with the correct net salvage to be employed for utility ratemaking must, among other things, take into account whether the results are systematic and rational. In arriving at a conclusion, the regulator must further take into account the quality and quantity of data relied upon, as well as the judgment employed by the depreciation analyst. Judgment plays an important role in the establishment of depreciation rates given the subjectivity involved in the various estimation processes. While judgment is critical, that does not mean that an analyst can simply refer to "judgment" as the basis for a proposal without providing meaningful factual support for that "judgment;" nor can "judgment" serve as the basis for *ignoring* relevant facts.

SECTION IV: <u>STEAM PRODUCTION PLANT LIFE SPANS</u>

Q. WHAT IS THE LIFE SPAN FOR A GENERATING UNIT?

A. The life span of a generating unit represents a time period between when a generating unit is first placed in service until it is retired. Thus, if a generating unit is placed into service on January 1, 1960, and is retired on December 31, 2019, it would have a life span of 60 years.

Q. DOES YOUR DEFINITION OF LIFE SPAN CORRESPOND TO THE DEFINITION RELIED UPON BY THE COMPANY FOR ESTIMATED PLANT DEPRECIABLE LIFE?

A. No. At page 2 of Mr. Mansfield's direct testimony he states that the estimated plant depreciable life ends when the plant is finally removed from service and ceases to generate electricity. He further states that a generating unit might not be immediately retired from an accounting perspective when the plant is removed from service as it may be retained in "reserve status". This definition does not comport with the definition of service life used in the industry, or with the FERC Uniform System of Accounts ("USOA").

Q. HOW DOES THE USOA DEFINE SERVICE LIFE?

A. The USOA defines service life as follows:

> Service life means the time between the date electric plant is included in electric plant in service, or electric plant leased to others, and the date of its retirement.[9]

The USOA makes no distinction of retaining a unit in "reserve status" as complying with the concept of retirement. If a unit is still providing service, even if it is in "reserve status", then it has not retired. Unfortunately, Mr. Mansfield does not describe what he means when he discusses retirement from an accounting perspective versus any other perspective. Simply put, when a unit is permanently removed from service, only then has it been retired.

Q. WHAT LIFE SPAN DOES THE COMPANY PROPOSE FOR ITS STEAM GENERATING FACILITIES?

A. As set forth on Exhibit RMP_(MCM-1) and Exhibit RMP_(DSR-1), the Company proposes a 64 year life span for most of its steam-fired generating facilities.

[9] 18 CFR Part 101, Definition 35.

Q. WHAT IS THE COMPANY'S BASIS FOR A 64-YEAR LIFE SPAN?

A. Mr. Mansfield states at page 4 of his direct testimony that there are three main criteria for the proposed life span. The first area is the evaluation of O&M history of the plants. The second area is the assessment of current conditions of major equipment components. Finally, the third area is the projected capital expenditures associated with various plants.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSED 64-YEAR LIFE SPAN FOR MOST OF ITS STEAM GENERATING UNITS?

A. Yes. The Company's proposed life span for the majority of its steam generating units is reasonable from the standpoint of economic theory and actual practice that is evolving in the industry. Moreover, it should be noted that the Company states that it "is not aware of any potential issue that would not allow the Company's steam generating facilities from reaching a 70-year life."[10]

Q. WHAT DO YOU MEAN WHEN YOU STATE THE ESTIMATE IS APPROPRIATE FROM AN ECONOMIC THEORY STANDPOINT?

A. The Company's coal-fired generating units represent significant levels of capital investment. Economic theory dictates that high cost capital equipment should be operated as long as possible to obtain the greatest level of economic benefit from the investment. Given the nature of the equipment and the cost of replacement equipment, large coal-fired generating units can produce lower cost electricity for longer periods of time than most other forms of generation. Therefore, it is normally cost effective to perform both minor and major maintenance on such equipment to keep it operating.

[10] Response to CCS 9.8.

Q. PLEASE EXPLAIN YOUR STATEMENT REFERENCING INDUSTRY INFORMATION.

A. While the initial life span estimates for steam generating units in the industry was relatively short, the utility industry now has the benefit of decades of experience in operating and maintaining larger coal-fired generating facilities. Based on that track record, it has become apparent that large coal units can provide economic and reliable service for 60 years or longer. In a recent proceeding involving Public Service of Oklahoma, the Corporation Commission of Oklahoma ordered the utility to rely on a 60-year life for its coal-fired generating facilities.[11] In a recent Public Service Company of Colorado ("PSCo") case, the utility agreed to a settlement that recognized a 60-year life for coal-fired generating units.[12]In addition, the engineering department of American Electric Power Company, one of the largest utilities in the nation, states that a life span of 60 years for a coal-fired steam unit is not only reasonable but achievable based on its own experience.

SECTION V: <u>OTHER PLANT LIFE SPANS</u>

Q. DO YOU AGREE WITH THE COMPANY'S REMAINING LIFE SPAN ESTIMATES FOR ITS CT AND CCCT GAS FACILITIES?

A. No. In my opinion, the Company's proposed 25-year life span for CT units and its proposed 35-year life span for CCCT units are too short.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSED LIFE SPAN FOR OTHER PRODUCTION PLANTS?

A. Mr. Mansfield states at page 10 of his direct testimony that the Company employed a similar process to that used for hydro generating facilities. In other words, he limited the expected life of these facilities to the length of either a Purchase Power Agreement for the specific facility or the expected life of a

[11] Corporation Commission of Oklahoma Cause No. 200600285.
[12] Public Service Commission of Colorado (PSCC") Docket No. 06S-234 EG, Settlement Agreement at page 11 and PSCC Staff witness Mr. Comp's Answering Testimony at page 15.

critical component. Mr. Mansfield further referenced "the original equipment's design lives" as the basis for the 25-year life span for CT units.[13]

Q. DID MR. MANSFIELD IDENTIFY ANY OTHER BASIS FOR THE COMPANY'S PROPOSED CT AND CCCT PLANT LIFE SPANS?

A. Yes. At page 11 of his testimony, he raises the issues of the impact of the cycling operation of a plant versus steady state conditions as something that "may reduce" the plants expected useful life. In addition, Mr. Mansfield also makes reference to the original design life for these particular facilities in his exhibit RMP (MCM-1).

Q. DO ANY OF THESE STATEMENTS OR REFERENCES BY MR. MANSFIELD RISE TO THE LEVEL OF CREDIBLE EVIDENCE?

A. No. Theses generalized statements represent nothing more than extremely conservative estimates on the part of the Company. Electric utilities have historically claimed artificially short life spans based on initial design criteria. In more than a quarter of a century of seeking any initial design criteria documentation that would support the claimed artificially short lives by utilities, I have yet to receive a single document that sets forth the claimed short life span. In fact, the "original design" conditions provided by the Company in this case in no manner support any life span over another.[14]Moreover, even if there were specific indications in the original design life documentation, it has long since been proven to be completely inaccurate. During the 1970's, utilities attempted to justify 30- or 35-year life spans for coal-fired generation based on original design parameters and even attempted to justify 25-year life spans for nuclear generation. Those coal and nuclear units are the same type of units that this Company and other companies are now proposing 60-year life spans. Simply put, the Company has no real documentation to support its generalized "original design" life claim.

[13] Mr. Mansfield's Direct Testimony at page 10.
[14] Response to CCS 9.7.

Q. HAS THIS COMPANY SPECIFICALLY RELIED ON SHORTER SERVICE LIVES FOR ITS GENERATING FACILITIES IN THE PAST?

A. Yes. Based on the information provided in Exhibit RMP_(MCM-1), it is clear that in the early 1980's the Company relied on 34-year life spans for the same coal-fired generating units that it is currently recommending a 64-year life.[15] In addition, for the Company's Little Mountain CT unit the Company has documented that it initially proposed a 30-year life as far back as the early 1980's compared to its current life span proposal of 38 years.[16]

Q. IS THE COMPANY AWARE OF ANY PROHIBITIONS TO THE EXTENSION OF PURCHASED POWER AGREEMENTS TIED TO THE LIFE OF CERTAIN GENERATION?

A. No, the Company is unaware of any prohibitions.[17]

Q. DOES THE COMPANY ADMIT WITH PROPER MAINTENANCE LONGER PLANT LIVES MAY BE OBTAINED FOR ITS CTs?

A. Yes.[18] There is no currently known reason why these units cannot operate for periods longer than proposed by the Company.

Q. HAS THE COMPANY DEMONSTRATED A PATTERN OF HISTORICALLY UNDERESTIMATING REASONABLE LIFE SPANS FOR ITS GENERATING FACILITIES?

A. Yes. Moreover, the Company attempts to continue this practice in the area applicable to CT and CCT generating units. It is time to stop this practice of artificially setting short life span estimates for recently installed generating facilities.

[15] Response to CCS 1.11-Attachment 1.
[16] *Id.*
[17] Response to CCS 9.13.
[18] Response to CCS 9.14.

Q. IS THERE EMPIRICAL DATA THAT DEMONSTRATES THAT CT GENERATING UNITS CAN OPERATE FOR MORE THAN 25 YEARS?

A. Yes. The Energy Information Agency ("EIA") publishes an inventory of power plants. Review of the 2004 publication identifies more than 70 CTs that had operated for longer than the Company's proposed 25-year life span, many of which were over 40 years. This number has undoubtedly increased since 2004. This data helps to confirm the Company's proposal for a 38-year life span for its Little Mountain CT unit is not only reasonable, but achievable.

