BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PUGET SOUND ENERGY, INC. Respondent.	DOCKET NO. UE-060266 DOCKET NO. UG-060267

INITIAL BRIEF OF COMMISSION STAFF

October 31, 2006

ROB MCKENNA
Attorney General

ROBERT D. CEDARBAUM
Senior Counsel
Office of the Attorney General
PO Box 40128
1400 S Evergreen Park Drive SW
Olympia, WA 98504-0128
(360) 664-1188

REDACTED VERSION

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I. INTRODUCTION

1 Puget Sound Energy, Inc. ("PSE" or "the Company") seeks to increase electric and natural gas revenues by $41.4 million (2.4%) and $49.8 million (5.3%), respectively.[1] Commission Staff recommends a decrease in electric revenues of $31.3 million (-1.8%) and an increase in gas revenues of $21 million (2.2%).[2]

2 The primary issue is the cost of capital.[3] The Company proposes to increase its authorized return on equity to 11.25% applied to a higher equity ratio of 45%.[4] It does so despite admitting that capital costs are "near all time lows"[5] and that there would be a "very positive, salutary effect on the risk of the Company"[6] from the Gas Decoupling mechanism, Depreciation Tracker and revised Power Cost Adjustment ("PCA") that it *also* proposes *in addition* to existing regulatory mechanisms that already protect PSE from risk.

3 In contrast, Staff's cost of equity of 9.375% and equity ratio of 43% reflect current investor return requirements and protect PSE's credit quality at a reasonable cost for ratepayers. While Staff opposes the Depreciation Tracker and recommends no changes to the PCA, Staff proposes a gas decoupling mechanism that restores revenues the Company loses to customer conservation. Staff also supports PSE's capital building program by including in rate base $530 million for post-test period electric generation resources, most of

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[1] Exhibit No. 4C, Attachment A at 1:44 and 11:30 ("PSE Revenue Requirement").
[2] Staff's revenue requirement amounts differ slightly from Exhibit No. 4C, Attachment A at 1:44 and 11:30 because Staff accepts the cost of short-tem debt (6.66%) presented by PSE in rebuttal. (Exhibit No. 140 at 1 (Gaines).) That revision increases Staff's overall cost of capital from 7.85% to 7.87%.
[3] The Attachment compares Staff and Company cost of capital recommendations.
[4] PSE's current equity return is 10.3% applied to an equity ratio of 43%. *WUTC v. Puget Sound Energy, Inc.*, Order No. 06 at ¶90, Docket Nos. UG-040640, *et al.*, (February 18, 2005) ("2004 Rate Case Order").
[5] Exhibit No. 457C at 7:6 (Valdman).
[6] Tr. 385:18-21 (Morin). *See also*, Tr. 293:7-14 (Valdman).

which are not certain to be in service at the beginning of the rate year.[7] The Company's acquisition of new purchased power agreements is also supported by Staff.[8]

4 Staff's cost of capital and its other proposals balance properly the interests of ratepayers and investors in accordance with statutory[9] and constitutional requirements.[10] The Company's proposals shift that balance sharply and unfairly in favor of shareholders.

5 The argument that follows disproves PSE's fundamental claim that the cost of capital and new regulatory mechanisms it seeks are essential to support necessary utility investments on behalf of ratepayers (Section II.A.) and to reduce regulatory lag on behalf of shareholders (Section II.B.). This includes rebuttal to the Depreciation Tracker.

6 We then prove that the Commission should adopt Staff's recommended cost of capital (Section II.C.), Gas Decoupling mechanism (Section II.D.), Electric Energy Conservation Incentive mechanism (Section II.E.), Gas Rate Spread and Rate Design (Section II.F), and its proposals on remaining revenue requirement issues (Section II.G.).[11]

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[7] Exhibit No. 4C, Attachment A at 1: 12 (Baker Hydro Re-licensing), 18 (Hopkins Ridge Wind Plant) and 34 (Wild Horse Wind Plant). Only Hopkins Ridge has gone into service. The completion of Baker Re-licensing and Wild Horse is not guaranteed before January 1, 2007.

[8] Exhibit No. 521 at 30:19-21 ("ORMAT PPA") and 31:1-5 ("Chelan Contract") (Russell).

[9] RCW 80.28.010(1) and RCW 80.28.020 require that rates must be "just, fair, reasonable and sufficient."

[10] A utility is not guaranteed profitability. It is entitled only to the *opportunity* to earn a rate of return sufficient to maintain its financial integrity, attract capital on reasonable terms, and receive a return commensurate with other enterprises of comparable risk. *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 605 (1944); *Bluefield Water Works Improvement Co. v. Public Serv. Comm'n of West Virginia*, 262 U.S. 679, 692 (1923). The interests of investors do not exhaust the relevant considerations. The interests of ratepayers must also be protected. *Permian Basin Area Rate Cases*, 390 U.S. 747, 797 (1968).

[11] The last section addresses Staff's adjustment for Directors and Officers Insurance and its proposal that the Company collect certain data for its weather normalization procedures. Staff's positions on the PCA and Power Costs are presented jointly with Public Counsel and the Industrial Customers of Northwest Utilities. Staff adopts the arguments presented in their briefs on those subjects.

II. ARGUMENT

A. The Cost Of Capital And New Regulatory Mechanisms PSE Proposes Are Not Necessary To Attract Sufficient Capital To Serve Ratepayers

7 The Company states that an 11.25% return on equity, 45% equity ratio, and the new regulatory mechanisms it requests, will "likely place" it in a position to improve its corporate credit rating from BBB- to BBB+, which would "better enable" it to invest in utility infrastructure and new electric generation resources, and to engage in energy risk management activities, all on behalf of its customers.[12]

8 Notably, PSE never states that it *will* meet those goals with the relief it requests. Nor does it state that it *cannot* meet those goals without the relief it requests. In fact, PSE admits that its credit matrices improve to BBB+ or BBB both *under the Staff case* and *without* rate relief of any kind.[13]

9 The Company admits that quantifying benefits for ratepayers from the cost of capital and new regulatory mechanisms it proposes is a critical issue. Yet, that issue was not addressed in its presentation.[14]

10 Moreover, PSE admits that credit rating agencies examine many qualitative and quantitative factors other than regulatory action.[15] The 2004 Rate Case is telling: PSE's corporate credit rating was unchanged even though it did not receive the requested rate

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[12] Exhibit No. 131C at 2:15 (Gaines) and Exhibit No. 171 at 7:5 (Harris). This theme is not novel. It was central to PSE's presentation in its last general rate case. (2004 Rate Case Order at ¶¶16-17.)

[13] Exhibit No. 10 and Exhibit No. 131C at 15-17, Table 8 and Charts (Gaines). The only exception is Debt Leverage at BBB-.

[14] When asked directly to estimate the cost of capital and wholesale power market savings that would derive from an increase in PSE's corporate credit rating, PSE stated only that that question was an "excellent question" for which it had no answer. (Tr. 425:7-426:25 (Gaines).)

[15] Exhibit No. 131C at 14:10-13 (Gaines). The Commission echoed this point in the 2004 Rate Case:

> Turning to PSE's goal of advancing its corporate credit rating by two steps, from BBB- to BBB+, we observe that ratings agencies consider a host of factors in deciding whether to upgrade a company . . . We have no reason to believe that allowing a 45% equity ratio in rates will be determinative as PSE works toward an improved credit rating . . .

(2004 Rate Case Order at ¶35.)

relief.[16] The Commission should not set rates, nor adopt regulatory mechanisms, based on a perception of how Wall Street might react.

