# BEFORE THE STATE TAX APPEAL BOARD OF THE STATE OF MONTANA

Puget Sound Energy, Inc.	)
5	) Docket No. CT-2007-5
Appellant,	)
	) Findings of Fact and
<b>v.</b>	) Principles of Law,
	) Conclusions of Law and
The Department Of Revenue	) Board Discussion, Order and
of the State of Montana	) Opportunity for Judicial
	) Review
Respondent.	)

The above-entitled matter was heard from September 29 through October 8, 2008, in accordance with the order of the State Tax Appeal Board (Board). The notice of the hearing was given as required by law. Michael W. Green and David J. Crapo represented Puget Sound Energy, Inc. (PSE or Puget). C.A. Daw and Michele Crepeau represented the Department of Revenue (DOR or Department).

Testimony was presented, exhibits were received, and post-hearing briefs and proposed findings and conclusions were submitted. The Board having fully considered the testimony, exhibits, and post-hearing submissions, finds and concludes as follows.

# Findings of Fact and Principles of Law

1. The issue involved in this matter is the valuation of the operating property owned by Puget Sound Energy, an electric utility corporation, for purposes of *ad valorem* taxation in the state of Montana. (Appellant's Complaint).

- 2. The DOR is required to assess all taxable property at 100% of its market value and may not adopt a lower or different standard of value from market value except as otherwise provided. (Section 15-8-111, MCA).
- 3. Market value is defined as "the value at which property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of relevant facts." (Section 15-8-111(2)(a), MCA).
- 4. Puget Sound Energy is subject to central assessment by the Department of Revenue on January 1 of each year. (Section 15-23-101(2), MCA).
- 5. The parties stipulated and submitted to the board the following facts prior to the hearing. (Pre- Hearing Conference Order).
  - A. These consolidated cases relate to the 2005, 2006, and 2007 property tax assessments asserted by the DOR against the operating property owned by PSE located in the state of Montana.
  - B. The valuation lien dates are January 1, 2005, 2006 and 2007.
  - C. PSE is a Washington corporation established in 1960. PSE Form 10-K, Item 1. Business (Mar. 1, 2007).
  - D. PSE was a wholly owned subsidiary of Puget Energy, Inc., a

    Delaware corporation ("Puget Energy"), on each of the subject lien
    dates. Puget Energy was a publicly traded company listed on the New
    York Stock Exchange on each of the subject lien dates.
  - E. PSE is a regulated electric and gas service company that provides services to approximately one million electric customers and 713,000 gas customers in a service territory that covers approximately 6,000 square miles in the Puget Sound region of the State of Washington.
  - F. PSE has no electric or gas customers in Montana.

- G. Although PSE has no customers in Montana, it has arranged to obtain electric generation from assets located in Montana. PSE owns an interest in certain electric generation properties in Montana. Specifically, PSE owns a 50% interest in the Colstrip Units 1 and 2 and a 25% interest in Units 3 and 4 located in Colstrip, Montana.
- H. "PSE is subject to comprehensive regulation by the Securities and Exchange Commission (the "SEC"), the Federal Energy Regulatory Commission (the "FERC") and the Washington Utility and Transportation Commission ("WUTC"). These agencies regulate many aspects of PSE's business, including customer rates, service territories, sales of securities, asset acquisitions and sales, accounting policies and practices, wholesale and [sic] purchases of electricity, and the operation of it electric generation and transmission facilities."
- I. PSE is required to keep a set of regulatory books and comply with the FERC accounting guidelines. These regulated books are reported to the FERC annually in a form referred to as the FERC Form 1 and FERC Form 2.
- J. In May of each of the subject years, the DOR issued its Revised Final Appraisal Reports for the respective January 1<sup>st</sup> lien dates.
- K. PSE disagreed with the DOR's assessments for the subject years and timely filed a complaint with STAB for each of the subject assessments and thus initiated this action.
- 6. PSE presented Hal B. Heaton, Ph.D.; John H. Davis, III, Ph.D.; Gary C. Cornia, Ph.D.; and Lawrence C. Walters, Ph.D., as expert witnesses supporting the taxpayer's case. (Tr. Generally).
- 7. PSE, like all centrally assessed taxpayers in Montana, is required to file a report with the DOR by March 31<sup>st</sup> of each year, to provide the DOR

- with the financial information needed to prepare the assessment. (Sections 15-23-103, 301 and 303, MCA).
- 8. The DOR does not generally receive all the materials requested in the annual property tax report. In this instance, for example, Puget did not complete the annual report for tax year 2005. (See Exh. 1, pp. PUG-DOR 382-384, 394, 397-98, 416, 428). Because of Montana's statutory filing deadline, certain federal regulatory filings such as the FERC Form 1 are not yet completed for the year in question. (Exh. 1, p. PUG-DOR 428; Section 15-23-103, MCA).
- 9. Puget serves a high growth area and its customer base expanded during the tax years at issue. Puget purchased power in addition to its own generation because it did not have sufficient assets to serve its retail load. Puget added, and was expected to continue adding, plant and generation facilities to service new customers. (DeBoer, Tr., pp. 442-444).

# DOR Appraisals for 2005, 2006, and 2007

- 10. The DOR centrally assessed the operating properties of PSE for the 2005, 2006, and 2007 tax years through the use and application of the unit method of valuation. (Exh. 10, p. PUG-DOR 178; Exh. 12, p. PUG-DOR 1118; Exh. 14, p. PUG-DOR 2007). The unit method of valuation involves appraising, as a going concern and as a single entity, the entire unit of the company, wherever located. (Rule 42.22.101(30), ARM). The valuation thus determined is intended to capture all the operating assets of the company, both tangible and intangible. (ARM 42.22.101(31).
- 11. After the unit value of PSE was identified and the default percentage for intangible personal property was removed pursuant to § 15-6-218, MCA,

- and ARM 42.22.110, the DOR allocated to Montana a proportionate share of the unit value. (Exh. 10, p. PUG-DOR 178; ARM 42.22.121).
- 12. PSE maintains a negotiated lease with the Bonneville Power Administration (BPA) to use certain power lines to transport power from Colstrip to the West Coast. PSE does not own the lines in question but the transmission contracts specify that PSE will pay for transmission services based on the contracted megawatt level of demand, regardless of use. (Exh. 7, p. PUG-4577, DeBoer, Tr., pp. 507-508).
- 13. The BPA contract is considered an asset by PSE. (Appellant's Post-Hearing Brief, p. 32).
- 14. Utility regulators do not include the value of the BPA lines in Puget's rate base but, in Montana, the beneficial use of BPA power lines may be taxed pursuant to § 15-24-1203, MCA. (Cameron, Tr. p. 80; DeBoer, Tr. generally).
- 15. The Department did not add the value of the BPA lines into the cost indicator of value. Instead, the DOR separately taxed the value of the BPA lines, and added that value to the allocated Montana value for tax years 2005, 2006, and 2007. (Exh. 10, p. PUG-DOR 178; Exh. 12, p. PUG-DOR 1118; Exh. 14, p. PUG-DOR 2007).
- 16. John K. Cameron, DOR Utility Appraiser, prepared the DOR appraisals for all three of the subject years. (Cover pages of Exhs. 10, 12, and 14).
- 17. Mr. Cameron became a utility appraiser for the Department in late 2004. Prior to 2005, he had never prepared a utility appraisal. Mr. Cameron attended a WSATA (Western States Association of Tax Administrators) workshop in February 2005 and completed the PSE appraisal in April 2005. (Cameron, Tr. pp. 56-57 and 1831).