Q. IS THERE SIMILAR DATA AVAILABLE FOR CCCT UNITS?

A. While there is data, there are technological differences between older and newer CCCT units. Many CCCT units rely on older steam facilities for their steam source, and thus portions of the facilities have also exceeded the Company's proposed 35-year life span.

Q. IF RMP IS PROPOSING 64-YEAR LIFE SPANS FOR ITS STEAM-FIRED COAL GENERATION DOES ITS PROPOSED 35-YEAR LIFE SPAN FOR CCCT UNITS APPEAR REASONABLE?

A. No. The steam portion of a CCCT facility should be the greater cost component of the facility. Even if the CT portion of the CCCT facility is assumed to have the short 30-year life span as proposed by the Company in conjunction with the Company's assumed 64-year life span for steam-fired units, a 50/50 weighting would yield a 47-year dollar weighted life span ((30+64)/2=47). This helps demonstrate that the Company is again attempting to implement artificially short life spans for its new technology generation facilities just as it has in the past.

Q. WHAT DO YOU RECOMMEND?

A. I conservatively recommend that the life spans for CT and CCCT generating facilities be increased to 30 and 40 years, respectively. My recommendations recognize the various admissions by the Company noted above, the practice of the Company to continuously propose artificially short life spans for generation

facilities, the fact that steam-fired generation is now expected to operate for more than 60 years, and that the industry has demonstrated that gas CT and CCCT investments have already lasted longer than the life spans proposed by the Company.[19]

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION ON DEPRECIATION EXPENSE?

A. The standalone impact of my recommendation is a $1.3 million reduction to total Company depreciation expense based on plant as of December 31, 2006, and a corresponding $500,000 reduction to Utah.

SECTION VI: PRODUCTION PLANT NET SALVAGE

Q. WHAT IS THE ISSUE IN THIS PORTION OF YOUR TESTIMONY?

A. This portion of my testimony addresses the Company's proposed excessive level of negative net salvage associated with its production plant.

Q. WHAT DOES THE COMPANY PROPOSE FOR STEAM PRODUCTION PLANT NET SALVAGE?

A. The Company proposes two different net salvage values for its steam-fired generation. The Company proposes negative interim net salvage values of a 25%, 10%, 15%, 10% and 5% for Accounts 311, 312, 314, 315, and 316, respectively.[20] The Company also proposes a $50/kW terminal negative net salvage for its steam-fired generation investment.[21]

[19] EIA's publication entitled Inventory of Power Plants in the United States.
[20] 2006 Study at Schedule 2.
[21] Mr. Roff's direct testimony at page 11.

Q. WHAT DOLLAR AMOUNT OF NEGATIVE NET SALVAGE DO THESE PROPOSALS YIELD?

A. Based on plant as of December 31, 2006, these proposals yield a $361.9 million depreciation expense requirement over the entire life of the investments.[22]

Q. WHAT IS THE EQUIVALENT NET SALVAGE RATE FOR THE $361.9 MILLION AMOUNT?

A. The equivalent net salvage rate is a negative 7.72%.[23]

Q. WHAT IS THE EXISTING NET SALVAGE LEVEL?

A. The existing depreciation rates are based on a $25/kW terminal net salvage. Therefore, the Company's proposal represents an approximate 100% increase in negative net salvage.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSED 100% INCREASE?

A. Mr. Roff, the Company's depreciation consultant, states that production plant interim net salvage was based on his review and analyses of trends reflected in the Company's actual data base.[24] Mr. Roff further states that the terminal net salvage was based on cost estimates made by other utilities for dismantling generating units.[25] The vast majority of the proposed negative net salvage for steam production is associated with the terminal net salvage proposal.

Q. WHEN WERE THE DEMOLITION COSTS STUDIES THAT MR. ROFF RELIED ON ACTUALLY PERFORMED?

A. These demolition cost studies were performed between 1990 and 2004,[26] the majority of which occurred between 1990 and 1995.

[22] 2006 Study at Schedule 1.
[23] *Id.*
[24] Mr. Roff's Direct Testimony at page 10.
[25] *Id.*
[26] 2006 Study at Exhibit RMP_(DSR-4).

Q. WHAT DOES MR. ROFF CLAIM HE GLEANED FROM THESE VARIOUS DEMOLITIONS STUDIES?

A. Mr. Roff calculated, on average, a $54/kW net removal cost for coal-fired units.[27]

Q. SPECIFICALLY, WHAT VALUES DID MR. ROFF OBTAIN FOR COAL-FIRED UNITS BASED ON HIS REVIEW OF THESE DEMOLITION COST STUDIES?

A. Mr. Roff obtained an extremely wide range of results from $3/kW up to $575/kW.[28] That range represents a relationship where the highest value is approximately 192 times the level of the lowest value. Ranges of this magnitude on their face call into question the credibility of the process employed.

Q. DID MR. ROFF CONSIDER ANY OF THESE VALUES AS OUTLIERS?

A. No.[29] This unsupported claim is made even though the highest value is approximately seven standard deviations from the mean.[30]

Q. HAVE YOU TESTED THE SAMPLE RELIED UPON BY MR. ROFF TO DETERMINE IF ANY OUTLIERS DO EXIST?

A. Yes. Given the dispersion set forth in Mr. Roff's exhibit, it is clear that outliers do exist. Based on an outlier test criteria of two standard deviations, nine of the high dollars per kW demolition cost values would be considered outliers. Removing these nine others from Mr. Roff's sample reduces the average cost by approximately $8/kW from what Mr. Roff relied on.

Q. DID THE COMPANY PROVIDE YOU WITH A COPY OF ALL DOCUMENTS IN MR. ROFF'S POSSESSION REGARDING THESE VARIOUS DEMOLITION COST ESTIMATES?

A. Yes.[31]

[27] Mr. Roff's Direct Testimony at page 11.
[28] 2006 Study at Exhibit RMP_(DSR-4).
[29] Response to CCS 8.8.
[30] 2006 Study at Exhibit RMP_(DSR-4).

Q. WHAT DO THE DOCUMENTS PROVIDED REPRESENT?

A. The documents represent a summary of the actual analysis performed by the various outside consulting firms for the various utilities referenced. They do not constitute the underlying workpapers necessary to review and test the validity of the results, or to determine what caused the dramatic variance in results.

Q. DOES MR. ROFF ADMIT THAT HE DOES NOT HAVE THE WORKPAPERS UNDERLYING FOR THESE VARIOUS STUDIES?

A. Yes.[32]

Q. HAVE YOU REVIEWED THE VARIOUS SUMMARY DOCUMENTS PROVIDED BY MR. ROFF?

A. Yes. As previously noted, I find them inadequate to support the reasonableness of the Company's proposal.

Q. WHAT DO YOU CONCLUDE FROM YOUR REVIEW?

A. Mr. Roff has taken the summary results from these studies and used them in an inappropriate manner to arrive at his proposal.

Q. HAS MR. ROFF ALSO MODIFIED THE ORIGINAL RESULTS OF THE STUDIES HE REVIEWED?

A. Yes. In every instance, Mr. Roff accepted the total demolition cost estimates and then escalated each at a 2.5% compounded annual rate from the study date to the year 2006. In other words, Mr. Roff ignored any potential change in productivity, any change or inconsistencies in any internal assumption made within any study, any change in the level of asbestos that may be removed in between the study date and the date of actual unit retirements, or the fact that cost of removal and gross salvage may have changed at different rates over time. Mr. Roff also failed to recognize that 17 generating units in his study are in Canada and that the

[31] Response to CCS 1.24 Supplemental.
[32] Response to CCS 8.6.

Canadian dollar was worth approximately 70 cents to the U.S. dollar at the time of those studies.[33] Mr. Roff's failure to even consider the fact that gross salvage has changed significantly over time in a manner different than the inflation level he assumed has a significant impact on his conclusion.

Q. PLEASE EXPLAIN THE SIGNIFICANCE OF YOUR LAST STATEMENT REGARDING THE SIGNIFICANT CHANGE IN GROSS SALVAGE OVER TIME.

A. Many of the studies relied upon by Mr. Roff include two major categories. Those categories are the demolition costs offset by a component for salvage or the sale of scrap materials. Mr. Roff's approach of simply taking the total net value from each study and escalating it at 2.5% to the year 2006, ignores reality and results in a flawed proposal. In particular, the values associated with scrap copper and steel have escalated dramatically in comparison to Mr. Roff's assumed 2.5% annual inflation factor. This situation, when properly recognized, significantly reduces the result of his calculation.

Q. CAN YOU PROVIDE AN EXAMPLE OF THIS SITUATION?

A. Yes. One of the demolition cost studies relied upon by Mr. Roff was for the Sporn Power Plant owned by Appalachian Power Company. Based on the information provided, that 1990 study yielded a total cost of removal of $16,459,124 and an offsetting scrap value allowance of $4,761,237.[34] The combination of the cost of removal and gross salvage yielded a net cost of removal of $11,697,887, as shown on Mr. Roff's Exhibit RMP_(DSR-4).

[33] YAHOO historical conversion rates for currency.
[34] Response to CCS 1.24 Supplemental.