11 The Commission should also examine evidence that proves that PSE's financial condition is already well-positioned to meet the needs of ratepayers.

1. PSE's utility operations are sound and viewed in a positive light by the financial community

12 PSE argues that its ability to raise equity capital is threatened by a return on equity that averaged 8% for the period 2002-2005 and a stock price that under-performs.[17] It even alleged that it is one of the only utilities *in the Nation* that does not earn its authorized return on equity.[18] No evidence of that claim exists anywhere in this record.

13 Moreover, PSE admits that many factors influence stock price, including Company performance.[19] It performed no study to show why its stock price lags other indices.[20] The evidence, in fact, shows that Puget Energy stock recently outperforms the market (Standard & Poors 500 Index).[21]

14 The 8% earned return on equity also reflects the consolidated regulated and unregulated operations of PSE.[22] When regulated utility operations are isolated, PSE's test period return on equity is 10.03%.[23] This healthy return was achieved despite warmer than

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[16] Compare 2004 Rate Case Order at ¶16 and Exhibit No. 171 at 16:13-14 (Harris).
[17] Exhibit No. 457C at 26:2-9 (Valdman).
[18] Tr. 386:1-3 (Morin).
[19] Exhibit No. 177 at 9 and Tr. 351:11-12 (Morin).
[20] Exhibit No. 470.
[21] Exhibit No. 599 at 20, Figure 6.
[22] Exhibit No. 465 at 2-6.
[23] Exhibit No. 5, Staff Response to Bench Request No. 1. *See also*, Exhibit No. 525 (Russell).

normal weather[24] and declining use per customer.[25] Even if PSE's actual return on equity was only 8%, PSE continues to maintain a secured bond rating of BBB.[26]

15 PSE also maintains favorable access to the financial markets to support its utility operations.[27] It issued $250 million of senior secured debt in May 2005 at a rate of 5.483% and $150 million of senior secured debt in October 2005 at a rate of 5.197%.[28] PSE issued $300 million of 30-year debt in September 2006 at a rate of 6.274%.[29] In November 2005, the Company issued 15 million shares of equity at a per share price above per share book value.[30] Any alleged threat to PSE's ability to raise equity and debt capital is disproved by recent history.

16 The financial community also views the Company in a more positive light than PSE portrays. PSE enjoys "strong customer growth", which translates into greater earnings opportunities.[31] In fact, PSE's 2006 2nd Quarter earnings exceeded analysts' expectations.[32] All of the investment firms PSE cites recommend that investors buy or hold Puget Energy stock; none recommend that they sell.[33] Standard & Poors gives PSE a business profile score of 4 on a risk scale up to 10.[34] It sees PSE's business profile as "strong."[35]

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[24] Exhibit No. 521 at 22:10-23:3 and 29:17-23 (Russell). For gas operations only, normal weather in the test period would have increased the PSE's earnings on equity by 6%. (Exhibit No. 232C at 28:2-6 (Karzmar).)
[25] Exhibit No. 566 (Steward) and Exhibit No. 24 (Amen).
[26] Exhibit No. 151 at 4.
[27] PSE agrees that its ability to finance its utility operations has not been compromised. (Exhibit No. 451C at 16:13-14 (Valdman).)
[28] Exhibit No. 151 at 4. Both of those cost rates are below PSE's weighted average cost of long-term debt (6.64%). (Exhibit No. 136C at 1 (Gaines).)
[29] Tr. 406:6-407:8 (Gaines).
[30] Exhibit 151 at 4 and Tr. 404:1-4 (Gaines).
[31] Exhibit No. 459 at 6 and 18.
[32] Tr. 281:13-18 (Valdman).
[33] Exhibit No. 459 at 6, 10, 18, 20, 29, 37 and 40.
[34] Exhibit No. 131C at 12:1-2 (Gaines). *See also*, Tr. 418:10-11 (Gaines).
[35] Exhibit No. 469 at 1.

2. PSE's favorable access to the capital markets will support its investment in utility infrastructure and energy risk management activities

17 PSE places great weight on the fact that no party disputes its need to invest in utility delivery systems, acquire new electric generation resources, and enter energy risk management transactions.[36] It states that these expenditures are "unprecedented" and "extraordinary".[37] Percentage increases in transmission and distribution investment are cited for emphasis.[38]

18 PSE never states that its ability to finance even unprecedented expenditures will be compromised without the rate relief it seeks. It states only that it "fears it may at some point" be compromised as market conditions evolve.[39]

19 Moreover, the apex of PSE's capital budget ($850 million) occurs in 2006.[40] Thus, a significant amount is complete before the 2007 rate year commences. The Company's capital expenditures are actually forecasted to decline in 2007 and 2008 below 2006 levels, according to its 2005 SEC Form 10-K and rating agency presentation.[41]

20 Of the $850 million total capital budgeted in 2006, $317 million relates to the Wild Horse wind plant, which Staff includes in rate base along with the Baker River Hydro re-licensing and the Hopkins Ridge wind plant to support PSE's capital building program.[42] $89 million relates to a one-time pre-payment for the future purchase of power from Chelan

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[36] Exhibit No. 173 at 6:1-5 (Harris) and Exhibit No. 457 at 3:16-23 (Valdman).
[37] Exhibit No. 131C at 6:14-18 (Gaines).
[38] Exhibit No. 241C at 9:11-10:7 (McLain) and Exhibit No. 244 (McLain). PSE also includes percentage increases in operating and maintenance expenses. (*Id.*) However, many of those costs are already included in test period operations and, thus, will be recovered in rates. (Exhibit No. 521 at 22:1-6 (Russell).)
[39] Exhibit No. 451C at 16:13-14 (Valdman).
[40] Exhibit No. 457C at 6:12-13 (Valdman).
[41] Exhibit No. 151 at 2 and Exhibit No. 143HC at 16 and 21 (Gaines). PSE claims it is unknown whether capital expenditures will actually decline in 2007 and 2008 because its acquisition of generation resources is unknown. (Tr. 236:9-24 and 278:12-17 (Valdman).) However, the capital costs of those investments are recovered on an expedited basis in a Power Cost Only Rate Case.
[42] Exhibit 4C, Attachment A at 1:12, 18 and 34.

County PUD.[43] The Commission granted PSE interim authority to defer the pre-payment as a regulatory asset with carrying costs.[44] Staff recommends such authority continue, providing further support for PSE's capital expenditures.[45]

21 The Company also has adequate borrowing capacity to fund each type and amount of projected capital expenditure. PSE expects to internally fund 50% of construction.[46] This comes after implementation of its line extension tariffs, which allow PSE to recover funds from new customers for extending its delivery system to them.[47]

22 According to its most recent SEC Form 10-Q, under the most restrictive tests, the Company can issue $571 million in additional first mortgage bonds, $772 million of additional preferred stock, and $647 million of unsecured long-term debt.[48] Thus, PSE's additional borrowing capacity is currently $2 billion. This includes more than the $500 million of debt financing that it claims to need.[49]

23 PSE has also increased its short-term credit facilities from $500 to $700 during the rate year and beyond "To Support Rate Base Growth & Hedging Strategy".[50] Despite its substantial purchased power requirements, the Company has ample liquidity to meet calls for collateral in its wholesale power hedging transactions.[51] A separate line of credit has been opened to support PSE's electric and gas portfolio hedging transactions.[52] The

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[43] Exhibit No 457C at 6:12-13 (Valdman).
[44] *In re Petition of Puget Sound Energy, Inc.,* Order No. 01, Docket No. UE-060539 (April 26, 2006).
[45] Exhibit No. 521 at 32:21-33:3 (Russell).
[46] Exhibit No. 469 at 1. *See also,* Tr. 383:19-21 (Morin) and Exhibit No. 151 at 2 ("The proposed utility construction expenditures and any new generation resource expenditures that may be incurred are anticipated to be funded with a combination of cash from operations, short-term debt, long term debt and equity."). This statement is made in the same report that notes that PSE's cash generated from utility operations is down $200 million as a result of changes in the accounts receivable securitization program. (*Id.* at 3.)
[47] Exhibit No. 31 at 26:16-17 (Amen), Exhibit No. 241 at 13:15-19 (McLain), and Exhibit Nos. 446 and 447.
[48] Exhibit No. 466 at 38.
[49] Tr. 383:19-21 (Morin).
[50] Exhibit No. 131HC at 11 (Gaines).
[51] Exhibit No. 469 at 2.
[52] Exhibit No. 251C at 31-33 (Mills).

