DEPRECIATION EXCERPTS FROM PSI ENERGY CASE

PETITION OF PSI ENERGY, INC. FOR AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR ELECTRIC SERVICE; FOR APPROVAL OF NEW SCHEDULES OF RATES AND CHARGES AND OF RULES AND REGULATIONS APPLICABLE TO SUCH RATES AND CHARGES; FOR THE AUTHORITY TO REFLECT ITS QUALIFIED POLLUTION CONTROL PROPERTY AND OTHER NEW PLANT AND EQUIPMENT IN ITS RATES AND CHARGES; FOR APPROVAL OF ITS IMPLEMENTATION OF THE FEDERAL ENERGY REGULATORY COMMISSION'S SEVEN-FACTOR TEST; FOR APPROVAL OF VARIOUS RATE TRACKING MECHANISMS, INCLUDING A PROPOSED MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR MANAGEMENT COST ADJUSTMENT RIDER AND CONTINUED USE OF A PURCHASED POWER TRACKING MECHANISM; AND FOR APPROVAL OF RELATED ACCOUNTING TREATMENT AND DEPRECIATION RATES AND OTHER ACCOUNTING RELIEF RELATIVE TO ITS BUSINESS

CAUSE NO. 42359

Indiana Utility Regulatory Commission

2004 Ind. PUC LEXIS 150

May 18, 2004, Approved

PANEL: [*1] BY THE COMMISSION: David E. Ziegner, Commissioner; Scott R. Storms, Chief Administrative Law Judge; HADLEY, RIPLEY AND ZIEGNER CONCUR; McCARTY AND LANDIS ABSENT

OPINIONBY: ZIEGNER; STORMS

OPINION:

*****NOTE: THIS SCHEDULE OMITS MUCH OF THE OPINION, FROM LEXIS PAGES 150 TO LEXIS PAGE 158 WHERE THE DISCUSSION OF DEPRECIATION EXPENSE BEGINS, DUE TO THE OVERALL LENGTH OF THE OPINION. THE ENTIRE DISCUSSION OF DEPRECIATION IS INCLUDED IN THIS SCHEDULE*****

D. Disputed *Pro Forma* Expense Adjustments.

(1) Depreciation Expense.

(a) Rates.

(i) Evidence. PSI proposes to increase its annual depreciation accrual by $ 79,088,000, for a total *pro forma* annual depreciation expense of $ 233,022,000, Pet. Ex. X-21, Sch. C-3.36 (as updated by Pet. Ex. OO-3), based on a traditional depreciation study prepared by Mr. John J. Spanos, of Gannett Fleming, Inc. Mr. Spanos testified for PSI, and began his testimony by defining depreciation as the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of the utility plant in the course of service from causes that can be reasonably anticipated or contemplated against which the Company is not protected by insurance. As examples

of such causes, Mr. Spanos cited wear and tear, decay, exposure to the elements, inadequacy, obsolescence, change in demand and the requirements of public authorities. Mr. Spanos' depreciation study was presented in Pet. Ex. T-1.

Mr. Spanos stated that he utilized the straight [*159] line remaining life method of depreciation with equal life group procedures. He testified that annual depreciation is based on a method of depreciation accounting that seeks to distribute the unrecovered costs of fixed capital assets over the estimated remaining useful life of each unit or group of assets in a systematic and rational manner. Pet. Ex. T, p. 7. Mr. Spanos determined his recommended annual depreciation rates in two phases. First, he estimated the service life and net salvage characteristics for each depreciable group. Then he calculated the composite remaining life and annual depreciation rates based on the service life and net salvage estimates determined in the first phase.

With regard to the first phase, Mr. Spanos stated that his service life and net salvage study consisted of compiling historical data from records related to PSI's plant, analyzing this data to obtain historic trends of survival and net salvage characteristics, obtaining supplementary information from management and operating personnel, interpreting that data and forming judgments of average service life and net salvage characteristics. He analyzed the Company's accounting entries that recorded plant [*160] transactions during the period 1956 through 2001. These transactions included additions, retirements, transfers, sales and the related balances. Mr. Spanos utilized the retirement rate method to analyze this service life data. He stated this method is most appropriate because it determines the average rate of retirement actually experienced by the Company during the period of time covered by his study.

Mr. Spanos applied the retirement rate method to each different group of property, using the retirement rate method to form a life table, which, when plotted, shows an original survivor curve for that property group. *Id.* at 9. Each original survivor curve, according to Mr. Spanos, represents the average survivor pattern experienced by these several vintage groups during the experience band study. He said that the survivor patterns did not necessarily describe the life characteristics of the property group. Therefore, he must interpret the original survivor curves in order to use them as valid considerations in estimating service life. He utilized the Iowa type survivor curves to perform these interpretations.

Mr. Spanos made field reviews of PSI's properties in September, 1999 and [*161] April, 2002. The purpose of his field review was to allow him to become familiar with Company operations and obtain an understanding of the function of the plant; the reasons for past retirement; and, the expected future causes of retirement. *Id.* at 10. Mr. Spanos estimated the net salvage percentages by incorporating the historical data for the period 1989 through 2001 and considering estimates for other electric companies. He also utilized the demolition cost estimates prepared by Sargent & Lundy and sponsored by PSI witness Mr. Alan Wendorf.

As to the second phase of his study, in which he calculated the composite remaining life and annual depreciation rates, Mr. Spanos testified that he calculated annual depreciation rates for each group based on the straight line remaining life method, using remaining lives weighted consistent with the equal life group procedure. His calculations of annual depreciation accrual rates were developed as of September 30, 2002. *Id.* at 11. Mr. Spanos stated that the straight line remaining life method of depreciation allocates the original cost of the property, less accumulated depreciation, less future net salvage value, in equal amounts to [*162] each year of remaining service life. As to the equal life group procedure, he stated the property group is subdivided according to service life. The relative size of each equal life group is determined from the property's survivor curve. This procedure eliminates the need to base depreciation on average lives. The full cost of short lived units are accrued during their lives leaving no deferral of accruals required to be added to the annual cost associated with long lived units. He further stated that the equal life group procedure allocates the capital costs of a property group to annual expense in accordance with the consumption of the service value of the group.