Q. WHAT COMPRISED THE APPROXIMATE $4.8 MILLION OF SALVAGE ALLOWANCE FOR THIS PLANT?

A. The majority of the salvage allowance was associated with copper-related products, while scrap steel comprised the second most significant component of salvage.[35]

Q. WHAT WERE THE ASSUMED PRICES OF COPPER INCLUDED IN THAT 1990 STUDY?

A. Scrap copper prices were assumed to range from a low of $0.375 up to $0.90 a pound.

Q. ARE CURRENT SCRAP COPPER PRICES SIGNIFICANTLY HIGHER THAN THOSE LEVELS RELIED UPON IN THE 1990 STUDY?

A. Yes. For example, copper insulated electric cable, assumed in 1990 to be at 37.5 cents per pound, currently is priced at a $1.55 per pound or 4.1 times the 1990 level. This equates to over a 9% annual compounded growth rate. Given the quantity of #2 copper scrap involved 2.1 million pounds, the price for #2 copper is more significant. The 1990 price for this category of copper was $0.60 a pound while the current price is approximately $2.73 a pound or 4.6 times the level of 1990. This again represents a compounded inflation rate of 10%. Copper tubes, the second highest quantity of copper was $0.85 a pound in 1990, but is currently $3.09 a pound, or 3.6 times the 1990 level.

Q. ARE CURRENT SCRAP STEEL PRICES ALSO SIGNIFICANTLY HIGHER THAN IN 1990?

A. Yes. The current scrap price for steel has also escalated dramatically. In fact, the current average price for #1 and #2 scrap steal is approximately 5.7 times the level reflected in the 1990 study.

[35] *Id.*

Q. WHAT IS THE IMPACT OF USING ACTUAL CURRENT SCRAP METAL PRICES RATHER THAN INAPPROPRIATELY ESCALATING THE SALVAGE VALUE AS MR. ROFF DID IN HIS ANALYSIS?

A. CCS Exhibit (2.2) sets forth an example for the Sporn Power Plant listed by Mr. Roff on Exhibit RMP____(DSR-4S). For the Sporn generating station, the removal of the 1990 salvage allowance and escalation of the gross cost of removal at the 2.5% rate assumed by Mr. Roff, and then adding back in the current salvage value of scrap material, would result in an approximate $10/kW negative net salvage level. This corrected level of net removal cost is approximately 15% of the $58/kW reflected in Mr. Roff's analysis. This confirms Mr. Roff's analysis is flawed and can not be relied upon.

Q. HAVE YOU TESTED TO SEE WHETHER THE VALUES RELIED UPON BY MR. ROFF ARE VALUES ACTUALLY RELIED ON BY THE UTILITIES INCLUDED IN HIS ANALYSES?

A. Yes. I was able to identify the current level of negative net salvage relied upon by numerous utilities reflected in Mr. Roff's historical database. As set forth in the table below, not a single utility identified a net salvage value for steam production plants as high as the values reflected in Mr. Roff's database. As shown below, most values were significantly lower than what Mr. Roff estimated through his flawed approach.

Utility	Roff's 2006 Estimated ($/kW)	Actual Net Salvage ($/kW)
Alabama Power	$67	$29
Consumers Power	$31	$29
Georgia Power	$37	$32
Gulf Power	$89	$20
Indianapolis Power (Petersburg)	$51	$27
Southern Ele. Gen.	$56	$23
Otter Tail Power	$12	$5
Tampa Electric	$39	$28

Values taken from 2005/2006 FERC Form 1s.

Q. HAS ANY REGULATORY AGENCY APPROVED ANY OF THE DEMOLITION COST ESTIMATES INCLUDED IN MR. ROFF'S EXHIBIT RMP (DSR-4)?

A. No. Mr. Roff was requested to identify each regulatory agency that adopted any of the demolition cost estimates set forth in his exhibit and he was unable to identify a single regulatory body that had approved any of those values.[36]

Q. DID MR. ROFF ALSO RELY ON THE 2004 BLACK & VEATCH STUDY PERFORMED FOR PACIFICORP?

A. Yes. Mr. Roff relied on that study in two different ways: (1) he included the values within his sample of demolition cost estimates set forth in Exhibit RMP_(DSR-4); and (2) he also relied upon that study as an indication that his proposed $50/kW value was conservative.[37]

[36] Response to CCS 8.7.
[37] Mr. Roff's Direct Testimony page 11.

Q. HAVE YOU REVIEWED THE DEMOLITION COST ESTIMATES IN THE BLACK & VEATCH STUDY FOR REASONABLENESS?

A. Yes and I found the estimate contained in the study to be excessive.

Q. WERE YOU RECENTLY INVOLVED IN ANOTHER PROCEEDING IN WHICH BLACK & VEATCH PERFORMED THE SAME TYPE OF STUDY FOR ANOTHER UTILITY?

A. Yes. In the last several years, Black & Veatch performed an identical study for Nevada Power Company applicable to a select group of its plants. That study produced high cost of removal estimates similar to the estimate in the PacifiCorp study. However, the credibility of the Black & Veatch study was put to the test in Nevada when Nevada Power Company actually demolished some of its plants in question. The actual demolition cost was approximately 40% of the estimates in the Black & Veatch study. Thus, the Commission should give little weight to the Black & Veatch study as evidence supporting Mr. Roff's recommended demolition cost value of $50/kW.

Q. WHAT LEVEL OF DEMOLITION COST WOULD TRANSPIRE IF THE RELATIONSHIP EXHIBITED IN NEVADA WERE APPLIED TO THE BLACK & VEATCH STUDY FOR PACIFICORP?

A. If the Black & Veatch estimated level of demolition costs for PacifiCorp were to be adjusted to reflect the error level realized in Nevada, it would reduce the approximate $66/kW cost estimate to approximately $25/kW.

Q. IS THERE YET ANOTHER PROBLEM WITH MR. ROFF'S ANALYSES AND PROPOSAL?

A. Yes. The megawatt size plant sample of other utilities ranges from a low of 25 MW to a high of 1,300 MW. Given that there are certain costs that are constant no matter what the size of the project while other cost vary with size and difficulty of the job, Mr. Roff was asked if he believes the concept of economies

of scale applies to demolition cost of larger plants.[38] Mr. Roff responded by stating that this "concept would not seem to apply to removal of generation stations."[39]

Q. IS MR. ROFF'S RESPONSE CONSISTENT WITH HIS PRIOR TESTIMONY?

A. No. In a recent case in Hawaii, Mr. Roff did recognize the "relative capacity" of units in his sample.[40] In fact, he testified that "the larger the facility, the lower the unit cost to dismantle. A figure of $35/kW (based on 100 megawatt units) was utilized."[41]

Q. ARE MOST OF THE COMPANY'S UNITS LARGER THAN 100 MW?

A. Yes.

Q. HAS THE COMPANY PREVIOUSLY DECOMMISSIONED A STEAM GENERATING STATION?

A. Yes. In 1991 it decommissioned the Hale plant.[42]

Q. WHAT $/KW COST DID THE COMPANY INCUR WITH THAT PROJECT?

A. The Company incurred a negative net salvage or cost of removal of approximately $27/kW.[43]

Q. WHAT WAS THE SIZE OF THE HALE PLANT?

A. The Hale plant was only 44 MW, or very small.[44] Therefore, the Hale removal cost $/kW represents a high per unit cost estimate.

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[38] Data Request to CCS 8.12.
[39] Response to CCS 8.12.
[40] Response to CCS 8.17 page 697.
[41] *Id.*
[42] Response to DPR 5.11.
[43] *Id.*
[44] *Id.*

Q. WHAT DO YOU RECOMMEND FOR THE COMPANY'S STEAM PRODUCTION NET SALVAGE?

A. I recommend that the Company's proposed increase to $50/kW be rejected and that the Commission retain the existing $25/kW negative net salvage estimate.

Q. DO YOU BELIEVE THAT YOUR $25/KW ESTIMATE IS CONSERVATIVE?

A. Yes. It is conservative because the approach reflected in this case represents a worse case scenario. In other words, it assumes full demolition of a power plant and site restoration. This worst case scenario approach assigns no probability to the concept that a generating facility may actually be sold rather than demolished. If a small probability (e.g., 10%) were assigned to the concept that some generating facilities of the Company might actually be sold rather than be demolished, a positive overall net salvage would be more appropriate.

Q. HAS THE COMPANY, IN FACT, SOLD GENERATION IN THE PAST?

A. Yes. Approximately six years ago, the Company sold its 625 MW share of the Centralia Plant. It has also sold several hydro plants.[45] Thus, it is not far fetched to assume that some generating facilities could be sold in the future rather than demolished.

Q. IN ADDITION TO THE FUTURE POSSIBILITY OF THE COMPANY SELLING RATHER THAN DECOMMISSIONING A GENERATION PLANT, IS THERE ANOTHER REASON WHY ALL ESTIMATES IN THIS CASE MAY BE VIEWED AS EXCESSIVE?

A. Yes. Power plants include access to transmission facilities, fuel transportation modes (e.g., gas pipelines, rail lines for coal, etc.), as well as other infrastructures necessary for any future power plant. Therefore, even if the Company were to actually retire a generating facility and decide to demolish it, it is highly likely that either the Company or another entity would be interested in such site to

[45] Response to DPU 5.12.

construct new generating facilities. If that were the case, not all facilities would need to be demolished. This approach reduces the cost of removal and, potentially results in positive levels of overall net salvage. I believe these are important considerations for the Commission to consider in its determination of an overall appropriate level of net salvage for production facilities.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation would result in a $6 million reduction to depreciation expense based on plant in service as of December 31, 2006. The allocated impact of my recommendation to Utah is $2.4 million.

SECTION VII: INTERIM ADDITIONS

Q. WHAT DO YOU ADDRESS IN THIS PORTION OF YOUR TESTIMONY?

A. I address the issue of the Company's inappropriate attempt to include interim additions in its calculation of depreciation rates for its generation investment.

Q. WHAT ARE INTERIM ADDITIONS?

A. Interim additions are theoretical or estimated future dollars of capital for either replacing existing facilities of adding new facilities to an existing generating plant. Such additions are referred to as interim since they do not reflect the dollars of investment currently in service.