- 18. Mr. Cameron did not hold any appraisal designations at the time he prepared the 2005 appraisal. (Cameron, Tr. p. 59).
- 19. To prepare the appraisal of Puget, Mr. Cameron used a template available through the Department but, at the time of this hearing, he could not recall what the template looked like. (Cameron, Tr. pp. 76-77).
- 20. The DOR did not call either Mr. Cameron or a supervisor from the central assessment unit as a witness to provide support or explanation for the DOR appraisals in this case. (Tr. generally).
- 21. The Department did introduce several analyses by investment bankers, as well as PSE's ten-year strategic plan, to support the DOR's assessed values of the company. (Exhs. 40, 43, 44, 52, and 55).
- 22. Additionally, J. Randall Woolridge, Ph.D.; D. Brent Eyre, ASA; John W. Wilson, Ph.D.; and James T. McClave, Ph.D., testified as experts in support of the Department's values. (DOR's Notice of Filing Expert Witness Reports and Tr. generally).
- 23. During the three years under appeal, the DOR calculated five indicators of value each year: original cost less depreciation (OCLD), direct capitalization of net operating income (NOI), direct capitalization of gross cash flow, yield capitalization of NOI, and stock and debt. (Exh. 10, p. PUG-DOR 178; Exh. 12, p. PUG-DOR 1118; Exh. 14, p. PUG-DOR 2007).
- 24. The DOR used the figures in the taxpayer's FERC Form 1 to calculate the OCLD indicator of value for each of the three years under appeal. The Department did not test for obsolescence beyond the depreciation amount in the FERC Form. The Department maintained that all forms of depreciation were included in the book depreciation figure, based on the definition of depreciation in the Uniform System of Accounts used for the FERC Form. (Cameron, Tr. pp. 82 and 90; DeBoer, Tr. pp. 484-488; 18 CFR 101.12).

- 25. The direct capitalization approach is used to convert a single year's income into a value indication in one direct step through the use of a direct capitalization rate. Typically, the capitalization rate used in this approach is drawn from sales of comparable properties. In this matter, the parties agreed there were no sales of comparable properties from which to draw such data. (Exh. 22, pp. 43 & 47; Cameron, Tr. p. 169; Davis, Tr. p. 724).
- 26. For all three years in this case, the DOR derived a direct capitalization rate from earnings to price (E/P) ratios in place of data from sales of comparable properties. (Exh. 11, p. PUG-DOR 3517; Exh. 13, p. PUG-DOR 3557; Exh. 15, p. PUG-DOR 3608).
- 27. Puget maintained the Direct Capitalization approach required the use of data from similar properties and criticized the Department's substitution of E/P ratios in its direct capitalization approach. (Heaton, Tr. pp. 289-290).
- 28. The DOR used a stock and debt approach as a substitute for a sales comparison approach because no data from sales of comparable companies was available. (Exh. 22, pp. 49-50; Davis, Tr. p. 724).

# DOR's 2005 Appraisal

29. The 2005 DOR values determined for each value indicator were:

Value Indicators	Before IPP*	After IPP*
Original Cost Less Depreciation	\$4,176,377,442	\$3,758,739,698
Direct Capitalization of Net Operating Income	4,411,291,048	3,970,161,943
Direct Capitalization of Gross Cash Flow	3,960,550,581	3,564,495,523
Yield Capitalization of Free Cash Flows	3,850,369,704	3,465,332,734
Stock & Debt Approach	4,031,281,248	3,628,153,123

<sup>\*</sup>Intangible Personal Property (10% Exemption) (Exh. 10, p. PUG-DOR 178)

- 30. The DOR's 2005 Montana Allocated Value, after IPP was \$436,467,065. (Exh. 10, p. PUG-DOR 178).
- 31. The DOR's OCLD indicator contained material errors. Several items were not included in the OCLD total and should have been. (Cameron, Tr. pp. 83-86).

- 32. The DOR also included an amount for "Property Under Capital Lease". The DOR's expert, Mr. Eyre, did not know where this figure came from because the FERC Form 1 did not have any capitalized amount in that account. (Exh. 10, p. PUG-DOR 179; Exh. 22, p. 19).
- 33. These and other errors in the cost approach caused the DOR's OCLD indicator to be inaccurate. (Exh. 10, p. PUG-DOR 179; Exh. 22, p. PUG-DOR 5177; and Exh. 17, p. PUG-DOR 15348).
- 34. In deciding the correlated unit value, the DOR gave the OCLD indicator 70% weight. (Cameron, Tr. p. 75).
- 35. The DOR calculated three income indicators of value but only weighed two of them in correlating a final value for PSE: the direct capitalization of NOI and the yield capitalization of free cash flows. DOR gave each of these income indicators a 10% weight in the correlated unit value. (Exh. 10, p. PUG-DOR 178; Cameron, Tr. p. 75).
- 36. In its yield capitalization model, the DOR made errors in the treatment of deferred income tax, a factor in calculating the free cash flow. (Exh. 37, p. PUG-DOR 3; Cameron, Tr. pp. 108-113).
- 37. The DOR acknowledged this change needed to be made in its yield capitalization model but did not make the change in the final 2005 value for PSE. As a result, this DOR value indicator remained inaccurate. (Cameron, Tr. pp. 112-113).
- 38. The DOR used a stock and debt indicator as its market approach to value and gave this indicator a 10% weight in correlating the final unit value. (Cameron, Tr. p. 75).
- 39. In calculating the stock and debt indicator, the DOR sought to allocate to PSE a proportionate share of the stock value of Puget Energy, the parent company. (Exh. 10, p. PUG-DOR 187; Cameron, Tr. p. 117).

- 40. Puget Energy had a second subsidiary, InfrastruX. Associated with InfrastruX, there was an abnormal write down on the parent company's net operating income. (Exh. 37, p. PUG-DOR 3; Cameron, Tr. p. 119).
- 41. The DOR did not recognize this extraordinary event in its appraisal which caused an error in the DOR's calculation of the PSE share of the parent company's stock. (Cameron, Tr. pp. 115-122; Marcelia, Tr. pp. 878-879; Exh. 10, pp. PUG-DOR 186-187).
- 42. Mr. Eyre noted additional errors in the DOR's stock and debt indicator calculations. (Exh. 22, pp. PUG-DOR 5158-5160).
- 43. The DOR also made errors in calculating the 11.6796% allocation factor used to identify the Montana portion of PSE's operating property by omitting several categories of property that should have been included in the calculations. (Eyre, Tr. pp. 1405-1408; Exh. 10, p. PUG-DOR 188; Exh. 22, p. PUG-DOR 5192).
- 44. Mr. Eyre included all appropriate categories of property in calculating an allocation factor and derived a factor of 11.4868%. PSE acknowledged that Mr. Eyre's allocation factor was more appropriate. (Appellant's Post-Hearing Brief, p. 31; Exh. 22, p. PUG-DOR 5192; Cameron, Tr. pp. 130-131).

# DOR's 2006 Appraisal

45. The 2006 DOR values determined for each value indicator were:

Value Indicators	Before IPP*	After IPP*
Original Cost Less Depreciation	\$4,548,417,418	\$4,093,575,676
Direct Capitalization of Net Operating Income	4,958,050,493	4,462,245,444
Direct Capitalization of Gross Cash Flow	5,182,697,867	4,664,428,080
Yield Capitalization of Free Cash Flows		
Stock & Debt Approach	4,407,036,206	3,966,332,585

<sup>\*</sup>Intangible Personal Property (10% Exemption) (Exh. 12, p. PUG-DOR 1118)

- 46. The DOR's 2006 Montana Allocated Value, after IPP was \$452,908,753. (Exh. 12, p. PUG-DOR 1118).
- 47. As in 2005, the DOR's OCLD indicator included material errors. (Exh. 12, PUG-DOR 1119; Exh. 23, pp. PUG-DOR 5213 and 5263).
- 48. The DOR gave the OCLD indicator 60% weight in correlating the unit value. (Cameron, Tr. p. 208; Exh. 12, p. PUG-DOR 1118).
- 49. The DOR calculated three income indicators of value but only weighed the direct capitalization of NOI in correlating a final value for PSE. The Department gave this indicator 10% weight. (Exh. 12, p. PUG-DOR 1118; Cameron, Tr. p. 208).
- 50. The DOR calculated a yield capitalization of free cash flows indicator but failed to correct the error in handling the deferred income tax part of the free cash flow. (Exh. 12, p. PUG-DOR 1123) In addition, PSE substantially increased capital expenditures in 2005 which caused a negative free cash flow as calculated by the Department. Accordingly, the DOR gave the yield capitalization indicator no weight in correlating the unit value and did not list the value on the reconciliation page. (Exh. 12, pp. PUG-DOR 1118, 1120 and 1123; Cameron, Tr. p. 208).
- 51. The DOR used a stock and debt indicator as its market approach to value and gave this indicator a 30% weight in correlating the final unit value. (Cameron, Tr. p. 208).
- 52. The stock and debt indicator suffered from several errors. For example, the DOR improperly removed construction work in progress (CWIP) from the operating property. (Exh. 12, p. PUG-DOR 1127).
- 53. Because PSE has no publicly traded stock, a portion of the parent company's stock value must be allocated to PSE. In doing so, the DOR also allocated the parent company's debt when the parent had no debt

- beyond PSE's and debt should not have been allocated. Also, as a part of the allocation process, the Department mixed NOI figures from the FERC Form 1 (used for PSE) and the 10-K (used for the parent) and should have used the 10-K figures for both. (Exh. 23, p. PUG-DOR 5245; Exh. 12, pp. PUG-DOR 1127-1128; Cameron, Tr. pp. 173-174).
- 54. The Department used the WSATA formula to derive an allocation factor to identify the Montana portion of PSE's property. The factor thus derived was 11.0682%, but the DOR failed to include "Gas Stored Underground" current or non-current in its calculation of the allocation factor. (Exh. 12, p. PUG-DOR 1129; Exh. 23, pp. PUG-DOR 5250-5251).
- 55. Mr. Eyre included "Gas Stored Underground" current and non-current in calculating the allocation factor used in his appraisal. Otherwise, his calculations matched those of the DOR. The allocation factor calculated by Mr. Eyre was 11.0451%. (Exh. 23, pp. PUG-DOR 5251 and 5278).