PSI witness Alan Wendorf, Executive Vice President of Sargent & Lundy, LLC, ("S&L") testified regarding the results of a study that estimated the cost of dismantling certain PSI generating stations. Pet. Ex. U, p. 2. Mr. Wendorf testified that in its study S&L made several assumptions with respect to the decommissioning of PSI's plants. For example, they assumed that the only thing necessary to decommission an ash pond was to pump it dry and cover the ash pond with approximately two feet of soft soil. They also assumed [*163] that there was sufficient room on site to dispose of all the non-hazardous debris and that there was sufficient fill material on site to cover all this debris. *Id.* at 3. They also assumed that tens of thousands of feet of underground pipe and electrical conduit could be left in place and it would not be necessary to fill in the cooling lake at the Gibson Generating Station. In Mr. Wendorf's opinion, many of these assumptions were conservative and minimized dismantling cost numbers -- *i.e.*, the estimated costs represent the lower end of potential dismantling costs.

Mr. Wendorf estimates of the net cost of dismantling each of PSI's generation stations in 2002 dollars are: Gallagher Generating Station -- $ 23,691,800; Wabash River Generating Station including the PSI portion of the Wabash River Repowering project -- $ 33,698,900; Cayuga Generating Station -- $ 37,544,000; Gibson Generating Station -- $ 118,434,500; Edwardsport Generating Station -- $ 12,376,200; and Noblesville Generating Station -- $ 7,554,000. *Id.* at 6. The details of these estimates are contained in Mr. Wendorf's exhibits, Pet. Ex. U-1 through U-6.

Mr. Michael Majoros testified for the OUCC and indicated [*164] that before the Commission allows the current recovery of a future dismantlement cost, it should ensure that such cost will in fact be incurred. He said it is doubtful PSI will dismantle plants unless the Company plans to install new plants at the same site and location as the retired plant. In these circumstances Mr. Majoros said that if there were dismantling costs, such costs should be part of the cost of a new plant. In his opinion, based on the probability of actual plant dismantlement for PSI, Mr. Wendorf's dismantlement estimates should be excluded in their entirety in determining depreciation rates in this proceeding. Pub. Ex. No. 9, p. 20.

Mr. Majoros said that he believes that the underlying premise for including dismantling costs is false. In his opinion it is doubtful that PSI will ever dismantle any of its generation plants to "Greenfield" conditions. Based on his observations during his own plant tour, he concluded that the Company has no plans to even retire these plants, let alone dismantle them. He noted that the retired boilers that he observed had been retired in place, yet this was the largest component of Mr. Spanos' dismantlement costs. *Id.* at 18 Mr. Majoros [*165] also relied on a nationwide survey conducted by his firm of steam generating units exceeding 50 MW that have been retired since 1982. According to Mr. Majoros, as of the date of his testimony, 64% of the retired generating units contained in the nationwide survey were retired in place, not dismantled. *Id.* at 19. Finally, Mr. Majoros indicated that PSI has not recorded any final retirements for any electric generating units or plant sites in the last 15 years, and other than Henry County, has no legal obligation to dismantle any of its plants. Mr. Majoros observed that it is unreasonable to assume that PSI, or any other utility, would spend $ 700 million to dismantle its production plants, absent a legal obligation to do so. *Id. at* 18-19.

Mr. Majoros went on to state that Mr. Spanos' approach projects substantial past inflation into the future. Thus, he said, Mr. Spanos' future net salvage rates for all other accounts are inflated future net salvage ratios. In Mr. Majoros' opinion, this results in excessive costs of removal charges because the inflated ratios charge current ratepayers for future inflation that has not occurred. Mr. Majoros calculated that over the most recent [*166] five years, PSI has only experienced $ 7.1 million in negative net salvage on average. This number, he said, should be contrasted with Mr. Spanos' recommendation of $ 54.2 million annual recovery of negative net salvage. *Id.* at 24.

Mr. Majoros disagreed with Mr. Spanos regarding the incorporation of future net salvage and terminal net salvage values in depreciation rates. Mr. Majoros indicated that he believes the incorporation of future net salvage and terminal net salvage values increase depreciation rates and inflate estimates of costs that will probably not be incurred. Mr. Majoros also stated that six (6) of the Company's proposed lives in the transmission, distribution and general plant function are too short, thereby overstating the associated depreciation expense. Pub. Ex. No. 9, p. 4. Mr. Majoros proposed a substantially lower annual depreciation expense primarily based on his conclusion that net salvage value should be ignored. *Id.* at 5.

Mr. Majoros also disagreed with Mr. Spanos' use of net salvage ratios in his depreciation rate calculation. He said that this issue is significant, because Mr. Spanos essentially capitalized costs the Company has no real obligation [*167] to incur and then inflated those costs. Mr. Majoros complained that Mr. Spanos was less than forthcoming about how he utilized Mr. Wendorf's cost study. *Id.* at 17. He said that Mr. Wendorf's cost studies were estimates made in terms of 2002 dollars. He said that even though Mr. Spanos stated he relied on Mr. Wendorf's studies, the figures from Mr. Wendorf are not traceable to Mr. Spanos study. Instead, he said, Mr. Spanos applied net salvage ratios to plant balances which resulted in substantially greater amounts of dismantlement costs than estimated by Mr. Wendorf. Mr. Spanos' equivalent numbers exceed $ 700,000,000, which means, Mr. Majoros contended, that Mr. Spanos inflated Mr. Wendorf's estimates. *Id.* at 18.