Q. ARE INTERIM ADDITIONS APPROPRIATE FOR DEPRECIATION PURPOSES?

A. No. Interim additions are inappropriate since they reflect the estimation of potential additions to plant-in-service that currently do not exist and are not used and useful in providing service. Interim additions may never actually occur or may occur at a much different date or amount than initially assumed.

Q. IS THE COMPANY'S REQUEST FOR INTERIM ADDITIONS BASED ON ESTIMATED PLANT ADDITIONS TO THE DEPRECIATION STUDY TEST YEAR?

A. Yes, it corresponds to "plant not yet in service".[46]

Q. CAN YOU IDENTIFY A SOURCE SUPPORTING YOUR POSITION THAT ESTIMATED INTERIM ADDITIONS SHOULD NOT BE REFLECTED IN THE CALCULATION OF DEPRECIATION RATES?

A. Yes. The National Association of Regulatory Utility Commissioners ("NARUC") 1968 publication entitled Public Utility Depreciation Practices describes, on pages 133 and 134, how interim additions are treated. It states the following.

> *Appropriate computations must be made for such interim retirements, but interim additions are not considered in the depreciation computation until they are actually made.*
>
> *It is possible to estimate the probable future retirements and additions to a particular piece of property and thus arrive at a single depreciation rate applicable over the entire life of the property. This is unsatisfactory practice inasmuch as considerable speculations would be required to make such an estimate on future additions. In any event, this is not necessary inasmuch as the depreciation accrual can be adjusted fine in the near future.* (Emphasis added).

The 1996 NARUC depreciation publication reaffirms this concept.[47]

Q. HAS THE FERC RENDERED A DECISION ON THE ISSUE OF INTERIM ADDITIONS?

A. Yes. In 1983, the FERC reviewed and ruled on this issue in its Opinion No. 165, a Commonwealth Edison Company ("Commonwealth") case.[48] In that case, Commonwealth had proposed taking into account budgeted future interim additions and stated that without the inclusion of the budget interim additions, there would be a violation of the matching principle (i.e. revenues collected

[46] Response to CCS 8.13.
[47] Page 142 states "... interim additions are not considered in the depreciation base or rate until they occur."
[48] 23 FERC paragraph 61,219 (1983).

corresponding to the expense incurred). In Opinion No. 165, the FERC clearly opposed the recognition of interim additions:

> *... we reject its [Edison's] claim that this will leave some costs unrecovered after the plant is retired. Such a result might occur if Commonwealth would fail to adjust its depreciation rates from time to time, taking into account up-to-date information on changes in plant balances, estimated remaining life, salvage and removal cost experience, and accumulated provision for depreciation to date. However, Commonwealth not only is free to make such adjustments to its depreciation rates, but is obligated to do so to assure that as near as possible the service value of electric plant is fully recovered during its useful life. For all these reasons, we find no basis to approve Commonwealth's depreciation methodology.*[49]

Q. DO THE COMPANY'S EXISTING DEPRECIATION RATES REFLECT INTERIM ADDITIONS?

A. No.

Q. HAS THE COMPANY INCLUDED INTERIM ADDITIONS IN ITS DEPRECIATION STUDIES DURING THE PAST 20 YEARS?

A. No.[50]

Q. HAS MR. ROFF PREVIOUSLY PROPOSED DEPRECIATION RATES FOR ELECTRIC UTILITIES THAT DO NOT INCORPORATE INTERIM ADDITIONS?

A. Yes.

Q. WHY ARE INTERIM ADDITIONS IMPORTANT IN THIS CASE?

A. While the Company's request reflects only an estimate of interim additions for the next 5 years, it represents a significant change in policy. If the limited request is granted in this case, it may result in the Company proposing much greater levels of interim addition estimates in future depreciation studies.

[49] 23 FERC at page 61,489.
[50] Response to CCS 8.2 (g).

Q. IS THERE A NEED TO SPECULATE ON THE COMPANY'S FUTURE INTERIM ADDITIONS?

A. No. The Company will have the opportunity to recover actual additions to plant from customers once they occur.

Q. WHAT IS THE IMPACT OF REMOVING INTERIM ADDITIONS FROM THE COMPANY'S REQUEST?

A. The standalone impact of removing interim additions is a reduction to total Company generation depreciation expense of $2.2 million based on plant as of December 31, 2006 and a corresponding reduction to Utah of $900,000.

SECTION VIII: MASS PROPERTY NET SALVAGE

A. GENERAL

Q. WHAT DOES THE COMPANY PROPOSE FOR MASS PROPERTY NET SALVAGE?

A. Mass property plant relates to those investments in transmission, distribution, general and mining categories of plant. As shown on Schedule 1 of the 2006 Study, the Company proposes $675 million of negative net salvage over the life of the transmission plant, of which $270 million is allocated to Utah. In addition, the Company proposes to charge Utah customers $795 million for net salvage over the life of distribution, general and mining plant either directly assigned or allocated to Utah. It is the proposed large levels of negative net salvage for transmission and distribution accounts that result in approximately a $12 million annual increase in depreciation expense for Utah.

Q. CAN YOU PROVIDE AN ACTUAL EXAMPLE OF HOW RMP'S PROPOSED NET SALVAGE IMPACTS REVENUE REQUIREMENT?

A. Yes. For Account 364-Distribution Poles, Towers and Fixtures, the Company requests a negative 105% net salvage. Given a plant balance of $257 million as of

December 31, 2006, the Company's net salvage figure results in approximately $270 million of additional revenue requirement over the life of the investment *above* the recovery of the original $257 million investment.[51] The proposed annual depreciation rate for this account would have to increase to 5.08% to recover all proposed amounts. Absent the impact of any negative net salvage (i.e., a zero level of net salvage), the annual depreciation rate declines to only 1.31%.[52] The difference in rates applied to the $257 million plant balance for 2006 would result in approximately a $9.7 million annual revenue requirement impact for this account alone.

Q. WHAT PERIOD HAS THE COMPANY CHOSEN TO ANALYZE FOR ITS NET SALVAGE ANALYSIS RELATING TO THE MASS PROPERTY ACCOUNTS?

A. The Company has analyzed a 15-year period, 1992 through 2006.[53] The Company's analysis of the historical data relies on "rolling" and "shrinking" bands of data, with particular emphasis in 5-year (2002-2006), 10-year (1997-2006), and full band (1992-2006) summaries.

Q. HAVE YOU REVIEWED ALL THE INFORMATION PRESENTED BY THE COMPANY IN SUPPORT OF ITS NET SALVAGE REQUEST?

A. Yes. The information provided is inadequate to support or demonstrate the appropriateness of the Company's request. The Company's net salvage analyses for transmission, distribution, and general plant basically reflects a mechanical averaging of historical data without appropriate evaluation of the data to test the reasonableness of the results. Moreover, the Company has manipulated the historical data to eliminate reimbursed retirements from the net salvage analyses, but not from the life analyses for the same plant.[54] In my opinion, this

[51] 2006 Study at Schedule 1 page 11.
[52] *Id*., with zero level of net salvage.
[53] Response to CCS 1.2.
[54] Response to CCS 8.1(a).

inconsistent treatment of reimbursed retirements is inappropriate and is one of the factors underlying my proposed adjustments to various mass property accounts.

Q. DOES THE DEPRECIATION STUDY CLAIM THAT AN EVALUATION PROCESS WAS EMPLOYED?

A. Yes. The 2006 Study, at page 15, contains a discussion of the evaluation process and is set forth below.

EVALUATION OF ACTUAL EXPERIENCE

> *The analysis involves historical retirement experience. Since the depreciation rates are to be applied to surviving property, the historical mortality experience indicated by the Life and the Salvage and Cost of Removal Analyses must be evaluated to ensure that the mortality characteristics used to calculate the rates are applicable to surviving property. This evaluation is required to ensure the validity of the recommended depreciation rates.*
>
> *The evaluation process requires knowledge of the type of property surviving, the type of property retired, the reasons for changing life, dispersion, salvage and cost of removal characteristics; and the effect of present and future plans on property life.* [Emphasis added].

While the Company claims to have performed an evaluation process, a careful review of RMP's 2006 Study, its workpapers, and its responses to data request yields a different result.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATION CONCERNING THE COMPANY'S NET SALVAGE VALUES FOR MASS PROPERTY.

A. The Company's proposed net salvage analysis in the mass property area is flawed and insufficiently substantiated. Consequently, I recommend a reduction to the Company's depreciation expense based on adjustments to its proposed mass property net salvage levels. The standalone impact of my net salvage

recommendations is a reduction of $23 million in annual depreciation expense based on plant as of December 31, 2006.

Q. WHAT MASS PROPERTY ACCOUNTS ARE YOU RECOMMENDING CHANGES TO FOR NET SALVAGE?

A. I am recommending changes to 11 mass property accounts. Those adjusted accounts are listed below.

ACCOUNTS	EXISTING %	PACIFICORP PROPOSED %	CCS % RECOMMENDATIONS
353 Transmission Station Equipment	-5	-10	0
354 Transmission Towers & Fixtures	-30	-10	0
355 Transmission Poles & Fixtures	-30	-50	-15
356 Transmission Overhead Conductors & Devices	-30	-45	-10
364 Distribution Poles, Towers & Fixtures	-75	-105	-35
365 Distribution Overhead Conductors & Devices	-20	-75	-10
366 Distribution Underground Conduit	-50	-70	-15
367 Distribution Underground Conductor & Devices	-15	-45	-5
368 Distribution Line Transformers	0	-15	+5
369 Distribution Services	-20	-20	-10
390 General Plant Structure and Improvements	0	+5	+20

Q. PLEASE DISCUSS THE GENERAL PROBLEMS WITH THE COMPANY'S NET SALVAGE ANALYSIS?

A. Three of the more significant general problems with the Company's proposals in the area of mass property net salvage can be summarized as follows:

- The Company has elected to inappropriately remove all impacts of reimbursed retirements in the salvage analysis. The elimination of reimbursed retirements from the historical data has a dramatic impact on the results.
- The Company failed to evaluate whether the retirement activity, during the historical data period it relied upon, reasonably matches the type of investment remaining in plant in service. Failure to recognize the

significant differences between retirements and surviving plant has an appreciable impact on the net salvage values for certain accounts.