Company proposes that the costs of that credit facility be recovered through the PCA and Purchased Gas Adjustment ("PGA") mechanisms.[53] Staff supports that proposal.[54]

24 In short, PSE has not met its burden to prove that its access to capital will be compromised if the Commission does not set rates with an 11.25% return on equity and a 45% equity ratio, and does not approve the new regulatory mechanisms that PSE requests.

B. The Cost Of Capital And New Regulatory Mechanisms PSE Proposes Are Not Necessary To Protect Shareholders From Regulatory Lag

25 PSE states that the Gas Decoupling and Depreciation Tracker mechanisms are necessary to provide it the opportunity to earn the authorized return on equity by reducing regulatory lag on the recovery of infrastructure investments.[55] However, the Company has already benefited from numerous mechanisms to counter regulatory lag solely at ratepayer expense. PSE has not shown that extraordinary circumstances exist in this case to justify further protection for the sole benefit of shareholders.

1. Ratepayers already protect shareholders against regulatory lag

26 PSE's argument for protection against regulatory lag ignores existing mechanisms that already materially shift risk from investors to ratepayers. The PGA assures 100% recovery of fixed and variable gas supply costs, which comprise more than half of a ratepayer's bill.[56] In doing so, the PGA insulates 69% of the Company's gas revenue requirement from the effects of weather.[57] PSE agrees that volatility in gas prices makes the

[53] Exhibit No. 131C at 25:18-26:2 (Gaines) and Exhibit No. 421 at 51:15-52:6 (Story).
[54] Exhibit No. 599 at 21:15-19 (Mariam, *et al.*)
[55] Exhibit No. 171 at 17:20-18:9 (Harris) and Exhibit No. 173 at 6:10-12 (Harris).
[56] Exhibit No. 222 at 33:8-9 (Karzmar).
[57] Exhibit No. 521 at 23:9-11 (Russell).

PGA critical to its financial strength.[58] Revenues collected from basic charges, demand charges and base usage are also collected irrespective of weather.[59]

27 The PCA also reduces the Company's exposure to energy price volatility and under-recovery of fixed production costs. The PCA insulates 72% of PSE's electric revenue requirement from the effects of weather.[60]

28 The Company is the only utility regulated by this or any other commission that enjoys a Power Cost Only Rate Case ("PCORC").[61] The PCORC "goes a long way to resolving the regulatory lag issue"[62] by allowing expedited rate recovery of significant production and transmission assets and changes in power supply costs.[63] The Commission has recognized that the PCORC and PCA were designed to "materially reduce the Company's risk" and "already have provided significant support to PSE's infrastructure investment activities . . . and improved market risk management capability."[64] The PCORC allowed real-time recovery of the Frederickson cogeneration facility[65] and the Hopkins Ridge wind generation facility.[66] Now, in this case, Wild Horse and Baker River re-licensing will be placed in rates possibly before their in-service dates.

29 An existing deferral mechanism insulates PSE from storm-related costs above an annual amount of $7 million. The Company triggered the deferral in early 2006.[67] A myriad of twenty-seven other regulatory assets address the timing and recovery of other costs.[68]

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[58] Exhibit No. 222 at 33:14-15 (Karzmar).
[59] Exhibit No. 521 at 23:11-12 (Russell).
[60] Exhibit No. 521 at 23:8-9 (Russell).
[61] Tr. 386:23-24 (Morin).
[62] *Id.*
[63] Exhibit No. 531C at 56:10-13 (Hill).
[64] 2004 Rate Case Order at ¶34.
[65] *WUTC v. Puget Sound Energy, Inc.*, Order No. 14, Docket No. UE-031725 (May 13, 2004).
[66] *WUTC v. Puget Sound Energy, Inc.*, Order No. 04, Docket No. UE-050870 (October 20, 2005).
[67] Exhibit No. 521 at 23:19-21 (Russell).
[68] Exhibit No. 805.

PSE's investment in conservation and its support of low-income customers is also guaranteed through tariff riders and tracker mechanisms.[69]

30 All told, including general rate cases, the Company's rates have changed 13 times since the 2001 general rate case that established the PCA and PCORC.[70] In 2005 and 2006 alone, rate changes have increased Company revenues by $450 million. It is clear that ratepayers have already made a significant contribution to protect PSE from regulatory lag. Staff's recommendation to increase gas revenues by $21 million and create a gas decoupling mechanism, further protects PSE.

2. The Commission should reject the depreciation tracker

31 PSE proposes a Depreciation Tracker for transmission and distribution infrastructure invested between general rate cases. The proposal would immediately increase electric and gas rates by $7.9 million and $10.9 million, respectively, and would require subsequent annual rate increases even if the Company over-earns.[71] No sunset date is proposed. No limitation on PSE's ability to file general rate cases is proposed. No lower return on equity is proposed for the reduced risk to shareholders that PSE admits would occur.[72]

32 The Depreciation Tracker should be rejected as inappropriate single issue ratemaking that reduces management's incentive to achieve all possible efficiencies in capital investment and offsetting cost savings between general rate cases. Some in the investment community already see the Tracker as excessive.[73]

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[69] Exhibit No. 531C at 56:21-57:2 (Hill).
[70] Exhibit No. 174. This includes the recent PGA in Docket Nos. UG-061394 and UG-061395 that increased rates for gas service by $95 million on October 1, 2006.
[71] Exhibit No. 4, Attachment at 4:43 and 11:29, and Exhibit No. 421 at 72-78 (Story).
[72] Tr. 292:20-293:14 (Valdman) and Tr. 385:7-21 (Morin).
[73] Exhibit No. 459 at 14.

a. The depreciation tracker violates the matching principle of historical test year ratemaking

33 It is the well-established practice of the Commission to set rates based upon a fully adjusted and pro-formed historical test period.[74] The "matching principle" embodied in this practice recognizes the importance of a balanced and synchronized examination of all cost-of-service components (revenue, expenses, rate base and cost of capital) over a consistent time period in order to determine a utility's revenue requirement.[75]

34 The Depreciation Tracker violates the matching principle because it isolates for recovery from ratepayers only one element that arguably increases PSE's cost of service, while ignoring all other elements that arguably decrease PSE's cost of service.[76] For example, the Depreciation Tracker does not consider that operation and maintenance expenses may decrease as new plant replaces old plant;[77] that customer growth creates incremental revenues;[78] and that tax depreciation on new investment creates tax benefits.[79]

35 The Depreciation Tracker secures all of these offsetting benefits for shareholders without any determination that the underlying investment is prudent and reasonable.[80] A general rate case, rather than an annual tracker, is the appropriate forum to measure and address those critical issues.