Mr. Majoros went on to discuss the Statement of Financial Accounting Standards ("SFAS") No. 143. He said that pursuant to this accounting standard, all companies, including PSI, must determine whether or not they have an actual legal obligation to dismantle and/or remove retired assets. Pub. Ex. No. 9, p. 25. These legal obligations are called "Asset Retirement Obligations" ("AROs"). If the Company does have an ARO, the net present value of the cost of removal is [*168] capitalized and included in the cost of the asset and depreciated over the life of the asset. It is not included as a negative net salvage ratio in depreciation rate calculation, as proposed by Mr. Spanos, but rather, it is added directly to the cost of the assets. He stated that if a Company does not have an ARO, future costs of removal are

not considered as a cost of the asset and, therefore, should not be included in the company's depreciation expense on its general financial statements. Mr. Majoros stated that under Generally Accepted Accounting Principles ("GAAP"), electric utilities are required to conduct a review to determine if they have any AROs. PSI, he said, conducted such a review and had quantifiable AROs of $ 6,890,212. *Id.* at 27.

Mr. Majoros then went into a discussion of the life study methods. He stated that Mr. Spanos used two basic methods. The life span method and the retirement rate actuarial method. In addition to these methods Mr. Majoros also used the geometric mean turnover ("GMT") method. *Id.* at 50. Mr. Majoros testified that he did not disagree with Mr. Spanos' use of the life span method, but did disagree with his application of the method because [*169] Mr. Spanos included negative future net salvage in his calculations.

Mr. Majoros also discussed the production life depreciation calculations performed by Mr. Spanos. He said these calculations were predicated on the life method. Based upon his own calculations and independent studies, Mr. Majoros accepted Mr. Spanos' terminal retirement years for steam and other production functions and found them to be reasonable. *Id.* at pp. 52-57. With regard to transmission, distribution and general functions, Mr. Majoros concluded that some of the accounts analyzed by Mr. Spanos utilized service lives that were too short. In particular, Mr. Majoros objected to the service lives used by Mr. Spanos for account 354, 356, 365, 366, 367 and 397. Pub. Ex. No. 9, p. 60. As to vintage amortization accounting Mr. Majoros only disagreed with the five years Mr. Spanos proposed for Account 391.1, office furniture and equipment -- IT systems. Mr. Majoros recommended a 10 year amortization for this account. *Id.* at 64.

Mr. Majoros then described an analysis to identify the amount of past collections of non-legal AROs included in PSI's accumulated depreciation account and two alternative versions for [*170] a specific going forward allowance. As to the former, he stated that Mr. Spanos estimated the amounts to be $ 281 million as of December 31, 2002. Mr. Majoros said that this amount represents money charged to ratepayers in the past for which PSI has no legal cost or obligation. *Id.* at 36-37. With regard to his proposed going forward allowance, he stated that non-legal AROs included in depreciation expense should be included in a specifically identifiable allowance and should be accounted for separately in depreciation expense and accumulated depreciation accounts. He described his first alternative as an allowance calculated in much the same manner as the Company allowances for legal AROs. For this calculation, Mr. Majoros used Mr. Wendorf's 2002 net present value amount for production plants. For transmission, distribution and general plant, he used Mr. Spanos' future net salvage proposal and estimated remaining life to determine the net present value of these amounts. He stated that the annual allowance using this method is $ 3.3 million.

Mr. Majoros' preference is to use his second alternative, a five year rolling net salvage allowance approach which has been used by other [*171] administrative agencies such as the New Jersey Board of Public Utilities; the Pennsylvania Public Utility Commission; the Missouri Public Service Commission; and, on a trial basis by the Kentucky Public Service Commission. *Id.* at 45-50. Mr. Majoros characterized this as the Pennsylvania Public Utility Commission's normalized net salvage allowance approach. This approach is based on the average of the most recent five years worth of actual net salvage activity shown in PSI's depreciation study. *Id.* at 38. He said that the net salvage is treated just as any other normalized expense, except that it is charged to accumulated depreciation. He said that the normalized net salvage allowance amount under this proposal is $ 7.1 million. Mr. Majoros concluded this portion of his testimony by stating that the Commission should reject PSI's net salvage amount of $ 54.2 million and substitute his preferred normalized allowance of $ 7.1 million.

The PSI-IG presented the testimony of James T. Selecky with regard to depreciation. Mr. Selecky stated that he supports excluding net salvage from the development of the calculation of book transmission, distribution and general depreciation rates. [*172] In his opinion, the net salvage expense should be included in the revenue requirement as a cost to serve as an operating expense, and not a component of depreciation rates. PSI-IG Ex. No. 2, p. 4. Mr. Selecky stated that the annual net salvage component of depreciation expense that PSI is requesting is significantly greater than PSI's actual net salvage expense. In fact, he states, the level of expense as proposed by PSI is approximately six times greater than the historical level typically incurred by PSI on an annual basis. He said that the consequences of PSI's proposed treatment of net salvage are that it unnecessarily raises rates for today's ratepayers and produces inter-generational inequities by shifting cost burdens to today's ratepayers from future ratepayers.

Mr. Selecky stated that PSI's proposed depreciation expense for transmission, distribution and general plant contains an annual net salvage component of $ 23,460,000. However, PSI's average actual annual net salvage expense over the last 10 years was a negative $ 3,879,000 and over the last 5 years PSI's net salvage expenses averaged a negative $ 3,737,000.

Mr. Selecky stated that the large difference between net salvage [*173] expense proposed to be included in depreciation rates and PSI's actual net salvage expense in recent years is due in part to the fact that proposed net salvage percentages included in the development of depreciation rates include estimates of future inflation and may not capture the economies of scale that would occur if large retirement activity occurred during a single year. Also, net salvage ratios included in depreciation rates, he contended, may be developed from limited retirement experience that is not typical. *Id.* at 7. Mr. Selecky stated that under PSI's methodology, if an asset with a service life of 50 years is retired in 2000, PSI compares the cost to remove the asset in 2000 dollars with the installed cost of the asset which, in this case, was measured in 1950 dollars. As a result, the net salvage ratio is developed in costs stated in dollars from different time periods. While the cost of the asset and the cost to remove the asset are stated in nominal dollars, the net salvage ratio provides an estimate of future inflation. As the result, according to Mr. Selecky, PSI's net salvage percentages require today's ratepayers to pay estimated costs of future inflation based [*174] on historic trends.