- The Company failed to provide any meaningful narrative explanation of its selection process. The Company's proposals appear to be nothing more than the approximate mathematical average of the historical period relied upon for most accounts. This situation exists despite the Company's claim that its process relies on extensive discussions with Company accounting, engineering and operating personnel, and specific analysis of retirements to identify the type of property retired and reason for retirements.

B. REIMBURSED RETIREMENTS

Q. WHAT ARE REIMBURSED RETIREMENTS?

A. Reimbursed retirements represent situations where an outside party reimburses the Company for retirement activity. Examples of reimbursed retirements may be situations where a governmental entity request that the Company move its power poles due to road widening, or where an outside party damages a pole due to an accident. In either case, the outside party has to reimburse the Company for the event.

Q. DOES THE COMPANY RECOGNIZE REIMBURSED RETIREMENTS IN ITS ACCOUNTING SYSTEM?

A. Yes. The Company recognizes reimbursed retirements beginning in 1999 and Mr. Roff included the information in his net salvage workpapers.

Q. HOW DO REIMBURSED RETIREMENTS AFFECT THE NET SALVAGE CALCULATION?

A. As previously noted, net salvage is equal to gross salvage less cost of removal. Thus, when the Company retires and replaces an item of plant, it incurs replacement costs, but also receives funds (which represent gross salvage) from

the outside party causing the event. The amount received precisely corresponds to the FERC definition of salvage that has been previously set forth. The Company does not dispute this since it reports reimbursed retirement amounts in FERC Account 108-APFD.

Q. DOES THE COMPANY REPORT REIMBURSED RETIREMENTS ON A CONTINUOUS BASIS?

A. Yes. The Company reports, for almost all mass property accounts, an annual level of reimbursed retirements for the period 1999 thought 2006. Therefore, it is a normal reoccurring event. The data prior to 1999 was not provided as it was prior to the Company's conversation to the new SAP software system.

Q. FROM A DEPRECIATION THEORY STANDPOINT, SHOULD REIMBURSED RETIREMENTS BE RECOGNIZED?

A. Yes. First, the Company incurs reimbursed retirements on an annual basis, thus, they have become part of the mortality characteristics exhibited by the plant. Second, it is important to be consistent between the life analysis and the net salvage analysis of a depreciation study. If reimbursed retirements are included in the life analysis and have the impact of shortening the average service life, then the corresponding amount received for salvage should also be included in the overall depreciation evaluation in order to comply with the matching principle for depreciation purposes.

Q. SHOULD REIMBURSED RETIREMENTS BE CONSIDERED A REDUCTION IN THE COST OF NEW PLANT ADDITIONS?

A. No, unless there is a specific contractual arrangement that clearly identifies all amounts received are solely for the purpose of constructing a replacement facility without any consideration for the payment for the retired facility. However, this is not the situation here. The Company's agreement for the relocation work specifically states that it "would charge Requestor [outside 3rd party] to remove

the Existing Facilities."[55] There can be no doubt that the Company charges and receives amounts that comply with the USOA's definition of salvage.

Q. HAVE YOU REVIEWED THE COMPANY'S CONTRACT FOR SUCH SITUATIONS?

A. Yes. The contract did not identify any limiting language that would negate the appropriate recognition of reimbursed retirement amounts as gross salvage.

Q. DID THE COMPANY ANALYZE REIMBURSED RETIREMENTS IN ITS 2006 STUDY?

A. Yes, but in a most unusual manner. Mr. Roff, at pages 14 and 15 of his direct testimony, states that he performed a "special analysis" for the effect of reimbursements for the period 2004 to 2006. Without further explanation, he then states that the "retirements, salvage and cost of removal related to the third-party reimbursements were eliminated from the analysis." This "special analysis" and the remainder of the Company's testimony in support of its net salvage proposals fail to fully explain or document what was actually performed. This lack of support is simply unacceptable when Utah ratepayers are being requested to pay over $150 million in annual depreciation expenses.

Q. DOES THE COMPANY'S TREATMENT OF REIMBURSED RETIREMENTS COMPLY WITH THE AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS DEFINITION FOR DEPRECIATION?

A. No. As noted on page 3 of Mr. Roff's direct testimony, the American Institute of Certified Public Accountants includes the concept that depreciation accounting must be in a systematic and rational manner to ensure a reasonable distribution of costs over the estimated useful life of plant investment. Given that reimbursed retirements do occur on a continuous basis, failure to recognize them to any extent

[55] Response to CCS 1.37 – Attachment 2.

in the establishment of depreciation expense for current plant in service overstates the appropriate level of depreciation expense.

Q. IS THERE ANY BASIS FOR THE FAILURE TO RECOGNIZE REIMBURSED RETIREMENT IN THE DEVELOPMENT OF DEPRECIATION RATES IN THIS PROCEEDING?

A. No. The only question is to what extent should they be recognized?

Q. HAS THE COMPANY PREVIOUSLY INCLUDED REIMBURSED RETIREMENTS IN ITS DEPRECIATION ANALYSES?

A. Yes, always.[56]

Q. HAS MR. ROFF REMOVED REIMBURSED RETIREMENTS IN ANY OTHER UTILITY DEPRECIATION STUDY HE PERFORMED IN THE PAST 10 YEARS?

A. No.[57]

Q. WHAT IS THE IMPACT OF THE COMPANY'S PROPOSAL TO ELIMINATE ALL REIMBURSED RETIREMENTS?

A. The elimination of reimbursed retirements from the net salvage calculation proposed by the Company results in excessive negative net salvage levels for mass property accounts. The Company's failure to include in its net salvage calculation reimbursed retirement amounts that are already identified on its books renders its net salvage calculation for mass property accounts fatally flawed.

[56] Response to CCS 1.1 (e).
[57] *Id.*, at (d).

C. RELATIONSHIP OF PLANT RETIRED TO PLANT REMAINING IN SERVICE

Q. IS IT IMPORTANT TO EVALUATE THE TYPE OF RETIREMENTS THAT HAVE OCCURRED IN COMPARISON TO THE PLANT REMAINING IN SERVICE?

A. Yes. The Company states in its 2006 Study that this is an essential part of the overall evaluation of actual experience.[58] Specifically, the Company states that such an evaluation "is required to ensure the validity of the recommended depreciation rates."

Q. DOES THE COMPANY CLAIM THAT IT HAS, IN FACT, PERFORMED SUCH AN EVALUATION?

A. Yes. At page 15 of the 2006 Study, the Company states that the evaluation included, among other things, a determination of the type of property carried in each account and special analysis of retirements to identify the type of property retired and reasons for retirement.

Q. WERE YOU ABLE TO IDENTIFY ANY SPECIFIC EVALUATION OF THE TYPE OF PROPERTY CARRIED IN EACH ACCOUNT?

A. No. The only detailed categorization of the type of investment in each account was developed by the Company in response to data request CCS 1.42. While the Company obviously has such data, it was not referenced by account in the 2006 Study nor in any of the corresponding workpapers. Moreover, if such an analysis had an impact in determining the net salvage for any given account, there was no indication in either the 2006 Study or the workpapers.

[58] 2006 Study at page 15.

Q. DID THE COMPANY PROVIDE ANY SPECIFIC ANALYSIS OF RETIREMENTS?

A. No. Again, the only specific identification of the type of retirements within any given account was developed and provided in response to data request CCS 1.42. If such information was provided to Mr. Roff, he did not include it in his workpapers or data responses. In short, I was unable to identify any documents in the Company's workpapers that gave any indication that such information played any part in the ultimate development of each of the Company's proposed net salvage values in the mass property area.

Q. IS THERE A DISCONNECT BETWEEN THE TYPE OF INVESTMENT RETIRED WITHIN A PLANT ACCOUNT VERSUS THE TYPE OF INVESTMENT REMAINING IN SERVICE TO BE RETIRED IN THE FUTURE?

A. Yes. As will be noted in the account by account discussion that follows, there are several instances where the type of investment retired during the historical time frame relied upon by Mr. Roff is not proportionately consistent with the remaining plant in service for the same account. In other words, if transformers comprise the majority of investment in an account but a disproportionate level of switches are retired historically, then the inferences drawn from such historical analysis should not be blindly assumed to be representative of future net salvage relationships that will occur when transformers do retire. In summary, the Company's failure to properly investigate any differences that are reflected in the historical database and the remaining plant in service renders many of the Company's proposals fatally flawed.

D. INDUSTRY COMPARATIVE DATA

Q. DID THE COMPANY RELY ON INDUSTRY COMPARATIVE DATA TO CONFIRM THE NET SALVAGE PROPOSALS IN THE MASS PROPERTY AREA?

A. It does not appear that the Company relied on industry data to confirm the reasonableness of its negative net salvage proposals for the mass property accounts. As noted in my account-specific recommendations that follow, many of the Company's proposals are at the very high end of negative levels of net salvage proposed in the industry. This tendency to be at or near the extreme range of net salvage from an industry perspective is basically unexplained by the Company. As will be discussed later, this is especially important given Mr. Roff's recent testimony in Colorado.