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[74] WAC 480-07-510(3).
[75] *WUTC v. Avista Corp.*, Order No. 05 at ¶111, Docket Nos. UE-050482, *et al.*, (December 21, 2005). *See also*, Goodman, L.S., *The Process of Ratemaking* at 735 (1998).
[76] Exhibit No. 521 at 26:2-17 (Russell).
[77] Operation and maintenance expense reductions include reduced service calls for gas leak checks and repairs, as well as reduced electric outage restoration. (Exhibit No. 506C at 28:5-17 (Brosch).)
[78] The Company acknowledges that customer growth is a significant factor driving the need for new investment (Exhibit No. 171 at 7:17-20 (Harris), but its Depreciation Tracker makes no attempt to remove facilities required by new customers that generate incremental revenues. (Tr. 786:13-19 (Story).)
[79] Exhibit No. 521 at 26:11-12 (Russell).
[80] Exhibit No. 521 at 26:15-22 (Russell).

b. PSE has not justified departure from the matching principle for the depreciation tracker

36 The Commission has diverged from traditional ratemaking, but only upon clear and convincing evidence that a utility will be denied any reasonable opportunity to earn its authorized rate of return without extraordinary relief.[81] Factors addressed by the Commission include reductions in retained earnings and interest coverage that restrict a utility's ability to obtain debt financing and issue equity without dilution, and significant growth in plant under construction as a percent of net plant.[82]

37 PSE does not meet these tests. Its retained earnings increased from 2001 through June 2006.[83] Its plant under construction is a very small percentage of post-test-period plant.[84] Its utility earnings have been healthy, despite recent years of warmer than normal weather.[85] Its access to debt and equity capital is unimpeded.[86]

38 PSE does provide "attrition studies", but does not advocate direct reliance upon them.[87] The attrition studies it did provide are simply forward projections based only on a comparison of two historical rate case test periods. They are far from the rigorous and complex studies required traditionally by the Commission.[88]

39 PSE states that it provided financial forecasts to support the extraordinary regulatory relief it requests.[89] Those forecasts, however, contain only earnings projections for internal

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[81] *WUTC v. Washington Natural Gas Co.*, 4th Suppl. Order at 29-30, Docket No. UG-920840 (September 27, 1993). Other relevant excerpts of Commission cases are contained in Exhibit No. 526 (Russell).
[82] *WUTC v. Puget Sound Power & Light Co.*, 54 PUR 4th 480, 493 (July 1983).
[83] Exhibit No. 150 at 2, 5, 8, 11 and 14 ("Earnings reinvested in business").
[84] Exhibit No. 450 at 4-5.
[85] Exhibit No. 5 (Staff Response to Bench Request No. 1).
[86] *See*, Section II.A., *supra*.
[87] Exhibit No. 421 at 63:12-17 (Story).
[88] Exhibit No. 521 at 27:18-28:22 (Russell). Even attrition studies have been found by the Commission to be susceptible to errors and lack of verification, and that the use of historical periods to project attrition can produce misleading results. (Exhibit No. 526 at 3, 15, 17 and 20-1 (Russell).)
[89] Exhibit No. 439 at 29:15-21 (Story).

use and have not been scrutinized for their applicability to PSE's regulated operations.[90] In short, the Company did not prove that capital investment between rate cases will significantly erode earnings to justify departure from traditional regulation.

c. The depreciation tracker reduces management's incentive to pursue cost savings and efficiencies

40 All of the new regulatory mechanisms proposed by PSE presume that regulatory lag should be avoided at every opportunity. However, a benefit of regulatory lag is that management is encouraged between rate case to maximize earnings by controlling operating expenses and efficiently allocating resources between capital investment options. Thus, regulatory lag creates symmetrical risks and opportunities for shareholders and ratepayers because positive or negative changes in revenue requirement allow a company to over-earn or under-earn until a new rate case is filed.[91]

41 The Depreciation Tracker disturbs this symmetry sharply in favor of shareholders because any increase in depreciation expense caused by capital spending results in an automatic rate increase out-side a general rate case.[92] The fact that the Tracker only addresses "recovery of" and not "recovery on" capital investment may temper that concern, but does not eliminate it.

42 The Company argues that the Depreciation Tracker would provide it an incentive to make capital investments that are outside its control and larger than recent expenditures.[93] However, PSE admitted that capital spending is never constant, but ebbs and flows in the

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[90] Exhibit No. 749, part (e).
[91] In fact, that balance is tipped somewhat in the utility's favor since it controls when to file a rate case if it is under-earning, while a third party or the Commission must file a complaint if the utility is over-earning.
[92] Exhibit No. 521 at 25:24-27 (Russell) and Exhibit No. 506 at 17:7-12 (Brosch).
[93] Exhibit No. 439 at 26:14-15 and 27:7-10 (Story).

normal course of business.[94] It also admitted that the issue is not "whether" but only "when" a project will be undertaken.[95] PSE could not identify a single project that would not occur if the Depreciation Tracker was rejected.[96]

3. PSE's "known and measurable" adjustment should be rejected

43 As an alternative to the Depreciation Tracker, the Company, on rebuttal, proposed a "known and measurable" adjustment for facilities installed from October 2005 through June 2006 that are "non-revenue" producing and "non-expense" reducing.[97] The adjustment increases PSE's revenue requirement by $8.8 million (electric) and $3.5 million (gas).[98]

44 The Commission should reject this proposal. The adjustment suffers from the same deficiencies as the Depreciation Tracker.[99] In addition, the adjustment includes 6300 separate projects[100] that represent a significant portion (64%) of total plant added during the period at issue.[101] Two separate PSE departments were required to perform a *manual* review of the accounts to develop the adjustment.[102] That review included projects that may be revenue producing or expense reducing.[103] It also included "Wild Horse Transmission",

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[94] Tr. 192:13-23 (McLain).
[95] Tr. 198:23-199:3 (McLain).
[96] Exhibit No. 249.
[97] Exhibit No. 439 at 30:4-17 (Story). PSE states its proposal was "suggested" by the Federal Executive Agencies. *Id.* FEA, however, opposes any adjustment for investments beyond December 2005. FEA also excludes capacity enhancing plant additions because they are associated with customer growth, and offsets changes in accumulated depreciation of existing transmission and distribution plant. These are significant differences not noted by PSE. (Exhibit No. 527 at 2:20-3:8 (Russell).)
[98] Exhibit No. 439 at 31:5-7 (Story).
[99] Exhibit No. 527 at 2:8-12 and 4:4-13 (Russell).
[100] Exhibit No. 247 at 2 and Attachment, and Tr. 186:8-14 (McLain).
[101] Exhibit No. 246 and Exhibit No. 747 at 7:3-5 (McLain), and Tr. 189:7-190:3 (McLain). 64% represents the $145 million of plant additions that PSE included in its adjustment out of the total $232 million considered.
[102] Exhibit No. 247 at 2 and Attachment, and Tr. 186:4-20 (McLain).
[103] For example, some projects imply additional revenues: "Distribution Electric, New Construction" or "Gas Distribution, New Construction". Other projects imply cost savings: "CP System Improvements", "Cost Effective Replacement Component", "Targeted Outage Reduction", and "Substation Planned Vegetation Management". (Exhibit No. 247, Attachment.)

which is already included in PSE's and Staff's cases.[104] The Commission simply cannot verify whether the projects included in the adjustment are non-revenue producing and non-expense reducing, especially at this late stage of the case.[105]

45 If, however, the Commission believes that extraordinary relief is warranted in this case, it should strictly confine any remedy to a one-time post-test-period rate base adjustment for the following projects only: 1) Cast Iron Replacement ($3.0 million); 2) Bare Steel Replacement ($1.9 million); 3) Critical Bond ($5.7 million); 4) Cable Remediation ($10.2 million); and 5) NERC/WECC Bothel-Sammamish Transmission Line ($5.1M)[106] Projects 1-3 relate to the safety of gas operations and are mandated by Commission order.[107] Project 4 is not mandated by Commission order, but is analogous to the gas projects and is critical for service reliability. Project 5 is mandated by NERC/WECC reliability standards.[108]

46 A one-time adjustment for these projects results in a maximum additional revenue requirement of $1,720,000 for gas operations and $2,370,000 for electric operations.[109]

C. The Cost Of Capital Proposed By Staff Should Be Adopted By The Commission

47 Staff's cost of capital recommendation was presented by Mr. Stephen G. Hill.[110] The Company presented by Dr. Roger A. Morin and Mr. Donald E. Gaines on cost of capital.