#### DOR's 2007 Appraisal

56. The 2007 DOR values determined for each value indicator were:

Value Indicators	Before IPP*	After IPP*
Original Cost Less Depreciation	\$5,213,175,011	\$4,691,857,510
Direct Capitalization of Net Operating Income	5,006,657,218	4,505,991,496
Direct Capitalization of Gross Cash Flow	5,362,633,702	4,828,370,332
Yield Capitalization of Free Cash Flows		
Stock & Debt Approach	5,246,958,470	4,722,262,623

<sup>\*</sup> Intangible Personal Property (10% Exemption) (Exh. 14, p. PUG-DOR 2007).

- 57. The DOR's 2007 Montana Allocated Value, after IPP was \$517,302,354. (Exh. 14, p. PUG-DOR 2007).
- 58. The Department considered three of the five indicators in determining a correlated unit value for PSE. The DOR gave 60% weight to the OCLD indicator, 20% weight to the direct capitalization of NOI and 20% weight to the stock and debt approach. (Exh. 14, p. PUG-DOR 2007).

- 59. In its 2007 appraisal, the DOR corrected most of the major errors which marred the calculation of the value indicators in the prior two years' appraisals. (Exh. 14 generally).
- 60. The DOR's OCLD indicator matched the experts' (Mr. Brent Eyre and Dr. John Davis) cost indicators prior to any deduction for IPP or for economic obsolescence. (Exh. 14, p. PUG-DOR 2007; Exh. 19, p. PUG 15496; Exh. 24, pp. PUG-DOR 5300 and 5347).
- 61. The DOR's yield capitalization of free cash flows indicator depended on an average of the prior three years' free cash flow. Due to substantially increased capital expenditures by PSE, the free cash flows for two of those years were negative, as calculated by the Department. As a result, the Department did not complete a yield capitalization income indicator for 2007. (Exh. 14, pp. PUG-DOR 2007 and 2012; Exh. 24, p. PUG-DOR 5324).
- 62. Again, the Department used the WSATA formula to derive an allocation factor to identify the Montana portion of PSE's property. The factor thus derived was 11.0991% but, as in 2006, the DOR failed to include "Gas Stored Underground" current or non-current in its calculations. (Exh. 14, p. PUG-DOR 2017; Exh. 24, p. PUG-DOR 5335).
- 63. By including "Gas Stored Underground" current or non-current in calculating an allocation factor, Mr. Eyre's factor was 10.8884%. (Exh. 24, p. PUG-DOR 5336).

# PSE Appraisals by Dr. John H. Davis III

64. PSE retained Dr. John H. Davis III to prepare a separate appraisal of PSE's Montana operating property for each of the subject years. (Exhs. 17, 18 and 19).

- 65. In each of the subject years, Dr. Davis used two indicators of value to determine a unit value for PSE's operating property: (1) Historic cost less depreciation ("HCLD")<sup>1</sup>, and (2) Yield Capitalization of Income. (Davis, Tr. pp. 725 and 732-734; Exh. 17, p. PUG-15322; Exh. 18, p. PUG-15396; and Exh. 19, p. PUG-15470).
- 66. Dr. Davis reduced his correlated unit value each year by the 10% default amount allowed for intangible personal property. (Davis, Tr. p. 726; Exh. 17, p. PUG-15322; Exh. 18, p. PUG-15396; and Exh. 19, p. PUG-15470; ARM 42.22.110).
- 67. Dr. Davis then deducted the amount for "Gas Stored Underground Current" as a business inventory exempt from taxation under § 15-6-202, MCA, to derive an adjusted system value. (Davis, Tr. pp. 728 and 733-734; Exh. 17, p. PUG-15322; Exh. 18, p. PUG-15396; and Exh. 19, p. PUG-15470).
- 68. None of Puget's stored gas is located in Montana. Mr. Eyre included "Gas Stored Underground Current" in the cost approach to insure that all of PSE's operating property was valued in the OCLD indicator. He then eliminated the stored gas through the interstate allocation formula. (Eyre, Tr., pp.1387-1388 and 1342).
- 69. Dr. Davis's adjusted system value for 2005 was \$2,793,902,187, 2006 was \$2,772,800,064 and 2007 was \$2,897,258,657. (Exh. 17, p. PUG-15322; Exh. 18, p. PUG-15396; and Exh. 19, p. PUG-15470).
- 70. For the purpose of these appraisals, PSE authorized Dr. Davis to use the DOR's original allocation factor. (Davis, Tr. p. 729).
- 71. Dr. Davis acknowledged the use of Mr. Eyre's allocation factor was appropriate. (Davis, Tr. pp. 729 and 733).

<sup>&</sup>lt;sup>1</sup> HCLD and OCLD were used synonymously in this hearing. See Davis, Tr. p. 667.

- 72. For his HCLD indicator in each appraisal, Dr. Davis used the identical data source to that used by the DOR. Subsequently, however, Dr. Davis completed his appraisals by calculating an economic obsolescence adjustment using an income shortfall method, also known as an income impairment method. (Davis, Tr. pp. 667-676).
- 73. In the income impairment method, Dr. Davis compared the level of income PSE actually earned to the level of income it would have earned if it achieved what he identified as a market rate of return. Dr. Davis applied the same methodology for calculating economic obsolescence to each of the subject years. The economic obsolescence thus derived was \$1,027,628,458 for 2005, \$1,461,572,095 for 2006 and \$1,873,736,920 for 2007. (Davis, Tr. pp. 671-677 and 683; Exh. 17, pp. PUG-15318-15319; Exh. 18, pp. PUG-15392-15393; and Exh. 19, pp. PUG-15466-15467).
- 74. According to PSE, regulatory lag and regulatory drag impaired the company's earnings causing economic obsolescence. Regulatory lag is the delay between the company's spending money on capital assets and being able to recover that investment through having their regulators include the new assets in their rate base. Regulatory drag is caused by having regulators not allow expenses into the rate base. (DeBoer, Tr., pp. 452 and 457-458; Marcelia, Tr. p. 949; Exh. 45, pp. PUG 30609-30611).
- 75. PSE is not allowed to earn a return on its entire net plant value. It may only earn a return on its rate base and its rate base does not include some items which are included in its net plant value. (DeBoer, Tr. pp. 441-442 and 459-460).
- 76. Dr. Davis determined through his HCLD approach the following values: \$3,165,911,000 for 2005; \$3,171,574,000 for 2006; and \$3,339,438,000 for

- 2007. (Exh. 17, p. PUG-15319; Exh. 18, p. PUG-15393; and Exh. 19, p. PUG-15467).
- 77. Dr. Davis prepared an income approach to value using a single-step yield capitalization model, known as a no-growth model. (Davis, Tr. pp. 683-684).
- 78. Free cash flow was the income figure Dr. Davis used in the yield capitalization model. He analyzed five different approaches to estimate free cash flow and selected the performance ratio method. (Davis, Tr. pp. 685-693).
- 79. Dr. Davis performed a cost of capital study for each of the subject years. He used a "band of investment" technique "where each band of capital [debt and equity] and its associated cost [interest or discount] was averaged to obtain a weighted average cost of capital or WACC." (Exh. 17, p. PUG-15334; Exh. 18, p. PUG-15408; and Exh. 19, p. PUG-15482).
- 80. In his cost of capital studies, Dr. Davis calculated the cost of equity by averaging the results of four methods. In each of these methods, he included a size premium. In the Bond Yield plus Risk Premium Method, he also included a judgmental risk premium based on his estimation of the state of the electric utility industry. (Exh. 17, pp. PUG-15337-15340; Exh. 18, pp. PUG-15411-15414; Exh. 19, pp. PUG-15485-15488).
- 81. After Dr. Davis determined his estimate of the cost of debt and equity, he made a flotation cost adjustment to each estimate. According to Dr. Davis, the true cost of capital cannot be estimated without adding the cost of issuing the various debt and equity securities required to purchase the property. (Exh. 17, pp. PUG-15336 and 15341; Exh. 18, pp. PUG-15410 and 15415; and Exh. 19, pp. PUG-15484 and 15489).