Q. IN DEVELOPING YOUR NET SALVAGE PROPOSALS FOR THE MASS PROPERTY ACCOUNTS, DID YOU REVIEW INDUSTRY DATA AS A REASONABLENESS CHECK?

A. Yes.

E. ACCOUNT SPECIFIC

ACCOUNT 353-TRANSMISSION STATION EQUIPMENT

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 353-TRANSMISSION STATION EQUIPMENT?

A. The Company proposes doubling the existing negative 5% net salvage to a negative 10%. The negative 10% net salvage has an approximate $800,000 annual revenue requirement impact on allocated Utah plant.[59]

[59] 2006 Study at Schedule 1 page 9.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company's workpapers only indicate that salvage is declining and cost of removal is relatively consistent.[60] Based on the Company's workpapers, it appears that the Company relied on approximately the most recent 5-year historical band of historical data for its proposal. The Company's 10-year calculation and full band (15 years) analyses yielded negative 6% and negative 5%, respectively.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is excessively negative. The Company's approach is flawed in many areas. The first area is the Company's failure to give any recognition to reimbursed retirements. Second, the Company's reliance on the most recent 5-year band fails to recognize additional meaningful information that would yield a different result. For example, the Company fails to take into account the relationship of the type of investment retired versus the remaining investment in service. In addition, the Company fails to capture additional years of data that provides a more robust database upon which to draw conclusions.

Q. WHAT IS THE PROBLEM WITH THE COMPANY'S ANALYSIS AS IT RELATES TO THE MIX OF INVESTMENTS BETWEEN RETIREMENTS AND PLANT IN SERVICE?

A. The Company failed to recognize the different levels of cost of removal and gross salvage that will result from different types of retirements. For example, transformers comprise approximately 21% of the investment, but were only reflected at approximately 16% in the retirements during its period relied upon by Mr. Roff. This is significant since transformers are high dollar individual assets that not only provide significant potential for gross salvage, but on a dollar-per-unit basis, would normally be expected to have a lower level of cost of removal. Further, circuit breakers that comprise less than 10% of the investment are reflected at approximately 15% of the retirement activity during the period relied

[60] Response to CCS 1.2.

upon by Mr. Roff. Circuit breakers are normally not expected to bring appreciable levels of gross salvage, but on a dollar-per-unit basis are expected to incur higher levels of cost of removal than transformers. Thus, the Company's analysis reflects a mismatch between investment and retirement activity. This mismatch has resulted in an excessive level of negative net salvage being proposed.

Q. PLEASE FURTHER EXPLAIN YOUR PRIOR REFERENCE TO A LESS THAN ROBUST SAMPLE.

A. By relying on the 5-year band, the Company has skewed the results to give a disproportionate level of significance to events that occurred in 2006. 2006 cost of removal was by far the largest single dollar level of cost of removal experienced by the Company during the entire 15-year period in its workpapers. Each year of additional activity prior to 2006 reflected in the Company's data base would further reduce the level of negative net salvage experienced. This is affirmed by the Company's workpapers which indicate negative 5% and negative 6% levels for the 10-year and full band analysis, respectively.

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 353-TRANSMISSION STATION EQUIPMENT?

A. I recommend a zero level of net salvage. My recommendation is based on providing limited recognition to the impact of reimbursed retirements, including more data points into the historical analysis, and recognition of the mix of plant in service compared to the historical retirement activity.

First, it should be noted that full recognition of reimbursed retirements recorded by the Company from 1999 - 2006 would result in a small positive level of net salvage. Further, had the Company actually recorded reimbursed retirements prior to 1999, the resulting level of positive net salvage would be even greater. However, limiting the recognition of reimbursed retirements to the level of cost of removal incurred in any given year during the period for which it was recorded would result in less than a negative 3% net salvage. Next, taking into

account that items such as transformers are under reported in the historical data relied upon by the Company and the expectation that transformers would normally be expected to have positive levels of net salvage, conservatively combined with the other information noted above, and supports my recommendation of a zero level of net salvage for this account.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation for this account results in a $2 million reduction to depreciation expense on a total Company basis or approximately $800,000 on a Utah basis.

ACCOUNT 354-TRANSMISSION TOWERS AND FIXTURES

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 354-TRANSMISSION TOWERS AND FIXTURES?

A. The Company proposes to increase (make less negative) the proposed net salvage for this account to a negative 10% from the existing negative 30%.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company states that there has been virtually no gross salvage and that it based its proposal on the 5 and 10-year historical band analysis.[61] The Company's workpapers indicate a negative 12% and a negative 8% net salvage for the 5-year and 10-year historical bonds, respectively.[62]

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is excessively negative. The historical data relied on by the Company is too limited and irregular. The historical data included only 3 data points for cost of removal during the past 10 years, and one of those was

[61] Response to CCS 1.2.
[62] Response to CCS 1.40.

for only $477.[63] Moreover, if the historical data were to be relied upon with the inclusion of reimbursed retirements, the 10-year historical band would be a positive rather than a negative value.

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 354-TRANSMISSION TOWERS AND FIXTURES?

A. Given the small positive level of net salvage during the past 10 years with recognition of reimbursed retirement activity and the limited and irregular pattern of retirements, gross salvage and cost of removal, I recommend a zero level of net salvage for this account.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATIONS?

A. The standalone impact of my recommendation for this account results in a $900,000 reduction to depreciation expense on a total Company basis or approximately $400,000 on a Utah basis.

ACCOUNT 355-TRANSMISSION POLES AND FIXTURES

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 355-TRANSMISSION POLES AND FIXTURES?

A. The Company proposes almost double the existing negative 30% net salvage to a negative 50%. The negative 50% net salvage has an approximate $6.8 million total Company annual revenue requirement impact.

Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?

A. The Company's workpapers simply state that the full band and the 5-year band essentially are the same.[64] What the Company fails to note from its historical analysis is that the 10-year band, the one in between the 5-year and the full band,

[63] Response to CCS 1.40.
[64] Response to CCS 1.40.

yielded a 39% negative net salvage based on the Company's calculation procedure.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. Again, the Company's proposal is excessively negative. The Company's approach is flawed in many areas. First, the Company's failed to recognize reimbursed retirements even though they have occurred on an annual basis since the Company began recording such information in 1999. In fact, if the full impact of reimbursed retirements were included in the net salvage analysis, it would result in a positive net salvage in excess of 20%. Recognizing reimbursed retirements only to the level of cost of removal in a given year still would produce a small positive net salvage during the past 5-year period and a negative 13% during the past 10-year period.

Another concern is the inconsistent relationship between the type of plant retired historically compared to the current investment mix of plant in service. The retirement of large wood poles is disproportionately reflected in the historical retirement activity and most likely has resulted in the incurrence of additional cost of removal.

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 355-TRANSMISSION POLES AND FIXTURES?

A. I conservatively recommend a negative 15% net salvage. This amount is reflective of the level of negative net salvage that has occurred during the past 10 years with recognition of reimbursed retirements up to the level of cost of removal in any particular year. Further, a negative 15% net salvage is reasonably in the middle range of values reported by the industry. Moreover, it should be noted that Mr. Roff recently proposed a negative 5% net salvage for this account in a Colorado case.[65] Finally, if full recognition of reimbursed retirements or the most recent trend in reimbursed retirement activity were relied upon, a zero or positive value of net salvage for this account would be more appropriate.

[65] PSCC Docket No. 06S-234 EG.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a $4.8 million reduction to depreciation expense on a total Company basis or an approximate $2 million reduction on a Utah basis.

ACCOUNT 356-TRANSMISSION OVERHEAD CONDUCTORS AND DEVICES

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 356-TRANSMISSION OVERHEAD CONDUCTORS AND DEVICES?

A. The Company proposes decreasing (making more negative) the net salvage level from the existing negative 30% to a negative 45%. The negative 45% net salvage has an approximate $7 million annual revenue requirement impact on a total Company basis.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Again, the Company only provided cryptic notes that stated gross salvage was down slightly in recent periods and that cost of removal was up.[66] In addition, a review of the Company's workpapers indicates that the Company must have relied on the 5-year historical data band given that the 10-year band of historical data yielded only a negative 30% net salvage.[67]

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's approach is flawed in many areas. First, recognition of reimbursed retirements only up to the level of cost of removal incurred in a given year results in an approximate negative 9% net salvage using a 10-year historical band.

Second, the Company's reliance on a 5-year band limits the data to being less than robust. When compared to the total outstanding plant balance,

[66] Response to CCS 1.40.
[67] *Id.*

expanding the review to a 10-year period more than triples the level of retirements and provides a more acceptable database on which to draw inferences. Even the Company's flawed analysis over a 10-year period yielded a negative 30% rather than the Company's proposed negative 45%.

Third, the Company's analysis fails to recognize the historical retirement activity relied upon is not indicative of the plant in service. For example, during the last 5 years, 69% of the retirements were associated with insulators while insulators comprise only 28% of the total investment.[68] The majority (57%) of the investment associated with actual wire, while the retirement activity during the last 5 years yielded only 27% of the retirement activity being associated with wire. The per unit cost to remove and replace insulators compared to wire is most likely part of the reason for the high level of cost of removal reported by the Company. Recognition of the need to reasonably synchronize plant investment with plant retirement activity has, in part, caused the level of reported negative net salvage to be excessively negative.

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 356-TRANSMISSION OVERHEAD CONDUCTORS AND DEVICES?