Mr. Selecky proposes that this Commission eliminate the net salvage ratio from the development of depreciation rates and include a net salvage provision as an operating expense. He recommends that a 10 year average actual net salvage expense be included as an operating expense in PSI's total cost of service. *Id.* at 10. He states that two other commissions have adopted this approach -- the Pennsylvania Utility Commission and the Missouri Public Service Commission. He proposed a reduction of $ 23,460,000 in depreciation expense and an increase of $ 3,879,000 in operating expense.

Mr. Selecky also claimed that the use of an inflation factor applied to Mr. Wendorf's dismantling studies was inappropriate in that this would require today's customers to pay for inflation that may not occur. Mr. Selecky developed his own net salvage ratios for production plant. *Id.* at 18. In developing his proposed ratios, he excluded switchyard costs and contingency costs from the ratios. In his opinion, switchyard costs represent the costs associated with non-steam production investment and it would be inappropriate to recover these costs in depreciation rates developed for steam [*175] plant. He removed Mr. Wendorf's contingency because he believes it does not represent a true cost, and, he maintained that as more plants are dismantled, one would expect technological improvements over 2002 technology. This resulted in a proposed reduction to the steam production depreciation expense of approximately $ 28,038,000.

Mr. Selecky also opposed PSI's use of the equal life group ("ELG") procedure and recommended that the Commission order PSI to revert to the use of the Average Life Group ("ALG") procedure to develop depreciation rates. Mr. Selecky claimed that use of the ELG procedure results in increasing the depreciation rates in the early life of an asset and implies a precision for allocating consumption of assets that does not exist. PSI-IG Ex. No. 2, p. 28.

Laura L. Cvengros, Assistant Director of the Electricity Division, for the Commission, also presented testimony with respect to depreciation. Ms. Cvengros performed a "reality check" on how PSI's $ 84 million depreciation adjustment was derived. IURC Staff Ex. No. 2, p. 3. She reviewed the depreciation study sponsored by Mr. Spanos and compared that depreciation study to PSI's current depreciation rates. PSI current [*176] depreciation rates are based on the testimony and exhibits presented by the OUCC, which resulted of a settlement in a prior PSI rate case, Cause No. 39584 that carried the rates forward into PSI's last rate case, Cause No. 40003.

Ms. Cvengros testified that she compared various components of PSI's depreciation study with similar components of the OUCC's depreciation study in Cause No. 39584. Staff compared the net salvage ratios proposed by Mr. Spanos in this proceeding with those used by the OUCC and found them to be consistent except for five accounts. IURC Staff Ex. No. 2, p. 12. She also found that, generally, the average service lives used by Mr. Spanos in his study were longer than those used by the OUCC to develop PSI's current depreciation rates. Ms. Cvengros explained that the general lengthening of average service lives for most accounts would have the effect of reducing the depreciation expense for those accounts. Ms. Cvengros concluded that Staff does not believe that the increased depreciation expense in this Cause was caused by significant changes in methods/procedures from the depreciation study used to set PSI's current depreciation rates, and recommended that the [*177] Commission approve PSI's proposed depreciation rates. *Id.* at 9 and 13.

Mr. Spanos testified in rebuttal to the testimony of Messrs. Majoros and Selecky. He first discussed why the ELG procedure should be preferred to the ALG procedure. He opined that the ELG procedure, contrary to Mr. Selecky's opinion, can be viewed as an accurate form of book depreciation. Pet. Ex. II, p. 2.

In Mr. Spanos' opinion, the ELG procedure correctly matches depreciation expense of the straight line allocation of service value over the period the assets are in service and avoids the back-end loading of the ALG procedure. Under the ALG procedure, he observed, the depreciation for each property group is based on the average service life of the account or vintage. As a result of using an average, the cost of short term lives is not fully accrued by the time of their

retirement and the service value of long lived items is more than fully accrued in order to make up for the under accruals of the short lived items. Mr. Spanos testified that the ELG method has been known to experts for many years but its widespread use was constrained by the large amount of computation required. Because the ALG procedure can [*178] be readily performed, it became the choice of experts by default prior to the use of computers due to ease of understanding. *Id.* at 3. With the advent of modern computer equipment, however, this constraint has been removed and this procedure, which is more accurate, is available to all companies.

Mr. Spanos stated that his service life estimates were based on a number of factors, including judgment. *Id.* at 8. According to Mr. Spanos, Mr. Majoros should have incorporated other considerations and made better use of industry data. Mr. Spanos stated the retirement rate method is the most commonly used life analysis when age retirement data are available. It develops historical indications of the rate of retirements by age intervals. The Geometric Mean Method, included in Mr. Majoros analysis, was used many years ago according to Mr. Spanos, to analyze un-aged data before the development of the simulated plant record method. It is no longer used to analyze un-aged data and was never used when age retirement data was available.

Mr. Spanos then discussed Mr. Majoros' use of industry data. *Id.* at 9. Although Mr. Majoros presented several statistics, Mr. Spanos stated he used only [*179] the maximum life or the upper limit as a measure of the reasonableness of his estimate. This use of the maximum recorded lives, in Mr. Spanos' opinion, is not appropriate. According to Mr. Spanos, the purpose of comparing the results of statistical analysis with other electric utilities' data is to ascertain whether the results fall within a range of reasonableness. Typically, when defining the range of reasonable service life estimates for an account, Mr. Spanos excludes several estimates of both the low and upper end of the range. In contrast, Mr. Majoros relied on the very longest service lives used in the industry to justify his estimates, Mr. Spanos observed. Mr. Spanos described in detail a number of examples where he believes Mr. Majoros inappropriately used industry data. *Id.* at 9-11. Due to these problems, Mr. Spanos concluded that all the bases used by Mr. Majoros are flawed and his recommendations as to survivor curve estimates must be rejected. *Id.* at 12.