- 82. Using this yield capitalization model, Dr. Davis estimated the value of PSE as follows: \$3,164,590,000 for 2005; \$3,172,749,000 for 2006; and \$3,338,261,000 for 2007. (Exh. 17, p. PUG-15317; Exh. 18, p. PUG-15391; and Exh. 19, p. PUG-15465).
- 83. Mr. Eyre criticized Dr. Davis's inclusion of the judgmental risk premium because Dr. Davis failed to provide documentation or references demonstrating how he derived the risk premium. (Exh. 22, pp. PUG-DOR 5144-5145).
- 84. Mr. Eyre criticized adding floatation costs to the discount rate. He considers flotation costs a cost of doing business and not a part of the discount rate used to find the value of the property for *ad valorem* tax purposes. (Exh. 22, pp. PUG-DOR 5148-4149).
- 85. Dr. Davis agreed flotation costs could be treated as an expense, a reduction in the free cash flow. (Davis, Tr. pp. 791-792).
- 86. Mr. Eyre further disagreed with Dr. Davis's use of a size premium adjustment in his cost of equity estimates. According to Mr. Eyre, the size premium adjustment was the result of data contained in the Ibbotson Yearbook. After 1982, Ibbotson made changes in its data procedures and there is little indication of a size premium in their post-1982 data, a fact which invalidated the use of a size premium adjustment in Mr. Eyre's opinion. (Exh. 22, pp. PUG-DOR 5139-5140).

# **Data Envelopment Analysis**

87. PSE submitted a written report, titled "Obsolescence in Puget Sound Energy, Inc." dated February 18, 2008, and authored by Dr. Gary C. Cornia and Dr. Lawrence C. Walters. This report examined whether there was additional obsolescence that needed to be accounted for in a cost analysis. (Exh. 20; Dr. Cornia, Tr. generally).

- 88. Dr. Cornia is the Dean of the Marriott School of Management and the Marriott Professor of Management at Brigham Young University. He is a former president of the National Tax Association and a former member of the Utah State Tax Commission. He was certified, without objection, as an expert in regard to the area of obsolescence and the calculation of obsolescence in the area of public utility property tax. (Cornia, Tr. pp. 514 and 516-518; Powell, Tr. p. 523).
- 89. Dr. Walters, a professor of public policy analysis and management at Brigham Young University, has studied and used Data Envelopment Analysis (DEA) since 1980 and has written software for DEA models. He was certified, without objection, as an expert on DEA as it relates to obsolescence in a property tax matter. (Walters, Tr. pp. 1645 and 1652).
- 90. Drs. Cornia and Walters have adopted the DEA methodology which looks at ratios of multiple inputs and multiple outputs to compare similar utility companies to one another. (Cornia, Tr., pp. 550-551).
- 91. The DEA model has been used to assess the relative efficiency and productivity in the electric utility industry for at least 25 years. (Cornia, Tr. p. 556).
- 92. The Cornia/Walters report showed PSE to have obsolescence ranging from 23.3% in 2000 to 32.6% in 2006. The analysis also indicated, however, that PSE's level of obsolescence was less than the industry's average throughout this same seven year period. (Exh. 21, p. PUG-30559; Exh. 20, pp. PUG-15618 and PUG-15619).
- 93. The DEA evaluation of PSE indicated the firm had both structural and external obsolescence, compared to leading companies in the electric utility industry. The obsolescence identified in PSE's electric plant for the years

- 2004, 2005 and 2006 was \$1.03 billion, \$1.07 billion and \$1.27 billion respectively. (Exh. 20, pp. PUG-15616 and 15620).
- 94. Dr. Cornia knew of no other articles applying the DEA to the problem of determining obsolescence. (Cornia, Tr. p. 612).
- 95. Drs. Cornia and Walters did not believe the model indicated poor management at PSE. (Cornia, Tr. pp. 572-573; Walters, Tr. pp. 1703, 1720, 1722-1723).
- 96. The DOR appraisals assumed that PSE was under competent management. (Exh. 10, p. PUG-DOR 176; Exh. 12, p. PUG-DOR 1116, Exh. 14, p. PUG-DOR 2005).
- 97. There was no indication in the record that PSE suffers from poor management. (Tr. and Exh. generally).
- 98. DOR's Expert witness Dr. James T. McClave argued the Cornia-Walters method for estimating obsolescence relied on linear programming models. He argued no measure of the statistical uncertainty or margin of error was provided for their estimates. (Exh. 30, p. PUG-DOR 5474).
- 99. Dr. McClave conducted a series of sensitivity analyses attempting to make the Cornia-Walters methodology consistent from model to model. These analyses indicated the Cornia-Walters estimates were extremely volatile and varied significantly when minor changes were made to the models' inputs. (Exh 30, PUG-DOR 5474).

# Review Appraisals by Mr. Brent Eyre

100. The DOR retained Brent Eyre, ASA, to perform review appraisals for each year. Mr. Eyre is a qualified appraiser with extensive experience in the appraisal field. Mr. Eyre was accepted as an appraisal expert in this matter without objection. (Eyre, Tr. p. 1138).

- 101. Mr. Eyre performed a review appraisal of Dr. Davis's PSE appraisal for each of the subject years. In the course of that work, Mr. Eyre also reviewed the DOR's assessment and, further, developed his own independent opinion of the value of PSE. (Eyre, Tr. pp. 43-44; Exhs. 22, 23, 24).
- 102. In his appraisal for 2005, Mr. Eyre's opinion of market value was rounded to \$3,975,000,000 after the standard 10% deduction for intangible personal property. By applying an allocation factor of 11.4868% to this unit value, the Montana allocated value was \$456,600,300. (Exh. 22, pp. PUG-DOR 5163 and 5165).
- 103. Mr. Eyre detailed his methodologies for determining market value for 2005. He used a cost approach, a direct capitalization of net operating income approach and a stock and debt approach as indicators of value and gave the most weight to the direct capitalization indicator. (Exh. 22, p. PUG-DOR 5163).
- 104. Mr. Eyre used a gross historical cost figure to calculate an interstate allocation for 2005. He included several categories of property in the calculation which he believed should also have been included by the Department in its appraisal. (Exh 22, pp. PUG-DOR 5164-5165).
- 105. His allocation percentage (11.4868%) for 2005 was applied to the reconciled system value. The value thus derived was before any deductions for pollution control, licensed vehicles, townsites, and hand held tools, and before any addition for the beneficial use of the BPA lines. (Exh. 22, pp. PUG-DOR 5165 and 5192).
- 106. In his appraisal for 2006, Mr. Eyre's opinion of market value was rounded to \$4,320,000,000 after the standard 10% deduction for intangible personal property. By applying an allocation factor of 11.0451% to this unit value,

- the Montana allocated value was \$477,128,000. (Exh 23, pp. PUG-DOR 5249 and 5251).
- 107. Mr. Eyre detailed his methodologies for determining market value for 2006. He used a cost approach, a direct capitalization of net operating income approach, a direct capitalization of gross cash flow (DCF) approach, and a stock and debt approach as indicators of value and gave the most weight to the direct capitalization indicator and the DCF indicator. (Exh. 23, pp. PUG-DOR 5248-5249).
- 108. The 2006 value derived was before any deductions for pollution control, licensed vehicles, townsites, and hand held tools, and before any addition for the beneficial use of the BPA lines. (Exh. 23, pp. PUG-DOR 5251and 5278).
- 109. In his appraisal for 2007, Mr. Eyre's opinion of market value was rounded to \$4,675,000,000 after the standard 10% deduction for intangible personal property. By applying an allocation factor of 10.8884% to this unit value, the Montana allocated value was \$509,033,000. (Exh. 24, pp. PUG-DOR 5336 and 5354).
- 110. Mr. Eyre detailed his methodologies for determining market value for 2007. He used a cost approach, a direct capitalization of net operating income approach, a direct capitalization of gross cash flow (DCF) approach, and a stock and debt approach as indicators of value and gave the most weight to the direct capitalization indicator and the DCF indicator. (Exh. 24, p. PUGDOR 5333).
- 111. The 2007 value derived was before any deductions for pollution control, licensed vehicles, townsites, and hand held tools, and before any addition for the beneficial use of the BPA lines. (Exh. 24, pp. PUG-DOR 5336-5354).