A. For the reasons noted above, I conservatively recommend a negative 10% net salvage for this account. In addition, the negative 10% net salvage for this account falls within the mid-range of the industry, and is more conservative than the zero level of net salvage recently supported by Mr. Roff in his testimony in Colorado.[69]

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The stand alone impact of my recommendation results in a $5.6 million reduction to depreciation expense on a total Company basis and an approximate $2.2 million reduction on a Utah basis.

[68] Response to CCS 1.42 and 1.55.
[69] PSCC in Docket No. 06S-234 EG.

ACCOUNT 364-DISTRIBUTION POLES, TOWERS AND FIXTURES

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 364-DISTRIBUTION POLES, TOWERS AND FIXTURES?

A. The Company proposes decreasing (making more negative) the proposed net salvage for this account from a negative 75% to a negative 105%.[70] The proposed negative 105% net salvage has an approximate $10 million annual revenue requirement impact.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company's workpapers simply state gross salvage is quite consistent while cost of removal is declining slightly.[71] My review of the Company's workpapers indicates that it relied on the most recent 5 and 10-year historical database bands for its proposal.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. In this particular instance, the Company's proposal not only results in a net salvage value more than 100% of the actual investment but is also at the high end of the industry reported values.

The Company's decision to inconsistently remove reimbursed retirements has actually decreased (made more negative) its proposal than would be the case under Mr. Roff's normal approach. Full recognition of reimbursed retirements during the past 10 years would result in a negative 18% net salvage rather than the approximate 105% negative net salvage. Limiting the impact of reimbursed retirements to the level of cost of removal incurred in any given year results in a negative 38% net salvage over the past 10-year period and a negative 19% over the past 5-year period. Thus, the <u>trend</u> in the data is that negative net salvage values are moving towards zero.

[70] Response to CCS 1.2 and Schedule 1 of the 2006 Study.
[71] Response to CCS 1.2.

An additional test of the Company's proposal is to compare it to the industry. Based on such a comparison, the Company's proposed value is at the high end of net salvage figures recognized by the industry. In fact, the existing negative 75% is also near the high end of values recognized by the industry. More realistic and representative values would be between a negative 20% and a negative 50% level of net salvage. Moreover, it must be noted that Mr. Roff's recommended salvage for this account in his 2005 Depreciation Study for PSCo was also much less negative.[72]

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 364-DISTRIBUTION POLES, TOWERS AND FIXTURES?

A. I recommend a negative 35% net salvage value. My recommendation blends the limited recognition of reimbursed retirements with industry data and further recognizes that the trend in the data, even as reported by the Company, is to negative values in the direction of zero. In addition, it should be recognized that my recommended negative 35% net salvage will annually produce more net salvage dollars for the Company than the average that the Company has experienced for cost of removal during the past 10 years. In other words, even if one ignores any gross salvage and all reimbursed retirements, my negative 35% recommendation still exceeds the average cost of removal experienced by the Company during the period 1997 through 2006.[73]

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a $6.5 million annual reduction in depreciation expense on a Utah basis.

[72] Mr. Roff's Book Depreciation Study of PSCo as of October 31, 2005.

[73] Company workpapers set forth a total cost of removal of $25,860,167 during the 10-year period 1997 through 2006. A 35% negative net salvage applied to the plant balance as of the end of 2006 and utilizing the 27.88 year remaining life proposed by the Company results in an annual recover of approximately $3.2 million per year, not counting growth of the plant balance that has already occurred and will continue to occur in the future.

ACCOUNT 365-DISTRIBUTION OVERHEAD CONDUCTORS AND DEVICES

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 365-DISTRIBUTION OVERHEAD CONDUCTORS AND DEVICES?

A. The Company proposes a value almost four times the negative net salvage level reflected in existing rates. In other words, the Company is proposing a negative 75% net salvage compared to the existing negative 20% net salvage.[74] The negative 75% net salvage has an approximate $4 million annual revenue requirement impact.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The narrative portion of the Company's workpapers simply state that gross salvage is declining slightly while cost of removal is higher in recent years.[75] Based on a review of the workpapers, it would appear that the Company relied on a 5-year historical band to arrive at its proposal.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is unjustified and unsupportable. First, the Company's failure to recognize any reimbursed retirements is inappropriate. Full recognition of reimbursed retirements would yield a positive 9% net salvage using a 5-year historical data band, and a positive 5% over the last 10 years. Additionally, the Company's proposal would make it one of the most negative net salvage values reported in the industry. Even Mr. Roff supported only a negative 25% net salvage level for this account recently in a Colorado case.[76] Further, a review of the type of retirement activity during the past 5 years clearly indicates a mismatch with the type of plant in service. In other words, the Company's proposal fails from every reasonable test applied to its proposal.

[74] Response to CCS 1.2 and Schedule 1.
[75] Response to CCS 1.2.
[76] PSCC Docket No. 06S-234 EG.

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 365-DISTRIBUTION OVERHEAD CONDUCTORS AND DEVICES?

A. I recommend a negative 10% net salvage value. My recommendation takes into account the fact that recognition of reimbursed retirements, only to the level of cost of removal in any given year, would result in an approximate 16% negative net salvage on a 10-year basis and a negative 7% net salvage on a 5-year basis. The reasonableness of my recommendation is confirmed by industry data, which indicates that a negative 10% value better reflects industry values.

In addition, a review of the retirement activity during the 5-year period relied upon by the Company for its proposal, indicates the retirement of switches represents a disproportionate level of retirement activity. In particular, switches comprise approximately 22% of the retirement activity during the last 5 years yet represent less than 4% of the investment in the account.[77] To the extent switches represent a higher per unit cost of removal than overhead conductors in the retirement process, it would help explain a portion of the Company's perceived increase in cost of removal in recent years. In other words, the Company may have recognized a trend, but did not adequately investigate to determine the basis for such trend in cost of removal activity. This failure to properly match retirements with investment levels results, in part, in an inappropriate proposal by the Company for this account.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a $3.6 million reduction in depreciation expense on a Utah basis.

[77] Response to CCS 1.42 and 1.55.

ACCOUNT 366-DISTRIBUTION UNDERGROUND CONDUIT

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 366-DISTRIBUTION UNDERGROUND CONDUIT?

A. The Company proposes to decrease (make more negative) the level of negative net salvage from a negative 50% to a negative 70%.[78] The proposed negative 70% has an approximate $2 million annual revenue requirement.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company states that salvage is reasonably consistent and cost of removal has been declining slightly.[79]

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is flawed in many aspects. First, the Company's proposal is based on its improper treatment of reimbursed retirements. Full recognition of reimbursed retirements during the 5-year historical period relied upon by the Company would result in a negative 12% net salvage, rather than the Company's proposed negative 70%. Partial recognition of reimbursed retirements, only to the extent of the annual cost of removal incurred in any year, results in a negative 15% net salvage based on the same 5-year historical period. Reinforcing the concept of a negative net salvage level closer to zero is the fact that the industry does not report values as negative as the Company is proposing in this proceeding. Industry values are more indicative of a zero to negative 15% level of net salvage for this account, and Mr. Roff recently supported a negative 5% for this account in Colorado.[80]

Finally, the type of retirement activity experienced by the Company during the historical time frame it relied upon for its proposal may explain the perceived increase in the level of negative net salvage. A review of the Company's historical retirement activity during the most recent 5-year period

[78] 2006 Study at Schedule 2 page 46.
[79] Response to CCS 1.2.
[80] PSCC Docket No. 06S-234 EG.

indicates that pads comprised approximately 23% of the retirement activity, yet only 6% of the investment in this account. The only identifiable category of plant in which retirement activity was lower than the actual level of identifiable plant in service was in the area of conduit. Given that conduit can be abandoned in place, or if the need arises to actually replace it in the same location the associated cost can be charged to the new installation, renders the Company's proposal flawed. In other words, there is no basis upon which to appropriately conclude that a negative 70% net salvage is reasonable for this account, whether it be from an actual data standpoint or an industry comparative standpoint.

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 366-DISTRIBUTION UNDERGROUND CONDUIT?

A. I recommend a negative 15% net salvage for this account. My recommendation relies on giving limited recognition to reimbursed retirements only to the level of cost of removal in any given year, and further investigation of the type of retirements in the historical data. The Company's failure to recognize these considerations and rely simply on the arithmetic results of its modified database is unacceptable. My recommendation is further confirmed by comparison with the industry and Mr. Roff's recent experience.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in an approximate $1.5 million decrease to depreciation expense on a Utah basis.

ACCOUNT 367-DISTRIBUTION UNDERGROUND CONDUCTORS AND DEVICES

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 367-DISTRIBUTION UNDERGROUND CONDUCTORS AND DEVICES?

A. The Company is proposing a negative 45% net salvage. This represents a dramatic decrease (more negative) from the existing negative 15% net salvage

value.[81] The Company's proposed negative 45% net salvage has an approximate $4.4 million annual revenue requirement impact based on plant as of December 31, 2006.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company's workpapers again are very cryptic. The only narrative basis for the Company's proposal is that gross salvage is reasonably consistent and cost of removal has been increasing.[82] Based on the Company's workpapers, it appears that the Company relied on the 5-year historical band of data in order to arrive at its proposed negative 45% net salvage value.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is excessively negative. The Company's approach is flawed for many reasons. First, the Company fails to recognize any level of reimbursed retirements. Full recognition of reimbursed retirements yields a positive 10% net salvage based on a 5-year band and a zero level based on a 10-year band.