In response to the recommendations of Mr. Majoros and Mr. Selecky with regard to net salvage for accounts other than production, Mr. Spanos indicated that these witnesses have proposed a radical change in the [*180] basis for determining PSI's allowance for net salvage for transmission, distribution and general plant. He noted that Mr. Majoros also proposed this treatment for the production plant accounts. *Id.* at 13. Their proposal is that the net salvage be removed from the calculation of depreciation and be included as an operating expense. Mr. Spanos characterized this proposal as one of net salvage costs incurred in the past, related to retired plant that served customers in the past, to be collected from current customers in the same manner as current operation and maintenance expense is collected. *Id.* at p. 13.

Mr. Spanos was not aware of any authoritative text on the subject of depreciation that supports their proposal to expense net salvage costs. He stated that the two depreciation texts most often cited by depreciation experts as authoritative support the traditional approach that he used here. Addressing Mr. Majoros' statement that state commissions have adopted his approach, Mr. Spanos said that the Pennsylvania Commission does use the five-year net salvage amortization, because it was required to under a 1962 court order interpreting a Pennsylvania statute. Mr. Spanos agreed [*181] that the Missouri Commission adopted the Majoros approach in a case. He noted, however, that Mr. Majoros failed to mention that this approach was not used in a later case by the Missouri Commission but, rather, the traditional approach used by Mr. Spanos in this matter was used. As to the two Kentucky cases cited by Mr. Majoros, Mr. Spanos stated that the two utilities were small cooperatives that did not maintain detailed records of costs of removal and gross salvage by account. In other Kentucky cases where the utility maintains detailed records of net salvage, as PSI does, Mr. Spanos noted the traditional methodology had been used. He concluded, by stating that 47 state utility commissions use the traditional method of incorporating net salvage in determination of annual depreciation rates. *Id.* at 15.

Mr. Spanos stated why it is more appropriate and equitable to recognize net salvage costs during the life of the plant. He said the net salvage value cost of an item of plant is part of its service value and, therefore, is part of the item's cost of providing service. That cost, he said, should be collected from the customers that receive the service. Thus, an allocable portion [*182] of the net salvage costs should be recovered each year from the customers receiving the value of the service rendered by the item of plant. *Id.* at 15-16. In his opinion, this approach is equitable in that the customers are responsible for the costs of plant that provides them with service. In contrast, Mr. Spanos said, expensing net salvage after the item has been removed from service recovers an entire element of an item's cost of service from customers who do not receive service from that item, or if a customer has received service from the Company for a

number of years, that customer has received only a portion of the item's service value. These results are not equitable, he contended, and violate the principle that customers should pay the cost of plant that serves them.

Mr. Spanos also disagreed with the position of Mr. Selecky and Mr. Majoros that net salvage costs for accounts other than for production plant that may occur in the future should not be collected from customers until they occur. Mr. Spanos testified that the amount of net salvage that should be included in the annual cost of service, and collected from current customers, is a portion of the net salvage related [*183] to the current plant in service as a result of allocating these costs to each year of service rendered by the plant. The amount should not be limited only to the current net salvage costs. Current net salvage costs are related to plant that previously rendered service. *Id.* at 18. Mr. Spanos stated that allocating net salvage costs during the life of the related plant is more appropriate and equitable and is in accord with sound ratemaking principles. In his opinion, delaying collection until such costs are incurred results in a charge to customers for plant from which they did not receive service, and as a result of the delay of recovery, also results in higher revenue requirements.

Mr. Spanos said that the current net salvage accruals are larger than current salvage costs because current cost experience is related to plant retirements that largely come from an older plant base that was constructed to serve fewer customers, while current net salvage accruals relate to plant presently in service that serves a much larger customer base. *Id.* at 23. In his opinion, it is appropriate for PSI to recover amounts for future net salvage costs that are greater than the amounts currently [*184] expended for such costs because the amount that PSI spends for plant additions is far greater than the amount it proposes for recovery of original costs. For example, according to Mr. Spanos, in the year 2001 PSI total plant additions were over $ 236,000,000. Adding the net salvage costs of $ 6.5 million for that year to this amount results in a total expenditure of over $ 240 million in 2001. This total expenditure is approximately $ 60 million greater than the proposed level of depreciation expense that includes recovery of past original costs and future net salvage costs. *Id.* at 23. In Mr. Spanos' opinion, basic equity requires that customers pay for the service value, original cost less net salvage of the plant, from which they receive the service. The fact that this results in accruals for net salvage that are greater than the current experience is neither unfair nor unusual. It is reality, according to Mr. Spanos.

In response to Mr. Majoros' discussion of SFAS 143 and FERC Order 631, Mr. Spanos stated these accounting pronouncements do not control ratemaking. *Id.* at 24. He said that, in general, GAAP in recent years has moved away from the matching principle in favor [*185] of an asset and liability based approach for purposes of improving potential investors' ability to ascertain a company's financial condition. Mr. Spanos said blind compliance would set standards for ratemaking purposes that would violate principles of customer equity by expensing the cost of retiring plant, resulting in charges to today's customers for plant that served past customers. Mr. Spanos added that although utilities may not have a legal obligation to remove plant, they nevertheless do so on a regular basis and will continue to do so in the future.

Mr. Spanos also testified that it is not appropriate to develop net salvage percents for production plant based on the estimated costs of dismantling in current dollars as Mr. Selecky did. Pet. Ex. II, p. 28. He stated that the net salvage costs to be recovered from current customers are those costs that will be incurred when the plant currently providing service is retired. Mr. Spanos escalated the dismantling cost developed by Mr. Wendorf to the year of probable retirement as a factor to be considered in the estimation of net salvage for production plant account. Mr. Spanos stated that the use of current dollar amount to cover [*186] future dismantling costs will result in under recovery and customer inequity. Mr. Spanos also considered the indication of net salvage developed from historical retirements, most if not all of which represent interim retirements, and compared these results to the escalated costs from Mr. Wendorf's dismantlement studies. The historical data, he said, also supports the net salvage percent that he has estimated for the accounts. He said that the net salvage percents that he developed result in an estimate of future net salvage costs that are less than the sum of the probable future net salvage costs related to both interim and final retirement. *Id.* at 29.