- 112. In all three appraisals Mr. Eyre contended Dr. Davis' assumptions about economic obsolescence were wrong. (Exh. 22, p. PUG-DOR 5128; Exh. 23, p. PUG-DOR 5214; Exh. 24, p. PUG-DOR 5300).
- 113. In all three appraisals, Mr. Eyre did not include the value of the beneficial use of the BPA lines in his calculations of the cost approach. (Exh. 22, p. PUG-DOR 5177). Instead, Mr. Eyre agreed with the Department's treatment of the beneficial use of the BPA lines in the OCLD approach. (Eyre, Tr. pp. 1395-1396).

#### Conclusions of Law and Board Discussion

The main issue presented to the Board is whether the DOR properly determined the market value of Puget Sound Energy for *ad valorem* tax purposes for tax years 2005, 2006 and 2007. In deciding this matter, the Board considered the following questions dispositive:

- 1. Did the Department of Revenue properly support its calculation of the market value for tax years 2005, 2006, and 2007?
- 2. Is PSE suffering from economic obsolescence not reflected in its regulatory filings?
- 3. Did the DOR use the appropriate methodology to tax the beneficial use of the BPA lines?
- 4. Was the direct capitalization method used by the DOR an appropriate valuation methodology?
- 5. Did the DOR's stock and debt methodology appropriately value the assets of Puget on the lien date?

#### Standard of Review

The Board has jurisdiction over this matter pursuant to § 15-2-302, MCA. It is the Board's function and duty to find the facts in this matter and "settle disputes over the appropriate valuation of a given piece of property." *Montana Department of Revenue v. PPL*, 2007 MT 310, ¶ 45; 340 Mont. 124, 135, 172 P.3d 1241, 1249(*citing Dept. of Revenue v. Grouse Mt. Development*, 218 Mont. 353, 355, 707 P.2d 1113, 1115 (1985)). *See also* § 15-2-201(d), MCA; *DOR v. Paxson*, 205 Mont. 194; 666 P.2d 768 (1983); *DOR v. Grouse Mountain Dev. v. DOR*, 218 Mont. 353, 355-56; 707 P.2d 1113, 1114-5 (1985).

As a general rule, the appraisal of the Department of Revenue is presumed to be correct and the taxpayer must overcome this presumption. The Department of Revenue should, however, bear a certain burden of providing documented evidence to support its assessed values. Farmers Union Cent. Exch. v. Department of Revenue, 272 Mont. 471, 474, 901 P.2d 561, 563 (1995); Western Airlines, Inc., v. Michunovich etal., (1967), 149 Mont. 347, 353, 428, P.2d, 3, 7, cert. denied 389 U.S. 952, 19 L. Ed. 2d 363, 88 S. Ct. 336 (1967).

In this case, the Board's authority to examine the facts and determine whether the Department set a proper valuation is critical because of significant errors in the Department's 2005 and 2006 appraisals.

# The Department's Appraisals and Burden of Proof

PSE argues that the Department failed to demonstrate its 2005, 2006, and 2007 assessments were correct, and thus the Department's assessments should not be given the presumption of correctness. The Department contends the errors were not material and its values are supported by external value indicators such as investor valuation reports and independent appraisal reports.

Although there is a legal presumption that the Department is correct, the taxpayer in this instance has demonstrated a number of material errors in the 2005 and 2006 appraisals. The Board has reviewed these contentions and concludes that the accuracy and reliability of the Department's methodologies and data inputs fail to meet even a minimum standard required to demonstrate the Department should be granted the presumption of correctness for tax years 2005 and 2006.

The DOR's lack of training and supervision for its appraiser causes the Board to be unwilling to rely on the Department's appraiser judgment to determine whether the 2007 opinion of value is reliable. Thus we also do not accept the DOR's 2007 values as presumed to be correct.

We discuss these issues in more detail below.

### The Department's Cost Approach

In the electric utility industry, the calculations for the cost approach are generally derived from regulatory filings such as FERC and SEC filings. For centrally assessed properties, the Department looks to the original cost less depreciation (OCLD) method using figures set forth in the regulatory filings. The advantage of the OCLD method is that the necessary source information (audited financial statements) is readily available. *DOR v. PPL, 2006 Mont. Dist. LEXIS 524 (2006)*.

The Department placed a great deal of weight on the cost approach for the 2005, 2006 and 2007 valuations. Puget argues the Department had numerous errors in its cost approach for 2005 and 2006 but those errors are most prevalent in 2005. We agree that numerous uncorrected errors existed in the DOR's 2005 and 2006 OCLD calculations.<sup>2</sup> See e.g., FOF 31, 32, 33 & 47.

<sup>&</sup>lt;sup>2</sup>The DOR corrected the mathematical errors for the 2007 tax year.

#### Economic Obsolescence

Puget further argues the Department failed to properly calculate economic obsolescence in its cost approach. The DOR maintains its cost approach fully considers all forms of depreciation because the federal regulatory filings encompass all forms of depreciation. The Department's appraiser, Mr. Cameron, testified that "obsolescence is reflected in book depreciation" (Tr. p. 90) and book depreciation includes all forms of obsolescence through the Uniform System of Accounts. FOF 24.

Pursuant to § 15-8-111(2)(b), MCA, the Department has a statutory duty to "fully consider" reduction in value caused by depreciation, whether through physical depreciation, functional obsolescence or economic obsolescence. As we have repeatedly stated, failing to do so is an error. See, e.g., Pacificorp v DOR (CT 2005-3, July 2007); Wells Fargo v. DOR (June 2005). See also, Crown Pacific Limited Partners v. DOR (First Judicial District, 1998). We do not believe the Department adequately tests for economic obsolescence in centrally assessed properties.

Reviewing book depreciation in federal regulatory filings alone is insufficient to **fully** consider the possibility of economic obsolescence. Economic or external obsolescence may exist but not be recognized in book depreciation. Whether through additional taxpayer reporting requirements or other examination methods, the Department must adequately determine if economic obsolescence exists beyond the depreciation set forth in regulatory filings.

# The Department's Income and Market Approaches Direct Capitalization

Puget criticizes the DOR's direct capitalization approach, arguing that this approach requires the appraiser to use comparable properties with similar aspects such as physical and locational characteristics. Instead the Department uses earnings to price ratios for the electric utility industry to derive a capitalization rate. Thus, the specific question becomes whether the Department may use surrogate companies to derive a capitalization rate for use in determining an indicator of value.

As noted in *Pacificorp v. DOR (CT-2005-3; July 2007)*, the Department is tasked with mass appraisal valuation which requires a small number of Department employees to assess a large number of companies in a compressed time period with limited company-specific information.

While these factors do not relieve the Department of its obligation to conduct accurate, professional appraisals, those factors do make it necessary for the DOR to use mass appraisal methods to enable the Department to complete its assigned task in a timely fashion. Consequently, there is an appropriate role for industry-wide analysis to derive annual capitalization rates.

#### Yield Capitalization

The Department did not include a yield capitalization indicator in its 2006 or 2007 correlated unit value for PSE because a substantial increase in PSE's capital expenditures caused gross cash flow to be negative. Puget argues it is an error for the Department not to calculate and use a yield capitalization model for valuation purposes. While a yield capitalization model may be a proper value indicator, there is no statutory directive that the Department must use one methodology over another methodology. *See Albright v. State*, 281 Mont. 196, 207, 208-9; 933 P.2d 815, 822, 823; *DeVoe v. DOR*, (1993)263 Mont. 100, 112; 866 P.2d 228, 235-36.

In addition, there were uncorrected errors in the Department's calculation of a yield capitalization indicator in 2005 and 2006 which caused this indicator to be inaccurate and unreliable in those years.

#### Stock and Debt

The stock and debt approach serves as a substitute for the sales comparison approach and is used when there are no sales of comparable properties from which to extract market data. The parties in this matter agree there were no sales of comparable properties available to be used in valuing PSE.