Second, Mr. Roff fails to compensate for the ramping up of cost of removal beginning in 2003. This increase appears to be related to emergency situations and overtime costs associated with failure of a particular type of underground cable that comprises probably less than 20% of the current balance.[83]

Third, review of industry information would indicate that the Company's proposed negative 45% net salvage would place it at the high end of the industry while more representative values of the industry are in the zero to negative 10% range. In fact, Mr. Roff recently proposed a negative 5% net salvage for this account in his testimony in Colorado.[84]

[81] 2006 Study at Schedule 2 page 46.
[82] Response to CCS 1.2.
[83] Response to DPU 1.85, Account 367 workpaper from 2006 Study and Schedule 1.
[84] Response to CCS 1.49.

Finally, the Company's simple reliance on mathematical average of historical data without investigating the relationship of the type of investment retired versus the type of investment in plant in service may further be the basis for why the Company's proposal is excessively negative.[85]

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 367-DISTRIBUTION UNDERGROUND CONDUCTORS AND DEVICES?

A. I recommend a negative 5% net salvage. First, including reimbursed retirements on a limited basis results in a negative 4% net salvage associated with the same 5-year historical band the Company relied on, while a 10-year band would yield an approximate negative 15%. Next, industry indications are for much less negative level of net salvage, closer to zero or a negative 5%. Additionally, the mix between retirements and plant in service indicates overstatement of negative net salvage. Finally, the Company fails to appropriately recognize the potential impact of future abandonment in place practices. Greater levels of underground conductors retired in place would result in less negative levels of net salvage.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. My recommendation on a standalone basis would result in an approximate $3.4 million annual reduction to depreciation expense on a Utah basis.

ACCOUNT 368-DISTRIBUTION LINE TRANSFORMERS

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 368-DISTRIBUTION LINE TRANSFORMERS?

A. The Company proposes decreasing (make more negative) the existing net salvage from zero to a negative 15%.[86] The proposed negative 15% net salvage has an approximate $1.3 million annual revenue requirement impact.

[85] Response to CCS 1.42 and 1.55, and DPU 1.86.
[86] 2006 Study at Schedule 2 page 46.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company states that salvage is reasonably consistent and increasing slightly while cost of removal is increasing.[87] Based on further review of the Company's workpapers, the negative 15% net salvage is based on the Company's review of the most recent 5-year historical data band.[88]

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. In fact, the Company's movement is in the wrong direction given the information available.

First, the Company's failure to recognize reimbursed retirements in this proceeding significantly skews the results. Full recognition of reimbursed retirements on a 5-year historical band would produce a positive 13% gross salvage while the 10-year band would produce a positive 12%. Even limited recognition of reimbursed retirements, up to the level of annual cost of removal in any given year, would still result in a positive 11% net salvage based on a 5-year historical data band and a positive 9% on a 10-year band. In other words, any reasonable historical recognition of reimbursed retirements would result in a positive level of net salvage. Additionally, testing the results against industry would indicate that the majority of identifiable utilities report a zero or positive level of net salvage for line transformers, just as Mr. Roff did when he supported a positive 5% net salvage level in his recent testimony in Colorado.[89] Given the current trend in the price of scrap copper, more positive values are to be expected. In summary, the Company has presented no basis for proposing a move to a negative net salvage, nor has it demonstrated that a positive level of net salvage is not appropriate at this time.

[87] Response to CCS 1.2.
[88] *Id.*
[89] PSCC Docket No. 06S-234 EG.

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 368-DISTRIBUTION LINE TRANSFORMERS?

A. I recommend a 5% positive net salvage for this account. My recommendation is conservative as it limits the recognition of reimbursed retirements. In addition, the 5% level of net salvage is more indicative of industry values and, only on a limited basis, recognizes the high level of scrap copper prices.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation would result in an approximate $1.8 million reduction in depreciation expense on a Utah basis.

ACCOUNT 369-DISTRIBUTION SERVICES

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 369-DISTRIBUTION SERVICES?

A. The Company proposes retaining the existing negative 20% net salvage.[90]

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company states that salvage is reasonably consistent and increasing slightly while cost of removal is increasing.[91] Based on a review of the Company's workpapers, it appears that the Company relied on the most recent 5-year historical data band for its proposal.[92]

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. As was the case with other distribution accounts, full recognition of reimbursed retirements in the net salvage calculation has a dramatic impact. In fact, full recognition would result in a positive 20% net salvage for overhead services and a positive 4% net salvage for underground services based on a 5-year historical band. Even when limiting the level of reimbursed retirements, the resulting 5-year historical band results are a positive 1% and a negative 1% for

[90] 2006 Study at Schedule 2 page 46.
[91] Response to CCS 1.2.
[92] *Id.*

overhead and underground services, respectively. Thus, there is no solid support for the Company's proposal.

Moreover, the underlying data contains additional problems. For example, during 2000 and 2001 the Company reported negative retirements for its overhead services, a theoretical impossibility. What transpired is that the Company booked "a reversal of prior year (1994 and 1995) retirements."[93] Thus, the Company has distorted its database to under-report retirements and in effect over-report net salvage percentages.

The negative value in these two years significantly understate retirements given that the 2001 value corresponds to the year in which the Company retired the second greatest number of overhead services during the past 10-year period.[94] In other words, the Company's reported retirements are understated by a minimum of $118,522 assuming that the dollar level of retirement in those years were actually zero. However, it is known that a significant number of services were retired during those years and most likely understates the level of retirements by more than $200,000. If $200,000 of additional retirements were reflected in the Company's overhead services' net salvage analysis, and ignoring any aspect of reimbursed retirements, the net result would be an approximate negative 16% rather than the Company's reported negative 29% net salvage. If reimbursed retirements were recognized to any extent, it would still result in positive rather than negative net salvage values.

Yet another discrepancy in the data appears to exist in the underground services account. The Company reports different annual levels of retirement activity in its net salvage workpapers compared to its response to CCS data request 5.12. These discrepancies coupled with the limited level of retirement activity in comparison to current plant balances diminishes the ability to rely on the Company's historical database.

[93] Response to CCS 5.14.
[94] Response to CCS 5.12.

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 369-DISTRIBUTION SERVICES?

A. I recommend a negative 10% net salvage for this account. My recommendation takes into account the Company's faulty historical database as well as its failure to recognize reimbursed retirements that have occurred on an annual basis since it began maintaining such information. In addition, given the fact that underground services comprise the majority of the Company's investment, one would expect the potential for greater levels of abandonment to occur in the future.[95] A negative 10% net salvage is also a value validated by a review of industry information and is identical to the level Mr. Roff recently supported in Colorado.[96] Therefore, until the Company can provide a valid and robust historical database to properly analyze the level of negative net salvage for this account, the Company should be limited to a 10% net salvage.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in an approximate $400,000 reduction to annual depreciation expense on a Utah basis.

ACCOUNT 390-GENERAL PLANT STRUCTURES AND IMPROVEMENTS

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 390-GENERAL PLANT STRUCTURES AND IMPROVEMENTS?

A. The Company proposes to increase the net salvage from zero to a positive 5%.[97]

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company's workpapers state that salvage exceeds cost of removal.[98]

[95] Response to CCS 5.11.
[96] PSCC Docket No. 06S-234 EG.
[98]2006 Study at Schedule 2 page 46.
[98] Response to CCS 1.5 at Attachment 3.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is not based on any meaningful information and does not appropriately reflect the reasonable expectations for future retirements.

Q. WHAT DO YOU RECOMMEND FOR ACCOUNT 390-GENERAL PLANT STRUCTURES AND IMPROVEMENTS?

A. I recommend a positive 20% net salvage value. While the Company simply relied on review of historical data without any further analyses, my recommendation is based on a more appropriate investigation of the situation.

Over 90% of the investment in this account is associated with building structures.[99] These building structures appear to include the large office and warehouse building identified as the North Temple building in Utah as well as other call centers, offices and service centers in Utah.[100] A review of the information provided by the Company indicates that a disproportionate share of the retirements appear to be in leasehold improvements and partitions, panels and modular furniture rather than in actual building structures.[101]

Appropriate expectations for office buildings and warehouses, with an assumed average 40-year service life, is normally expected to be significantly positive. Buildings normally appreciate in value over time rather than depreciate when it comes to market value. The Company's buildings are not any different than normal expectations. For example, the large North Temple building has a net book value of less than $10 million. It has property appraisal value of approximately $15 million. Reliance on the current property appraisal would yield over a 70% positive net salvage for this building alone, even though it is more than 65 years old.[102] This type of relationship is what is normally expected for large office and warehouses rather than minimal levels of net salvage that are normally associated with the retirement of smaller components of the overall building structure.

[99] Response to CCS 1.55.
[100] Response to CCS 1.60 and 1.61.
[101] Response to CCS 1.42.
[102] *Id.*

While the retirement of partitions, carpeting, roofs, etc. may yield limited levels of net salvage or, in fact, potentially negative net salvage, the blending of the value of the building itself, with its components, should result in higher levels of positive net salvage. Based on a review of the Company's historical data, it appears that a structure was retired in 1996 and yielded a positive 60% net salvage. Blending this transaction with the subsequent transactions through the year 2006 yields an approximate 18% positive net salvage. The Company's actual experience, in conjunction with normal anticipated increase in values for major structures, forms the basis for my recommendation of a positive 20% net salvage.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in an approximate $430,000 decrease to annual depreciation revenue requirements based on plant in service as of December 31, 2006.

Q. WHAT DO THESE 11 ADJUSTMENTS TO THE MASS PROPERTY NET SALVAGE ACCOUNTS SUM TO ON A UTAH BASIS?

A. As shown on my Exhibit 2.1, page 1 of 7, my net salvage adjustments in the areas of transmission, distribution and general plant total approximately $23.2 million on a Utah basis.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.