Mr. Spanos also stated, contrary to Mr. Selecky's position, that it is appropriate to expect that costs of dismantling will escalate at a rate of 3% per year. He noted the long term inflation rate as measured by the Consumer Price Index has averaged approximately 3%. He noted that the Handy Whitman Index for all steam production plant has increased at an average rate of 5.1% during the past 30 years. Therefore, in his opinion, it is more likely the dismantling costs will escalate at a rate greater than 3%.

Mr. Wendorf also presented [*187] rebuttal testimony on behalf of PSI. He first discussed Mr. Selecky's exclusion of the contingency factor that Mr. Wendorf included in his demolition estimate. Mr. Wendorf stated that this contingency factor was intended to cover unknowns and that experience teaches that almost every complex project, such as demolition of a generation station, ends up with unknowns. Many unknowns do not become apparent until detailed

engineering proceeds immediately prior to actual demolition activities and still others will not be identified until actual demolition activities commence. *Id.* at 2.

Mr. Wendorf noted that his estimates assumed that all underground piping, electric duct and foundations would remain in place, an unlikely event if the sites are reused. Mr. Wendorf looked at the resulting increased costs for one station, Cayuga, if these assumptions were changed. If below ground items have to be demolished and moved, PSI would have to backfill the voids and the debris would have to be disposed off-site. This simple change, according to Mr. Wendorf, results in a significant increase (over $ 15 million) in the estimated cost to demolish the Cayuga station. This change alone is approximately [*188] double the 25% contingency ($ 8,139,000) included in the demolition estimates which Mr. Sleekly removed. *Id.* at 4.

In response to the position of Mr. Majoros, that his estimates assume returning the sites to a "Greenfield" condition, Mr. Wendorf stated that a key assumption in his demolition estimates was that PSI would not have to remove the contents at the ash ponds at the stations. He assumed that the ash ponds at all these stations could be pumped dry and covered with two feet of soil and seeded. He stated that, contrary to the position set forth by Mr. Majoros, the use of two feet of soil to cover several years of bottom and fly ash does not constitute a return to a Greenfield condition. Pet. Ex. JJ, p. 5. Mr. Wendorf investigated what it would cost if PSI were required to remove and dispose of all stored ash from the existing ash pond at Cayuga to an off site landfill designed to contain the material in an environmentally acceptable manner. He assumed that such a landfill could be required and constructed within 10 miles of the Cayuga site. Changing this assumption about ash removal according to Mr. Wendorf, would add more than $ 100 million to the estimated cost of demolishing [*189] the Cayuga site. *Id.* at 5. Mr. Wendorf sponsored an exhibit detailing his analysis and that exhibit demonstrates that the incremental costs of demolishing the Cayuga station would be at least $ 155 million as compared with the original demolition cost estimate of $ 37,544,000. *Id.* at 6. He believes that the demolition estimates that he has developed in this proceeding are conservatively low with the 25% contingency factor included.

In response to Mr. Majoros' conclusion that, as certain boilers have been retired in place, PSI will never dismantle these plants to Greenfield conditions, Mr. Wendorf indicated that the only retired in place boilers on the PSI system are the recently retired boilers at Noblesville and the Wabash River Unit 1. *Id.* at 7. The turbines associated with all three of these boilers are still in service as part of the Noblesville Repowering Project or the Wabash River Coal Gasification Repowering Project. This situation is entirely different from a completely retired plant, he observed. Removal of these boilers while the remainder of the plant continues in operation would be a very complicated and expensive matter, with no real benefit, since there [*190] are interconnecting pipelines and electrical cables located in the area of this boiler which are still in use. Before demolition could begin on a single boiler it would be necessary to determine which of these pipelines and cables would have to be protected, terminated, capped or rerouted to allow continued operation of the remaining units. This process would require extensive engineering and field investigatory work. *Id.* at 8.

Mr. John Roebel was the Company's final rebuttal witness on the subject of depreciation. He responded to Mr. Majoros' assertion that PSI will not dismantle certain generating stations at the end of their useful lives. Pet. Ex. KK, p. 2. Mr. Roebel stated that, in his opinion, demolition will take place, because it is the reasonable thing to do. He stated that he believes that PSI will dismantle these stations in order to reuse the sites as future generating stations. According to Mr. Roebel, the Commission is well aware of the public concern that has accompanied some attempts to construct new generation in Indiana and elsewhere. In contrast, Mr. Roebel noted that there was virtually no local opposition to the recent Noblesville Repowering Project. These [*191] sites were selected originally because they were good sites for generation stations with access to water and to fuel supplies. He noted that there are not many good generating sites that are not already being used today and that he is not aware of any open sites that could be used for a major generation station without significant expenditures for new transmission facilities alone.

Mr. Roebel then discussed PSI's experience with regard to dismantling generating units and re-using sites. He stated the Company had completely retired one major generation station, its Dresser Generating Station, located near Terre Haute. PSI, he said, had dismantled that station and is now using the site for a machine shop. *Id.* at 3. He also noted that PSI has constructed additional generation at existing sites. PSI's Cayuga CT Peaking Unit was built at the Company's Cayuga Station site, the Wabash River Coal Gasification Repowering Project was constructed at the Wabash River Station reusing the existing Unit 1 turbine and other facilities and most recently PSI has reused the Noblesville site and many existing facilities and infrastructures as part of the Noblesville Repowering Project.

(ii) Discussion [*192] and Findings. In evaluating the merits of this issue we are faced with various proposals from expert witnesses in response to depreciation expenses proposed by PSI. In undertaking our review of this issue, the Commission recognizes our evaluation of depreciation expenses involves the examination of many variables. The U.S.