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[104] Exhibit No. 247, Attachment at 303.
[105] Exhibit No. 527 at 3:14-4:2 (Russell).
[106] Exhibit No. 247, Attachment.
[107] *WUTC v. Washington Natural Gas Co.,* 1st Suppl. Order, Docket No. UG-920487 (June 19, 1992) and *WUTC v. Puget Sound Energy, Inc.*, Order No. 02, Docket Nos. PG-030080, *et al.*, (January 31, 2005).
[108] Exhibit No. 241 at 34:8-17 (McLain).
[109] At the Company's rate or return: Gas - revenue requirement of $3,546,087 (Exhibit No. 445 at 1:41) divided by net additions of $21,835,783 (Exhibit No. 445 at 1:25 and 29) equals .1624 times $10.6 million ($3 million plus $1.9 million plus $5.7 million) equals $1,720,000. Electric – revenue requirement of $8,772,793 (Exhibit No. 445 at 1:20) divided by net additions of $56,643,569 (Exhibit No. 445 at 1:4 and 8) equals .1549 times $16.3 million ($10.2 million plus $5.1 million) equals $2,370,000.
[110] Mr. Hill is a well-known expert on these matters and has testified before the Commission in prior cases. (Exhibit No. 531C at 1:23-2:22 (Hill) and Exhibit No. 532 (Hill).)

48 The matters in dispute are the rate of return on equity and the capital structure.[111] Mr. Hill recommends a return on equity of 9.375% applied to a capital structure that includes 43% common equity. Dr. Morin and Mr. Gaines recommend an 11.25% return on equity applied to a capital structure that includes 45% common equity. Dr. Morin's equity cost includes a 25 basis point upward adjustment to account for "PSE's higher relative risks."[112]

1. The cost of equity capital

a. Staff's rate of return on equity of 9.375% fulfills all legal requirements

49 The *Hope* and *Bluefield* decisions of the United States Supreme Court require that PSE have the opportunity to maintain its financial integrity and earn a return commensurate with similar-risk firms so it can attract capital on reasonable terms.

50 Mr. Hill's return on equity recommendation meets those requirements. A 9.375% equity return, and the capital structure that Staff proposes, provide the Company a pre-tax interest coverage of 2.85 times, which is well above the interest coverage PSE actually achieved over the past 5 years.[113] Thus, Staff's recommendation allows the Company the opportunity to maintain or improve its financial soundness.

51 Mr. Hill estimated the cost of equity using a "comparable company" approach. He screened all electric and gas utilities followed by Value Line and selected companies that had at least 70% of their revenues from regulated operations, did not have a large stock price increase due to a pending merger, and did not omit or have a recent cut in dividends. Mr. Hill's electric companies also had stable book values and a bond rating between A- and

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[111] Staff does not contest the Company's cost rates for preferred stock, preferred trust securities, long-term debt and short-term debt. (Exhibit No. 531C at 38:4-7 (Hill).)
[112] Exhibit No. 301 at 58:13-14 (Morin).
[113] Exhibit No. 531C at 5:2-5 and 64:12-18 (Hill).

BBB-.[114] Thus, Staff's equity cost is commensurate to the returns investors require from companies of similar risk to PSE, which allows the Company to attract necessary capital.

52 PSE argues that Mr. Hill's equity cost is outside a "range of reasonableness" of 10.2% to 10.9%.[115] By that measurement, of course, Dr. Morin's equity cost of 11.25% is unreasonable.

53 PSE argues that Mr. Hill's equity cost is inconsistent with currently authorized returns.[116] Dr. Morin admits, however, that allowed returns are "not a precise indication of a company's cost of equity."[117] Thus, one must analyze a utility's specific circumstances in order to estimate the cost of equity.[118]

54 Moreover, most of the authorized equity returns presented by PSE are either undated, the result of settlement, or were established in rate cases litigated in 2005 or before.[119] Capital costs change over time, so equity returns from prior periods do not apply to the current cost of capital. Indeed, utility market prices far exceed book value, indicating that allowed returns overstate the current cost of capital.[120] The use of allowed returns to estimate the current cost of capital is also a circular argument that should be rejected.

b. Staff's cost of equity of 9.375% is supported by substantial evidence

55 The Commission has held that:

> Determining the proper cost of capital is an imprecise art. In particular, measuring the cost of equity capital requires the exercise of informed judgment. In contrast to the cost of debt, the cost of equity is not readily observable and

[114] Exhibit No. 531C at 41:16-43:4 (Hill) and Exhibit No. 539 (Hill).
[115] Exhibit No. 457C at 14:10-15:2 (Valdman).
[116] Exhibit No. 457C at 15:3-6 and 17:12-15 (Valdman) and Exhibit No. 315 at 5:3-7:2 (Morin).
[117] Exhibit No. 315 at 5:7-8 (Morin).
[118] Tr. 251:5-8 and 252:3-5 (Valdman).
[119] Exhibit No. 146 (Gaines) and Exhibit Nos. 461 and 462 (Valdman).
[120] Exhibit No. 531C at 26-28 (Hill).

must be estimated through the use of theoretical models and corroborative evidence.[121]

Only Mr. Hill's 9.375% equity return meets these tests. First, Mr. Hill focused upon investor return requirements measured by a Discounted Cash Flow ("DCF") analysis.[122] The DCF approach is the most widely used method to reliably estimate equity returns in rate proceedings.[123] Dr. Morin agreed that the DCF approach is "appropriate" and that its use is "almost unanimous" among regulators.[124] The Commission itself relies on DCF as the "most substantial and reliable evidence" of a utility's cost of equity capital.[125]

56 Second, Mr. Hill corroborated his DCF results with second-tier equity cost estimation approaches: Capital Asset Pricing Model ("CAPM"), Modified Earnings Price Ratio, and Market-to-Book Ratio. His corroborating methodologies indicate that a reasonable range of equity cost for similar risk electric companies is 9.09% to 9.58% and 9.01% to 9.65% for similar risk gas companies.[126]

57 Additional evidence not based on the subjective judgment of experts also indicates that Mr. Hill's 9.375% cost of equity is not only reasonable, but may actually overstate investor expectations:

- At 8% to 9%, the equity return expectation of PSE's pension fund portfolio is *below* the equity return Staff recommends.[127]