Use of a stock and debt approach based on a company's own stock and debt has been upheld as an appropriate valuation technique since the creation of the Montana Board of Equalization<sup>3</sup>. See, e.g., Yellowstone Pipeline, 138 Mont. 603, 611. There is no question that the stock and debt approach to valuation has also been accepted across the nation since the late nineteenth century<sup>4</sup>. See, e.g., Adams Express v. Ohio State Auditor, 166 U.S. at 220 (1897); Porter v. Rockford, R. I. &St. L. R. Co., 76 Ill. 561 (1874); State Railroad Tax Cases, 92 U.S. 575 (1875).

The Board accepts the use of a stock and debt approach by the Department. In this case, however, the DOR's application of the stock and debt methodology was riddled with errors and cannot be accepted as a reliable indication of PSE's value in 2005 or 2006.

#### Beneficial Use of BPA Lines

Puget argues the Department improperly taxes PSE's beneficial use of the BPA lines by placing the BPA line value (\$30,958,831 for 2005) "below the line" in its appraisal, *i.e.*, as an addition to the allocated Montana value. Puget

<sup>&</sup>lt;sup>3</sup> The Board of Equalization was the predecessor to the State Tax Appeal Board. Chp. 405, L.1973 transferred the powers and duties of the State Bd. of Equalization to DOR and STAB. *See also, DOR v. Burlington N. Inc.*, 169 Mont. 202, 545 P.2d 1083 (1976).

<sup>&</sup>lt;sup>4</sup> Adams Express v. Ohio State Auditor, 166 U.S. at 220 (1897): "But what a mockery of substantial justice it would be for a corporation, whose property is worth to its stockholders for the purposes of income and sale \$16,800,000, to be adjudged liable for taxation upon only one fourth of that amount. The value which property bears in the market, the amount for which its stock can be bought and sold, is the real value. Business men do not pay cash for property in moonshine or dreamland. They buy and pay for that which is of value in its power to produce income, or for purposes of sale."

contends the value of the BPA lines is already incorporated in the DOR's income and market approaches, and thus the DOR's "below the line" addition of this value taxes the same property twice.

The Department contends its methodology is appropriate, arguing that beneficial use taxation was litigated in the 1980's and Puget cannot re-litigate this issue. We disagree.

Beginning in 1983, the Montana legislature authorized a tax on the beneficial use of certain tax exempt properties, including electric transmission lines and associated facilities with capacity greater than 500 kilovolts. Section 15-24-1203, MCA. The beneficial use statute does not indicate a method or classification to be used for taxing the beneficial use.

Immediately upon passage of the law, the Colstrip owners litigated the constitutionality of the beneficial use tax in relation to the BPA lines. The Montana Supreme Court upheld the constitutionality of this tax on several occasions See, e.g., Pacific Power and Light Company v. Montana Department of Revenue (1989), 237 Mont. 77, 773 P.2d 1176; Portland General Electric Company v. Montana Department of Revenue (1989), 237 Mont. 324, 773 P.2d 1189, and Pacific Power & Light Co. v. Montana Dep't of Revenue, 246 Mont. 398(1991).

The Montana Supreme Court discussed the DOR's methodology for taxing the beneficial use of the BPA lines in four cases. These cases demonstrate an inconsistency in the Department's tax treatment of the BPA lines. The earlier cases, *Pacific Power and Light*, 237 Mont. 77, and *Portland General*, 237 Mont 324, indicate the Department added the value of the BPA lines into the cost indicator and then developed the unit correlated value and the allocated Montana value (an "above the line" treatment of the beneficial use tax).

Later cases, however, indicate a different treatment of BPA lines by the Department. In the *Pacific Power and Light* case decided in 1991, the Court wrote, "The total cost of the BPA transmission facilities were allocated to the Colstrip Owners as a ratio of each Colstrip Owners' [sic] transmission demand over the total capacity of the lines. This allocated cost was then multiplied by 50% and added to each owner's respective allocated Montana value." *Pacific Power at 401*. There is no indication as to why the allocated cost was reduced by 50% before being assessed to the owners or why this reduced amount was added to the allocated Montana value (a "below the line" treatment). The Supreme Court did not review the question of methodology because the issue had not yet been determined by this Board. *Pacific Power at 405*. We can find no later cases discussing why the Department changed methodology or whether "below the line" treatment is appropriate<sup>5</sup>.

In this case, the Department used a unit method to value PSE and then separately taxed the beneficial use of the BPA lines (a "below the line" treatment). Although the Department argues Montana law authorizes "separate taxation for the beneficial use of BPA lines," there is no indication in the statutes or case law that "separate" taxation is authorized or required.

The Department's methods for calculating market value for centrally assessed properties have changed substantially over the past 20 years. For example, the Department now uses computer assessment techniques, applies more advanced income methodologies, and has made other changes that affect derivation of a unit value for centrally assessed properties in Montana.

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<sup>&</sup>lt;sup>5</sup> The various owners subsequently challenged the classification of the BPA lines by filing amended complaints. The District Court disallowed the amended complaint, which was upheld by the Supreme Court. *Pacific Power and Light*, 246 Mont. 398. The owners filed the same claim with this Board. This Board granted DOR's motion to dismiss, which was upheld by the District Court and the Supreme Court. *Pacific Power and Light*, 249 Mont 33, 813 P.2d 433. There is no mention of the methodology of assessment. We can find no later cases before the Board or the Courts discussing whether the methodology is appropriate.

We hold that it is proper to review the Department's current methodology for taxing the beneficial use of BPA lines because of the inconsistency in the DOR taxation methodology as set forth in the Montana Supreme Court cases, the lack of statutory or regulatory directive, and the changes to assessment practices.

Unit methodology is designed to tax a unit as more than the sum of all of its parts. As the Montana Supreme Court noted in *PPL*, "DOR's regulations explain that the unit method of valuation' involves appraising, as a going concern and as a single entity, the entire unit, wherever located, then deducting the intangible personal property value and then ascertaining the part thereof in this state." *DOR v.PPL*, ¶ 34, *citing* Admin. R. M 42.22.101(30)(2007).

Based on the evidence presented, Puget's beneficial use of the BPA lines is an "asset" that constitutes an integral part of Puget's system and contributes to its earnings and its parent company's stock values. See FOF 13. We have no doubt that the beneficial use of the BPA lines is properly considered part of PSE's operating property, even though the lines are leased, not owned. See FOF 12. Puget has, through contract, control of the lines to deliver the Colstrip power to its Washington customers. FOF 12. Without the beneficial use of the BPA lines, the power generated from Colstrip would be undeliverable to the West Coast and, of necessity, Puget would have to acquire or arrange some other method to move power from Colstrip to its Washington customers. Therefore, we find it proper to include the beneficial use of the BPA lines in PSE's unit value.

The WSATA manual, often cited by the Department as guiding certain policy decisions, supports this interpretation. For example, "exceptions to ownership are possible and sometimes desirable in defining a unit. Leased property used in the utility operation should be included in the unit if it is so

specialized that it would have no separate value or if the lease arrangement is essentially a financing technique." WSATA, 11. In discussing how to treat leased property, the manual states that "Since it is simply a substitute for property which the utility would have to purchase, it should be added to the HCLD at net book cost, just as if it were owned property." WSATA, 34. See also, WSATA manual, treatment of a possessory interest in government owned property.

The Department's expert Mr. Eyre argues, however, that the value of the BPA lines is not included in the income indicator because Puget pays a fee to Bonneville to use the lines to transmit power, and deducts that amount as an operating expense. He argues that this neutralizes net income and any value associated with the BPA lines. Mr. Eyre also argues that the value of the BPA lines is not in the stock and debt approach because the lines are not owned by Puget, so there is no debt on the balance sheet and no income would be generated by the sale of the lines.

We disagree with both of Mr. Eyre's arguments. It is clear to the Board the value of the beneficial use of the BPA lines is an inherent part of the value of Puget and, thus, is a part of both the income and market value indicators. For the Department to tax PSE's property as a unit under class 13 and then separately tax the use of BPA lines, also as class 13, is improper.

Thus, we hold that the BPA lines should be included in the cost approach to be properly reflected in the unit approach to value in this instance.

#### Allocation

The DOR has several errors and omissions in its allocation factors for 2005 and 2006. It is undisputed that Mr. Eyre's calculations are more accurate than the DOR's. *See* PSE post-hearing brief, 31. *See also* Davis, Tr. at 732. FOF 43, 44, 54, 55, 62, 63, 105, 106 & 109. Thus, we conclude that the proper

allocation factors are those calculated by Mr. Eyre for 2005 (11.4868%), 2006 (11.0451%) and 2007 (10.8884%). *See* FOF 44, 55 & 63.