Supreme Court identified the uncertainties associated with the use of depreciation expenses in *Lindheimer v. Illinois Bell Telephone Company, 292 U.S. 151, 168-170, 54 S.Ct. 658, 665-666 (1934),* in which it stated:

> If the predictions of service life were entirely accurate and retirements were made when and as these predictions were precisely fulfilled, the depreciation reserve would represent the consumption of capital, on a cost basis, according to the method which spreads that loss over the respective service periods. But if the amounts charged to operating expenses and credited to the account for depreciation reserve are excessive, to that extent subscribers for the telephone service are required to provide, in effect, capital contributions, not to make good losses incurred by the utility in the service rendered [*193] and thus to keep its investment unimpaired, but to secure additional plant and equipment upon which the utility expects a return.
>
> Confiscation being the issue, the company has the burden of making a convincing showing that the amounts it has charged to operating expenses for depreciation have not been excessive. That burden is not sustained by proof that its general accounting system has been correct. The calculations are mathematical, but the predictions underlying them are essentially matters of opinion. They proceed from studies of the behavior of large groups of items. These studies are beset with a host of perplexing problems. Their determination involves the examination of many variable elements and opportunities for excessive allowances, even under a correct system of accounting, [are] always present. The necessity of checking the results is not questioned. The predictions must meet the controlling test of experience.

Id.

Our determination of appropriate depreciation rates is important, as excessive depreciation rates produce excessive depreciation expense. Since depreciation expense flows dollar-for-dollar into the revenue requirement, excessive depreciation expense [*194] results in an excessive revenue requirement that is ultimately passed on to ratepayers.

As alluded to by various witnesses in this proceeding, PSI's current depreciation rates are a result of a Settlement Agreement in Cause Nos. 39584 and 39584-S-2 (*Ind. Util. Reg. Comm'n*, February 17, 1995), the terms of which were subsequently incorporated into Cause No. 40003. While we have been presented with a wealth of testimony on this issue, we recognize that the determination of appropriate depreciation levels is far from an exact science, and decisions on this issue must be made on a case-by-case basis.

To assist us in our evaluation of the issues, we were presented with a traditional Depreciation Study ("Depreciation Study") prepared by Mr. Spanos. A second study, in response to the Depreciation Study, was prepared by Mr. Majoros. In response to PSI's testimony, Mr. Selecky and Mr. Majoros both proposed to remove some amount of net salvage from depreciation rates and proposed to treat such costs as expenses. The most contentious issue with regard to the determination of depreciation rates and expense in this proceeding was the proper treatment of dismantling costs. Mr. Spanos testified [*195] that dismantling costs should be included in current depreciation rates. Mr. Majoros disagreed and indicated that he does not. believe that PSI will dismantle its generation stations and return them to Greenfield conditions, as it has no legal obligation to do so.

In our consideration of this issue we note that PSI's estimates are not based on the cost of returning these generating station sites to Greenfield conditions. In addition, we do not find testimony, that indicated that three boilers located at operating generating stations were retired in place, controlling in our consideration as to whether these stations will be demolished at the end of their useful lives. The rebuttal testimony of Mr. Wendorf and Mr. Roebel make it clear that it is much more expensive and difficult to remove a single boiler and associated equipment while other units at a generating station are still in operation than to do so when the entire plant is demolished. This Commission is aware of the controversy that can be generated when a public utility proposes to construct a generation facility on a new site. It appears reasonable for PSI to maintain its current generation sites for future use as generating [*196] stations. Therefore, this Commission concludes dismantling costs should be included in fixing PSI's depreciation rates.

The next issue is the timing of the collection of such costs. The parties did not disagree that dismantling costs are a part of the cost of current facilities providing current service. They disagreed as to the timing of the collection of such costs and their amount. This Commission can either find that current customers should pay a share of dismantling costs, which will not be incurred for a number of years, or, in the alternative, conclude that these costs should be passed on to a future generation of customers. This Commission does not believe that the latter alternative constitutes sound regulatory policy, or is based on sound ratemaking principles. Current customers are receiving service from PSI's

generation facilities. A part of the costs of those facilities is dismantlement upon retirement. Therefore, we do not believe it would be appropriate for the Company to backload the dismantlement costs for future ratepayers to pay when the facilities associated with these costs are providing service to current customers. Rather, we find it is appropriate that these [*197] costs be shared by all customers that received service from PSI's generation facilities. Accordingly, this Commission finds that dismantlement costs are properly included in determining the depreciation rates approved in this cause.

The only challenge to the estimated costs of dismantling PSI's generating stations, presented by Mr. Wendorf, was Mr. Selecky's proposal to eliminate the 25% contingency. We believe that Mr. Wendorf's testimony on this issue provides an adequate explanation as to why such a contingency is needed. Mr. Wendorf also demonstrated that minor changes in conservative assumptions could more than use up the contingency. Therefore, based on the facts presented in this Cause, we find that Mr. Wendorf's approach is acceptable to the Commission.

The final issue regarding dismantlement costs is whether inflation should be factored into the dismantlement cost estimates to be utilized in determining PSI's depreciation rates. Mr. Selecky and Mr. Majoros objected to the use of inflation. Mr. Spanos utilized Mr. Wendorf's dismantlement costs which are stated in 2002 dollars, and factored inflation up to the year of the projected dismantlement as a factor in his consideration, [*198] along with his analyses of historical, or interim retirements. We find Mr. Spanos' approach to be realistic and consistent with past experience. Inflation has been a fact of life in the American economy for many years. Not factoring inflation into dismantlement costs to be incurred in the future would understate those costs, with the result being that future customers would have to pay costs arising from facilities that are not serving them. This result flies in the face of matching rates with costs incurred for service, a sound ratemaking principle followed by this Commission. Moreover, current customers receive a benefit by factoring in inflation, as it may appropriately allow for a reduction in rate base because of the increased accumulated reserve for depreciation. Accordingly this Commission finds that accounting for inflation in determining the dismantlement estimates to be used as part of PSI's depreciation rates is reasonable.