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[121] *WUTC v. Avista Corp.*, Order No. 05 at ¶45, Docket Nos. UE-050482, *et al.*, (December 21, 2005).
[122] Mr. Hill's DCF analysis indicated a cost of equity of 9.37% for similar risk electric companies and 9.44% for similar risk gas companies. (Exhibit No. 543 (Hill).)
[123] Exhibit No. 531C at 66:7-10 (Hill).
[124] Exhibit No. 301 at 15:2 (Morin) and Exhibit No. 531C at 66:12 (Hill).
[125] 2004 Rate Case Order at ¶73.
[126] Exhibit No. 531C at 49:11-50:19 and 51:9-52:9-18 (Hill) and Exhibit Nos. 544-547 (Hill).
[127] Exhibit No. 221 at 2 and 75 and Exhibit No. 531C at 49:11-50:19 (Hill). Dr. Morin was the only Company witness to respond to this issue. He argued that the "actuarial" data used for pension fund accounting is irrelevant in estimating the cost of equity. (Exhibit No. 315 at 43:6-21 (Morin).) However, Dr. Morin was not aware of the assumptions underlying PSE's pension fund investment projections. (Exhibit No. 336 at 1, part b.) He did agree that actuarial data apply principles of probability, statistics and financing (*Id.* at 1, part a), which are the same principles that form the basis of cost of capital analysis. When asked if the expected returns on PSE's pension fund investments were too low or inaccurate, he stated only that they were determined in a cautious and careful manner. (*Id.* at 1, parts c and d.) Staff assumes that any attempt to estimate the retirement

- Investor services advise subscribers to expect equity returns from utility investment *below* the equity return Staff recommends.[128]

- Value Line forecasts a return on book equity for PSE of 8.5% for 2007 and for 2009-2011.[129]

- Reports in the financial media indicate investor-expected returns *below* the equity return Staff recommends.[130]

- Even with increases in short-term rates, capital costs associated with bonds are near their lowest level in more than 40 years.[131]

- Value Line notes current expectations that the economy will expand at a moderate pace in 2006 and 2007, and that inflation and interest rates will continue to be moderate.[132]

- Value Line projects long-term Treasury bonds to average 5.3% through 2007 and 5.6% through 2008.[133] A recent average 30-year Treasury bond yield is only 4.97%.[134]

58 Even the Company admits that borrowing costs are "near all-time lows"[135] and that "market conditions have been attractive."[136] It notes that Treasury bond yields across maturities are lower than the 5.25% Federal funds rate, and that PSE's cost to borrow is less than 150 basis points over those levels.[137]

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needs of PSE's workforce is undertaken with substantial caution and care, which would include an accurate assessment of expected pension fund equity returns. Indeed, Mr. Hill explained that the expected returns must be accurate and reliable to ensure that annual pension fund expenses are neither too high nor too low so that, over time, the pension fund needs of PSE employees are met. (Exhibit No. 531C at 8:9-9:5 (Hill).)

[128] A.G. Edwards reports a gas utility stock return well below 10% and a return of 8.1% for a sample group of 16 gas distributors. Value Line reports a market return expectation of 9.125% for Mr. Hill's sample gas companies. (Exhibit No. 531C at 9:8-10:2 (Hill).) Thus, Dr. Morin errs when he claims (Exhibit No. 315 at 42:18-19) that the figures cited by Mr. Hill are for the overall market.

[129] Exhibit No. 315 at 22:4-5 (Morin).

[130] Exhibit No. 531C at 10:3-11:25 (Hill).

[131] The Federal Funds rate has remained in the 4.5% to 5.5% range. Moody's Baa-rated bond yields are below levels seen in the late 1960s. (Exhibit No. 531C at 18:1-20:8 (Hill) and Exhibit No. 537 at 2 (Hill).)

[132] Exhibit No. 531C at 20:10-21:16 (Hill).

[133] Exhibit No. 531C at 20:18-20 (Hill).

[134] Exhibit No. 531C at 20:20-22 (Hill).

[135] Exhibit No. 457C at 7:6 (Valdman).

[136] Tr. 283:11-12 (Valdman).

[137] Exhibit No. 457C at 7:6-8 (Valdman).

c. PSE's proposed 11.25% return overstates the cost of equity capital

59 Dr. Morin's equity cost of 11.25% is based on an average of four CAPM, six Risk Premium and six DCF analyses.[138] His CAPM and Risk Premium approaches use a similar bond yield plus risk premium formula.[139] The average equity cost estimate of his ten risk premium analyses is 11.2%, but only 10.4% for his six DCF analyses.[140] Thus, Dr. Morin's equity cost is skewed upward by his heavy reliance on risk premium results.[141] Each of his estimation techniques is also deficient in theory and/or practice.

i. Dr. Morin's DCF cost of equity is overstated

60 DCF analysis requires measurement of dividend yield and expected future growth in dividends. Dr. Morin's implementation of the DCF approach is problematic in both areas.

61 His DCF growth rate analysis relies only on earnings growth rate projections.[142] However, projected dividend, book value and sustainable growth rates are also widely available to investors and, thus, reflected in stock prices.[143] Had Dr. Morin considered all growth rate data available to investors, instead of just the earnings portion of those data, his DCF equity cost for his combination gas and electric utilities would be 9.06%.[144]

62 Dr. Morin also increased the current dividend of all of his sample companies by one plus the DCF growth rate. This adjustment overstates his DCF cost of equity because it assumes incorrectly that dividends increase immediately and remain at that higher level for

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[138] Exhibit No. 301 at 12:18-19 and 57:1-58:3 (Morin).
[139] Tr. 310:2-5 (Morin).
[140] These averages can be calculated directly from Exhibit No. 301 at 57 (Morin).
[141] Exhibit No. 531C at 65:12-18 (Hill).
[142] Exhibit No. 531C at 103:2-15 (Hill) and Exhibit No. 333 at 3 (Hill).
[143] Exhibit No. 531C at 103:2-104 (Hill) Exhibit No. 551 at 5:4-11 (Hill). Dr. Morin compiles some of this additional growth data in Exhibit No. 307 (Morin).
[144] Exhibit No. 531C at 105:4-106:7 (Hill). Mr. Gorman for ICNU commits the same error as Dr. Morin. Correcting that error lowers Mr. Gorman's equity cost from 9.9% to 9%. (Exhibit No. 551 at 4:8-5:23 (Hill).)

four quarters.[145] A more realistic assumption is that dividends increase, on average, half-way through the year.[146] Moreover, the Value Line dividend yields used by Dr. Morin do not need to be adjusted for increased growth because they are already based on cash dividends estimated to be declared in the next 12 months. Therefore, in adjusting the dividend yield published by Value Line for one year's growth, Dr. Morin double-counts that growth, which, again, overstates his DCF cost of equity.[147]

ii. Dr. Morin's CAPM cost of equity is overstated

63 Dr. Morin places heavy reliance on the CAPM approach even though it is highly criticized as an equity cost estimation technique. It is based upon many detailed theoretical assumptions likely to be violated in real capital markets.[148] The same leading expert cited by Dr. Morin in his attempt to denigrate the DCF finds that CAPM to be "inaccurate, incomplete and unreliable as a measure of a firm's equity cost of capital."[149] Dr. Morin also relies on research that confirms CAPM's short-comings and finds the model "invalid".[150]

64 Beyond these overriding deficiencies, Dr. Morin's CAPM analysis suffers in all three specific elements of the CAPM: the market risk premium, Beta, and the risk-free rate.