#### Summary of the DOR Appraisals

In this instance, the Board agrees with the taxpayer and concludes the Department's appraisals cannot be presumed to be correct. Of primary concern to this Board is the Department's utter failure to adequately train and supervise its employees who are tasked with valuing multi-billion dollar companies. In this instance, the DOR appraiser was afforded little or no training prior to preparing the 2005 appraisal. There is no indication that a supervisor reviewed the appraisal to determine whether the calculations were accurate or whether experienced appraiser judgment was necessary to produce an acceptable appraisal. Through questioning by this Board and PSE attorneys, it was evident that the employee could not explain calculations in his appraisal, where data was drawn from, or other key matters. We cannot confirm the accuracy or reliability of the data inputs or the Department's methodologies. FOF 19 & 20.

Using evidence of pitch book presentations and internal planning documents, such as set forth in FOF 21, does not provide sufficient support to overcome the material errors in the Department's valuations.

Given the extent of the errors, the unreliability of the DOR's methodologies, and the need for appraisal judgment in this matter, we cannot simply correct the problems with the DOR's appraisals and determine an appropriate value for Puget. Because we cannot presume the DOR appraisals to be correct, we next examine the two additional appraisals presented to the Board to assist in developing a proper market value for the property.

#### Dr. Davis's Appraisals

Dr. Davis, a recognized expert in the appraisal field, performed an appraisal of the subject property for the relevant tax years on behalf of PSE. He used a cost approach and an income approach to derive his opinions of value for tax years 2005, 2006, and 2007. Dr. Davis determined values of \$2,793,902,187, \$2,772,800,064 and \$2,897,258,657 respectively. *See* FOF 69.

These values are significantly lower than other opinions of value, primarily due to Dr. Davis's determination that Puget suffers from economic obsolescence in the range of \$1,027,628,458 for 2005, \$1,461,572,095 for 2006 and \$1,873,736,920 for 2007 (or 24-35% of the value of the cost indicator). FOF 73.

#### Cost Approach

Dr. Davis performed a Historic Cost less Depreciation (HCLD) approach using the net book value (cost less accumulated depreciation) of PSE's plant in service accounts from the FERC Form 1 financial statements to which additions were made for various items. The experts in this matter agree HCLD properly establishes the cost indicator of value for a closely regulated utility like PSE. Davis, the Department, and DOR expert witness Eyre all used HCLD (or OCLD) for calculating the cost indicator.

Dr. Davis, however, made a significant adjustment for "obsolescence", using an income shortfall method that substantially reduced the value he reported under this indicator. Dr. Davis rationalized the deduction by explaining, when actual earnings of a company are less than its expected rate of return, the difference between the two, when capitalized, will reflect obsolescence in the property.

Puget's primary argument for economic obsolescence is PSE has significant regulatory lag and drag which prevents the company from recouping its costs in a timely fashion. *See* FOF 74.

Puget, however, as a rate-regulated electric utility company, bears both the benefits and the burdens of rate regulation. (For a discussion of the differences between rate-regulated and non-rate regulated utilities, see DOR v. PPL, ¶ 34). While Puget may earn less at certain times than a company which is not rate-regulated, such lower earnings do not automatically indicate economic obsolescence.

Additionally, HCLD and rate base are not synonymous. Simply because a tangible operating asset is excluded by regulators from the taxpayer's rate base does not exclude that asset from being subject to *ad valorem* taxation.

There may be instances where the income shortfall methodology<sup>6</sup> may adequately calculate economic obsolescence, *if it exists*, but this matter is not one of those instances. The evidence demonstrates Puget is a well-managed company that is significantly expanding its plant to serve a rapidly growing customer base. FOF 95-97. We find no indication of economic obsolescence in this case.

# Income Approach

In valuing PSE, Dr. Davis used a standard income approach methodology recognized and utilized by most appraisers. The major difference in income indicators between Dr. Davis and others' opinions of value are in his weighted average cost of capital (WACC). Dr. Davis estimated the cost of equity by averaging four methods. He included a "judgmental risk premium"

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<sup>&</sup>lt;sup>6</sup> The income shortfall methodology has been discredited in certain jurisdictions, including Montana. *See United Telephone v. OTC*, 307 Or. 428, 770 P.2d 43 (1989); *Delta Airlines, Inc. v. Dept. of Revenue*, 328 Or. 546, 984 P.2d 836 (1999); *Puget Sound v. Revenue*, 232 Mont. 314, 761 P.2d 336 (1988) (discounting the use of DIT). This Board has recently discounted the methodology in *Pacificorp v. DOR* (CT 2005-3; 7/31/07).

in one of these methods but provided no supporting documentation for this additional premium nor for its inclusion in the cost of equity beyond "his estimation of the state of the electric utility industry". *See* FOF 83. In calculating the WACC, Dr. Davis also included a size premium in his estimate of the cost of equity and a flotation cost adjustment in his estimates of both the cost of equity and the cost of debt. *See* FOF 80.

The Board does not agree with Dr. Davis's WACC. Primarily, Dr. Davis agreed that flotation costs could be treated as an expense which reduces free cash flows rather than as a cost of the capital itself. The Board concludes that it is preferable to treat flotation costs as an expense rather than as a long-term cost of capital. The evidence also does not support Dr. Davis's addition of a size premium to the cost of equity. The Ibbotson Yearbook, the data source on which Dr. Davis based the size premium, has changed its data procedures and more recent data from this source (post-1982) shows little effect from variations in the size of companies. *See* FOF 86.

Accordingly, we cannot accept Dr. Davis's appraisal as an accurate indication of market value because we can find no economic obsolescence in the subject company and we do not agree with the addition of flotation costs or size premiums in the income approach.

# **Data Envelopment Analysis**

Puget bolstered Dr. Davis' valuation with a Data Envelopment Analysis (DEA) in which Drs. Cornia and Walters analyzed the operating and performance statistics for PSE and for all other electric and gas utilities that report to the Federal Energy Regulatory Commission. The report is designed to determine whether there is obsolescence that should be accounted for in the cost approach to valuing PSE.

The Board recognizes a DEA approach may provide some indication of the relative efficiency of a company. DEA, however, does not demonstrate to the Board's satisfaction that a company's lack of efficiency is the result of obsolescence. Because we find no evidence elsewhere in the record that PSE suffers from economic obsolescence, we cannot agree that DEA supports Dr. Davis' findings of economic obsolescence.

#### Mr. Eyre's Review Appraisals

The Department presented Mr. Eyre's review appraisals to the Board to support the DOR's appraised values for the subject years. Mr. Eyre is a certified appraiser with extensive experience in appraising utility companies and other centrally assessed companies. He has previously been recognized as an expert by this Board. *See Pacificorp*, FOF 45. After utilizing standard methods to determine market, cost and income indicators of value, he set forth an opinion of value for each year in question. *See* FOF 101.

Mr. Eyre's opinion of value comports most closely with the evidence presented to the Board in this matter. Mr. Eyre did not find that Puget suffered from economic obsolescence. His calculations and methodologies did not suffer from the high error rate found in the Department of Revenue's appraisals.

After reviewing all the evidence in this matter, we conclude that Mr. Eyre's opinion of market value is most nearly correct, subject to the adjustments discussed below.

# Adjusting Mr. Eyre's Opinions of Value for the Beneficial Use of the BPA lines

Mr. Eyre did not include the beneficial use of the BPA lines in his cost approach, instead adding that value to the allocated Montana value. *See* FOF 113 and Tr. 1393. As noted earlier, we do not agree with the reasons given for

treating the beneficial use of the BPA lines in this manner. We have held that the BPA lines are properly included in the cost approach in order to be reflected in the unit value. Thus, we have determined that Mr. Eyre's valuation must be adjusted to reflect proper treatment of the beneficial use of the BPA lines. Puget supports the inclusion of the BPA lines in the calculation of the cost approach. *See* Appellant's Post-Hearing Brief, 33.

In Tables 1, 2, and 3, the Board has displayed the changes required to include the BPA lines in the cost approach and subtract them from the allocated Montana value. As a result of these calculations, the Board has determined that the appropriate Montana value, to be distributed to counties, of Puget Sound Energy is \$452,794,869 for 2005; \$471,862,681 for 2006; and \$508,425,786 for 2007.