Turning to the net salvage values for transmission, distribution and general plant, Mr. Selecky and Mr. Majoros urged this Commission to utilize historical average of actual net salvage expense incurred by PSI for determining the net salvage to be utilized [*199] for these accounts and then expense these averages as a separate cost of service item. In effect, they are proposing that net salvage values be eliminated from the depreciation rates determination in this proceeding. n9 In contrast, Mr. Spanos took the traditional approach and utilized estimated net salvage values for these accounts based on historical net salvage costs as a percent of the original cost of the retired assets that produced the gross salvage or required costs to remove. Pet. Ex. II, p. 20. Mr. Majoros recognized that Mr. Spanos' approach was not abnormal, but he and Mr. Selecky cited a number of state commissions where an historical average approach had been adopted.

n9 Mr. Selecky proposed a 10-year average, while Mr. Majoros used a 5-year average. Mr. Majoros made the same proposal with regard to production plant.

Based on our review of the decisions cited by Mr. Majoros and Mr. Selecky, we note that only one state commission, the Pennsylvania Public Service Commission, following the directive in [*200] a decision by the Pennsylvania Supreme Court, has implemented the historical average approach. While the Missouri and Kentucky Public Service Commissions have utilized the historical approach to net salvage values in some cases or on a trial basis, subsequent decisions have adopted the approach advocated by Mr. Spanos.

We believe that there is a sound basis for the traditional approach on this issue that is utilized by a majority of states. Utilizing historical averages as an item to be expensed to current customers means that these customers will be paying for salvage costs at levels that may not be sufficient. That means that the next generation of customers will be paying for salvage costs related to facilities from which they may never have received service. The use of best estimates of future salvage costs addresses this inequity. Moreover, use of historical averages for dismantling costs does not take into account the current configuration of PSI's system with regard to its production, transmission, distribution and general facilities. Facilities in service 40-50 years ago did not take into account the significantly enhanced customer base that PSI now serves, nor the current [*201] configuration of PSI's facilities that serve these customers. It seems appropriate to utilize best cost estimates for net salvage values taking into account specific facilities now serving PSI's customers in developing depreciation rates that today's customers should pay. Accordingly, we find that the use of

historical averages for net salvage values with regard to transmission, distribution and general plant for the purpose of expensing them outside the context of the depreciation determination should be, and hereby is, rejected. n10

n10 With respect to another area of contention related to average service lives for a few accounts, Mr. Majoros proposed longer lives than those used by Mr. Spanos for six accounts. We find Mr. Spanos' testimony provides an adequate explanation on this issue and we decline to substitute the calculations of Mr. Majoros for only those few accounts.

With respect to the use of the ELG or ALG methodologies to determine average service lives, we note that Mr. Selecky advocates the use of ALG [*202] to determine average service lives as opposed to Mr. Spanos' ELG methodology. This Commission on numerous occasions has accepted the use of the ELG methodology. *See, Indiana-American Water Co., Cause No. 40703, 1997 Ind. PUC LEXIS 429 (Ind. Util. Reg. Comm'n*, December 11, 1997). Therefore, based on our review of the testimony we find that Mr. Spanos' use of the ELG methodology is acceptable.

Based on our review of the record on this issue, we find that the depreciation rates developed in Mr. Spanos' Depreciation Study and proposed by PSI for approval by this Commission are reasonable and appropriate and should be approved and used to determine PSI's *pro forma* operating expenses in this case. In approving PSI's proposal in this Cause, we recognize the complexity of this issue, and the fact that it will be necessary for us to carefully review this issue on a case-by-case basis in future proceedings before the Commission.

(b) Accelerated Depreciation on NO[x] Equipment.

(i) Evidence. In its case-in-chief testimony, PSI requested authority to apply a 15-year depreciation rate to its NO[X] compliance projects for the purpose of providing assurance [*203] of equipment cost recovery. Pet. Ex. C, p. 24. In particular, the Company would apply this accelerated depreciation rate to the same equipment approved by this Commission for use by PSI in Cause Nos. 41744, 41744-S1, 42061 and 42061-S1. Subsequently, PSI altered its request to seek authority to apply an 18-year depreciation rate to its NO[X] compliance equipment. Pet. Ex. OO, p. 4.

The only party to oppose this request was Kroger. Mr. Higgins testified that PSI's request would result in a depreciation rate of 6.67% instead of the 3.52% rate derived from the depreciation study sponsored by PSI witness Spanos, and the revenue requirement related to this difference was $ 10.5 million. Mr. Higgins testified that he believed that this request should be denied as it would compound the cost burden to customers at a time when the Company was seeking a 15% rate increase. Kroger Ex. No. 1, p. 21.

(ii) Discussion and Findings. We find PSI's request to be in accordance with the law and reasonable. IC 8-1-2-6.7(b) permits PSI to seek Commission approval of a 10-year depreciation rate for equipment deemed to be clean coal technology. We believe PSI's proposal is reasonable, will ensure cost [*204] recovery of Commission approved projects to which PSI is statutorily entitled, and should be approved. Therefore, we find that PSI should be authorized to utilize an 18-year life over which to depreciate its Commission-approved NO[X] equipment. We note that our decision here is entirely consistent with our November 25, 2003 Order in Cause No. 42411.

NOTE: THE DEPRECIATION DISCUSSION IN THE OPINION ENDED AT LEXIS PAGE 204. THE REST OF LEXIS PAGE 204 THROUGH LEXIS PAGE 412 ARE OMITTED FROM THIS SCHEDULE DUE TO ITS LENGTH.

HADLEY, RIPLEY AND ZIEGNER CONCUR; McCARTY [*412] AND LANDIS ABSENT:

APPROVED: May 18, 2004

CONCURBY: HADLEY; RIPLEY; AND ZIEGNER