65 Dr. Morin uses a 7.5% market risk premium based on historical returns compiled by Ibbotson & Associates.[151] In doing so, Dr. Morin ignores, or cites selectively, new research in financial economics demonstrating that forward-looking risk premiums are substantially

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[145] Again, Mr. Gorman for ICNU commits the same error as Dr. Morin. Correcting that error lowers Mr. Gorman's DCF results about 10 basis points. (Exhibit No. 551 at 2:14-3:9 (Hill).)
[146] Exhibit No. 531C at 84:10-85:12 (Hill).
[147] Exhibit No. 531C at 102:12-17 (Hill).
[148] Exhibit No. 531C at 77:11-78:12 (Hill). For example, CAPM assumes incorrectly that all investors have identical return expectations, can borrow and lend unlimited amounts of money at the risk-free rate of interest, and assume that their market activity will not affect stock prices.
[149] Exhibit No. 531C at 76:7-77:9 (Hill), citing, C.F. Phillips, *The Regulation of Public Utilities Theory and Practice* 396-97 (1993).
[150] Exhibit No. 531C at 79:1-82:14 (Hill), citing, E. Fama and K. French, *The Capital Asset Pricing Model: Theory and Evidence*, Journal of Finance (Summer 2004).
[151] Exhibit No. 301 at 29:2-11 (Morin).

below the historical averages he uses.[152] Indeed, based on his own published review of this research, Dr. Morin concludes that a 5% market risk premium falls within a reasonable range.[153] A 5% market risk premium produces a CAPM cost of equity of 9%, which is *below* the return Staff recommends.[154] Ibottson himself now finds that the forward-looking arithmetic market risk premium is only 5.9%.[155] Had Dr. Morin used a 5.9% risk premium, his current yield CAPM result would be 9.87% at most and his empirical CAPM result would be 9.63% at most.[156]

66 Dr. Morin used projected, rather than current, bond yields as the risk-free rate even though such projections over-estimate bond yield increases.[157] Beta, the primary risk measure of the CAPM, has many practical and conceptual problems that Dr. Morin, himself, cites in his 1994 textbook.[158] Dr. Morin used an "empirical" CAPM in an attempt to correct some of the shortcomings of the standard CAPM model. However, he incorrectly used

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[152] This research includes Dimson, *et al.*, who calculate an *arithmetic* average risk premium of 6.8% based on Treasury bills. (Exhibit No. 329 at 51, Table 7 and 54.) A market risk premium based on Treasury bonds is 150 basis points lower (Exhibit No. 327 at 6), or 5.3%. That is well below the 7%-7.5% Dr. Morin attributes to those authors. (Exhibit No. 315 at 48:17-21 (Morin).)

Seigel calculates an arithmetic market risk premium of 4.7%. (Exhibit No. 331 at 3.) Dr. Morin questions the reliability of that estimate, citing anomalies to the underlying data. (Exhibit No. 315 at 49:5-14 (Morin).) Those anomalies however, were corrected by earlier research. (Tr. 331:14-16 (Morin).)

In his new textbook, Dr. Morin cites (Exhibit No. 327 at 17), but does not discuss, Fama and French's market risk premium of 2.55% to 4.32%. (Exhibit No. 332 at 1.) Since they base their estimate on short-term risk free rates, their geometric averages must be adjusted *downward* by 150 basis points to be compatible with arithmetic averages for long-term risk free rates. Arnott and his colleagues conclude that the market risk premium is near zero. (Exhibit No. 334.) A recent study by Welch concludes that the market risk premium is 5% to 5.5% (Exhibit No. 330), while Graham and Harvey find that the market risk premium since 2000 has been 3.59% and 2.39% in the most recent quarter. (Exhibit No. 335.) Dr. Morin's criticism (Tr. 341:9-15) that the Graham survey is inaccurate because of its sample size is rejected by the authors. (Exhibit No. 335 at 2-3.)

[153] Exhibit No. 327 at 11.

[154] Tr. 313:1-7 (Morin).

[155] Exhibit No. 333 at 10.

[156] Exhibit No. 531C at 90:1-5 and 92:11-18 (Hill).

[157] Exhibit No. 531C at 86:4-87:4 (Hill). The current bond yields Dr. Morin uses for the risk fee rate are also unadjusted in derogation of advice from a researcher Dr. Morin recognizes as a "prominent finance scholar." (Exhibit No. 531 at 86:4-18 (Hill) and Exhibit No. 301 at 17:15 (Morin).)

[158] Exhibit No. 531 at 79:1-81:11 (Hill).

"adjusted" betas, rather than the unadjusted betas referenced in the research he cites. Correcting that error produces an equity cost estimate of 9.63%.[159]

iii. Dr. Morin's Risk Premium cost of equity is overstated

67 Cost of capital authorities have also found that Dr. Morin's Risk Premium approach suffers from "conceptual and measurement problems" that cause many to use the approach only as a "subsidiary method to test the results of other approaches."[160] Dr. Morin rejected that advice by giving overriding emphasis to his ten risk premium approaches.

68 The historical data upon which Dr. Morin relies for his Risk Premium study are also extremely volatile.[161] His historical Risk Premium result is "unreliable" as even he defines that term. According to his own data, we can be 95% certain that investors require an equity return above bond yields that falls between -33.5% and +44.6%.[162] That sort of result should not receive primary emphasis in the Commission's determination of the appropriate level of profit (return on equity) to be allowed PSE.

69 Dr. Morin's historical risk premium data also show that the relationship between utility stock returns and bond returns has not been stable and has been declining. Over the most recent 30 years, risk premiums have averaged only 4%, rather than 5.6% as Dr. Morin reports.[163] A 4% risk premium indicates a cost of equity of only 9.06%.[164]

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[159] Exhibit No. 531C at 91:6-92:18 (Hill).
[160] Exhibit No. 531C at 94:17-95:29 (Hill), citing, C.F. Phillips, *The Regulation of Public Utilities Theory and Practice* at 399 (1993).
[161] Exhibit No. 531C at 94:8-17 (Hill) and Exhibit No. 550 (Hill), which has Exhibit No. 305 (Morin) as its source.
[162] Exhibit Nos. 346 and 347 and Tr. 347:7-22 (Morin).
[163] Exhibit No. 531C at 96:9-18 (Hill). Dr. Morin's analysis of the return difference between gas utility returns and bond returns also confirms that more current risk premiums are smaller. (Exhibit No. 531C at 96:19-97:8 (Hill), citing, Exhibit No. 306 (Morin).)
[164] *Id.*

d. PSE's adjustment for flotation costs should be rejected

70 Dr. Morin increased his proposed cost of equity by 30 basis points to account for flotation costs.[165] Staff opposes such an adjustment.

71 First, the majority of issuance costs are discounts to institutional investors. They are not out-of-pocket expenses for the issuing company.[166] Thus, Dr. Morin errs to state that PSE will not recover a cost of business without a flotation cost adjustment.[167]

72 Even if issuance expenses are a cost of business for the issuing utility, they are not the only costs involved in the sale of stock. Other offsetting costs, such as brokerage fees, are involved.[168] Moreover, Dr. Morin's flotation cost adjustment is not based on any known, measurable and prudent costs of PSE. It is based only on a general study of the market that may or not be related to PSE's actual cost of issuing stock.[169] Thus, his adjustment does not meet Commission precedent:

> While, in some circumstances, we have permitted adjustments to a company's cost of equity to reflect issuance expenses or flotation costs [citation omitted], we cannot do so in this case because PacifiCorp did not incur such expenses in the test year, nor does the Company expect to incur such expenses in the future.[170]

73 Second, flotation cost adjustments are intended to prevent dilution of stockholder investment. However, with a current market price of utility stocks well above book value,