Table 1

Puget Sound Energy, Inc.		2005	2005
Value Indicators	Board's estimate based on Eyre's figures	Eyre's Appraisal	BPA Lines Included in OCLD by Board
Original Cost less Depreciation <sup>1</sup>	20%	3,774,185,319	3,802,048,268
Direct Capitalization of NOI <sup>2</sup>	60%	3,970,161,943	3,970,161,943
Direct Capitalization of GCF		0	0
Yield Capitalization of FCF		0	0
Stock & Debt Approach <sup>3</sup>	20%	4,181,904,889	4,181,904,889
Correlated Unit Value		3,973,315,207	3,978,887,797
Allocation Factor <sup>4</sup>		11.4868%	11.4868%
Montana Allocated Value		456,406,771	457,046,883
Deductions to Montana Value <sup>5</sup>			
Townsites		4,145,928	4,145,928
Handheld Tools		14,913	14,913
Licensed Vehicles		91,173	91,173
SM Equipment			
Pollution Control Equipment (PCE)		57,592,476	57,592,476
Total Other Deductions/Exemptions		61,844,490	61,844,490
Adjusted MT Value, excluding PCE		394,562,281	395,202,393
Additions to MT Value			
BPA Lines		30,958,831	
Pollution Control Equipment(PCE)		57,592,476	57,592,476
Total Other Additions		88,551,307	57,592,476
Total MT Value to Be Distributed to counties		483,113,588	452,794,869

- 1. Figures in **bold** were calculated by the Board to include BPA lines in the cost approach.
- 2. Footnotes reference the Exhibits from which the figures in the column headed "Eyre's Appraisal" were drawn.

<sup>&</sup>lt;sup>1</sup> Exhibit 22, PUG-DOR 005177

<sup>&</sup>lt;sup>2</sup> Exhibit 22, PUG-DOR 005163

<sup>&</sup>lt;sup>3</sup> Exhibit 22, PUG-DOR 005189

<sup>&</sup>lt;sup>4</sup> Exhibit 22, PUG-DOR 005192

<sup>&</sup>lt;sup>5</sup> Exhibit 10, PUG-DOR 000178

Table 2

Puget Sound Energy, Inc.		2006	2006
Value Indicators	Board's estimate based on Eyre's figures	Eyre's Appraisal	BPA Lines Included in OCLD by Board
Original Cost less Depreciation <sup>1</sup>	20%	4,169,831,873	4,193,912,354
Direct Capitalization of NOI <sup>2</sup>	30%	4,335,695,081	4,335,695,081
Direct Capitalization of GCF		0	0
Yield Capitalization of FCF <sup>3</sup>	30%	4,417,100,000	4,417,100,000
Stock & Debt Approach <sup>4</sup>	20%	4,307,463,357	4,307,463,357
Correlated Unit Value		4,321,297,570	4,326,113,667
Allocation Factor <sup>5</sup>		11.0451%	11.0451%
Montana Allocated Value		477,291,638	477,823,581
Deductions to Montana Value <sup>6</sup>			
Townsites		5,868,075	5,868,075
Handheld Tools		14,994	14,994
Licensed Vehicles		77,831	77,831
SM Equipment			
Pollution Control Equipment (PCE)		54,274,462	54,274,462
Total Other Deductions/Exemptions		60,235,362	60,235,362
Adjusted MT Value, excluding PCE		417,056,276	417,588,219
Additions to MT Value			
BPA Lines		26,756,090	
Pollution Control Equipment(PCE)		54,274,462	54,274,462
Total Other Additions		81,030,522	54,274,462
Total MT Value to Be Distributed to Counties		498,086,828	471,862,681

- 1. Figures in **bold** were calculated by the Board to include BPA lines in the cost approach.
- 2. Footnotes reference the Exhibits from which the figures in the column headed "Eyre's Appraisal" were drawn.

<sup>&</sup>lt;sup>1</sup> Exhibit 23, PUG-DOR 005263

<sup>&</sup>lt;sup>2</sup> Exhibit 23, PUG-DOR 005248

<sup>&</sup>lt;sup>3</sup> Exhibit 23, PUG-DOR 005248

<sup>&</sup>lt;sup>4</sup> Exhibit 23, PUG-DOR 005275

<sup>&</sup>lt;sup>5</sup> Exhibit 23, PUG-DOR 005278

<sup>&</sup>lt;sup>6</sup> Exhibit 12, PUG-DOR 001118

Table 3

Puget Sound Energy, Inc.		2007	2007
	Board's estimate based on Eyre's	Eyre's	BPA Lines Included in
Value Indicators	figures	Appraisal	OCLD by Board
Original Cost less Depreciation <sup>1</sup>	20%	4,691,857,510	4,714,417,009
Direct Capitalization of NOI <sup>2</sup>	30%	4,556,909,112	4,556,909,112
Direct Capitalization of GCF		0	0
Yield Capitalization of FCF <sup>3</sup>	30%	4,444,200,000	4,444,200,000
Stock & Debt Approach <sup>4</sup>	20%	5,186,835,932	5,186,835,932
Correlated Unit Value		4,676,071,422	4,680,583,322
Allocation Factor <sup>5</sup>		10.8884%	10.8884%
Montana Allocated Value		509,149,361	509,640,634
Deductions to Montana Value <sup>6</sup>			
Townsites		971,539	971,539
Handheld Tools		14,901	14,901
Licensed Vehicles		176,077	176,077
SM Equipment		52,331	52,331
Pollution Control Equipment (PCE)		50,747,077	50,747,077
Total Other Deductions/Exemptions		51,961,925	51,961,925
Adjusted MT Value, excluding PCE		457,187,436	457,678,709
Additions to MT Value			
BPA Lines		25,065,810	
Pollution Control Equipment(PCE)		50,747,077	50,747,077
Total Other Additions		75,812,887	50,747,077
Total MT Value to Be Distributed to Counties		533,000,323	508,425,786

- 1. Figures in **bold** were calculated by the Board to include BPA lines in the cost approach.
- 2. Footnotes reference the Exhibits from which the figures in the column headed "Eyre's Appraisal" were drawn.

<sup>&</sup>lt;sup>1</sup> Exhibit 24, PUG-DOR 005347

<sup>&</sup>lt;sup>2</sup> Exhibit 24, PUG-DOR 005333

<sup>&</sup>lt;sup>3</sup> Exhibit 24, PUG-DOR 005333

<sup>&</sup>lt;sup>4</sup> Exhibit 24, PUG-DOR 005351

<sup>&</sup>lt;sup>5</sup> Exhibit 24, PUG-DOR 005354

<sup>&</sup>lt;sup>6</sup> Exhibit 14, PUG-DOR 002007

#### **Order**

IT IS THEREFORE ORDERED by the State Tax Appeal Board of the State of Montana that the total Montana value to be distributed to counties for Puget Sound Energy is determined to be \$452,794,869 for 2005; \$471,862,681 for 2006; and \$508,425,786 for 2007.

The Department of Revenue's market value determinations for Puget Sound Energy's property are therefore modified for tax years 2005, 2006, and 2007.

DATED this 16th of June, 2009.

#### By order of the State Tax Appeal Board

/s/	
Karen E. Powell, Chairwoman	
/s/	
Sue Bartlett, Member	
/s/	
Douglas A. Kaercher, Member	

**Notice:** You are entitled to judicial review of this Order in accordance with Section 15-2-303(2), MCA. Judicial review may be obtained by filing a petition in district court within 60 days following the service of this Order.

# CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this 16<sup>th</sup> day of June, 2009, a copy of the foregoing order was served on the parties hereto by the method indicated below and addressed as follows:

Michael W. Green CROWLEY FLECK P.L.L.P. 100 North Park, Suite 300 P.O. Box 797 Helena, Montana 59624-0797	_x U.S. Mail, Postage Prepaid Hand Delivered E-Mail Telecopy
David J. Crapo WOOD CRAPO LLC 500 Eagle Gate Tower 60 East South Temple Salt Lake City, Utah 84111	_x U.S. Mail, Postage Prepaid Hand Delivered E-Mail Telecopy
C.A. Daw, Esq. Michele R. Crepeau, Esq. Special Assistant Attorneys General Montana DOR of Revenue Legal Services Office 125 N. Roberts Street P.O. Box 7701 Helena, Montana 59604-7701	U.S. Mail, Postage Prepaid Hand Deliveredx_ Deadhead E-Mail Telecopy
	DONNA EUBANK Paralegal