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[165] Tr. 310:12-20 (Morin).
[166] Exhibit No. 531C at 53:21-54:4 (Hill). Thus, Dr. Morin's analogy (Exhibit No. 315 at 16:10-14) of flotation costs to depreciation expense is inapt. Depreciation is a non-cash expense designed to recover capital invested in plant. Flotation costs are discounts and fees not paid by the utility.
[167] Tr. 311:4-6 (Morin).
[168] Exhibit No. 531C at 54:17-55:10 (Hill). Dr. Morin criticizes this conclusion not on logical grounds, but because the research cited by Mr. Hill is an "unpublished note in a relatively obscure bulletin." (Exhibit No. 315 at 17:20- 18:4 (Morin).) That research, however, was published by the National Regulatory Research Institute, which is the research arm of NARUC. (Exhibit No. 531C at 54, n18 (Hill).) Moreover, the only contrary research cited by Dr. Morin is reviewed in an article he authored. (Exhibit No. 316 (Morin).) The example he cites in that article holds the market-to-book ratio at a level (105%) that just offsets the flotation costs (5%). (*Id.* at 9-10.) The example does not hold if the market-to-book ratio is increased.
[169] Exhibit No. 471C at 48:12-17 (Gorman).
[170] *WUTC v. PacifiCorp, d/b/a Pacific Power & Light Co.*, Order No. 04 at ¶122, Docket Nos. 050684, *et al.*, (April 17, 2006) ("PacifiCorp Order").

the issuance of stock increases the book value of common stock for the benefit of investors.[171] Thus, any adjustment for flotation costs should *reduce* the cost of equity, not increase the cost of equity.[172] Dr. Morin ignores this point when he states that flotation costs associated with common stock are "exactly" like flotation costs associated with bonds.[173]

74 Finally, a flotation cost adjustment is unnecessary because:

- Investors understand that a portion of the stock price does not go to PSE, but rather to the underwriter. Thus, investors have accounted for issuance costs when they buy stock.[174]

- Staff's DCF growth rate already adjusts equity costs upward to account for sales of stock at prices above book value.[175]

e. Conclusion on the cost of equity capital

75 The Commission has stated that:

> [w]hile the determination of the cost of common equity capital requires the exercise of judgment, the use of judgment must be informed by the facts. If meeting the burden of proof through opinion evidence has any meaning, it means that the witness must present a logical connection between the factual evidence and the opinion offered.[176]

76 Staff's equity cost of 9.375% meets this test by ensuring that rates reflect the facts and circumstances of current capital markets, while also supporting PSE's credit quality. Staff's recommendation offers the Commission the opportunity to more accurately balance the interests of ratepayers and investors than the cost of capital recommendation of PSE.

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[171] Exhibit No. 531C at 53:13-20 (Hill).
[172] Exhibit No. 531C at 53:5-12 (Hill) and Exhibit No. 541 at 1 (Hill).
[173] Exhibit No. 301 at 52:4-6 (Morin). Dr. Morin contradicts his position on rebuttal when he states that stock flotation costs are different from bond flotation costs because the latter are based on gross, rather than net costs. (Exhibit No. 315 at 15:8-10 (Morin).) He also overlooks the fact that the embedded cost of debt is based on the net proceeds of each bond issue. (Exhibit No. 136C at 6 (Gaines).)
[174] Exhibit No. 531C at 54:5-12 (Hill).
[175] Exhibit No. 531C at 54:13-16 (Hill).
[176] *WUTC v. Avista Utilities*, 3rd Suppl. Order at ¶355, Docket Nos. UE-991606, *et al.*, (September 29, 2000).

2. Capital Structure

77 Each source of capital has its own level of risk and corresponding return. Thus, setting a capital structure for ratemaking purposes requires an appropriate balance of debt and equity on the basis of economy and safety.[177] Staff's recommended capital structure of 43% common equity, 3.75% preferred stock, 0.70% preferred trust securities, 47.88% long-term debt, and 4.67% short-term debt satisfies that standard.[178] The same cannot be said for PSE's capital structure, which consists of 45% common equity, 3.75% preferred stock, 0.70% trust preferred securities, 47.87% long-term debt, and 2.68% short-term debt.[179]

a. Staff's 43% equity ratio reflects PSE's actual and projected capital structure

78 Staff's common equity ratio of 43% is the mid-point of PSE's actual capitalization over the recent past and its projected capital structure for the 2007 rate year. With respect to the recent past, the equity portion of PSE's capital structure increased from 39% at year-end 2004 to 42% at year-end 2005.[180] The Company itself indicated that its average capital structure in 2005 included only 40% common equity.[181] With respect to future capitalization, PSE projects a [redacted] equity ratio based on average of monthly capital balances from December 2006 through December 2007.[182]

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[177] 2004 Rate Case Order at ¶27. *See also, WUTC v. Puget Sound Power & Light Co.*, 11th Suppl. Order at 25-26, Docket Nos. UE-920433, *et al.*, (September 21, 1993).
[178] Exhibit No. 538 at 3 (Hill). Reducing the Company's projected average common equity balances by $100 million and replacing that capital with short-term debt produces the capital structure proposed by Staff.
[179] Exhibit No. 136C at 1 (Gaines).
[180] Exhibit No. 538 at 1 (Hill).
[181] Exhibit No. 137C at 10:16-20 (Gaines).
[182] Exhibit No. 136C at 2:18 (Gaines) and Exhibit No. 140C at 2:18 (Gaines).

79 PSE argues that its stock issuance in November 2005 brought its equity ratio close to the 45% level it now requests.[183] However, when all unregulated common equity is removed from the Company's balance sheet, the common equity ratio at year-end 2005 is 42%.[184]

80 PSE argues that [redacted] will result in an equity ratio of 45%.[185] Whether or not that transaction will occur is speculation. The 2004 Rate Case is instructive. There, PSE projected a common equity issuance designed to reach a 45% average equity ratio, but, since that issuance did not occur until November 2005, the Company was actually capitalized with only 40% common equity for most of the rate year from that case.[186] Instead of shoring up PSE's equity ratio with all monies from the sale of its unregulated subsidiary, InfrastruX, Puget Energy, the parent, elected to retain most of those proceeds and lend a portion to PSE.[187] This transaction increased PSE's short-term debt ratio, contrary to its stated desire to increase its common equity.[188]

b. Staff's 43% equity ratio captures the reality that capital structure fluctuates over time

81 A company's capital structure is not static. It fluctuates in a range over time. Although PSE currently has a higher equity ratio than it had on average in 2005, by year-end

[183] Exhibit No. 131C at 5:5-10 (Gaines).
[184] Exhibit No. 531C at 29:20-30:16 (Hill).
[185] Exhibit No. 131C at 10:6-8 (Gaines).
[186] Exhibit No. 531C at 34:3-11 (Hill). Thus, for most of the rate year from the prior case ratepayers supported a more expensive 43% equity ratio, but without receiving the corresponding benefits in credit quality that that capital structure may produce. Moreover, in early February 2005, when PSE was arguing in its last rate case for a 45% equity ratio, Puget Energy's stock was trading above $24 per share. (Exhibit No. 152 at 2.) The Company, however, received only $20.67 per share for the 15 million shares it issued in November 2005. (Exhibit No. 151 at 4 and Tr. 409:15-19 (Gaines).) Thus, PSE's delay in issuing stock until November 2005 cost shareholders and ratepayers $50 million. (($24 - $20.67) x 15 million shares) = $50 million.)
[187] Exhibit No. 531C at 35:12-36:2 (Hill).
[188] Staff acknowledges that Puget Energy invested some of the proceeds in PSE as equity. (*See* Exhibit No. 137C at 22:13-14 (Gaines).) The point is that, if Puget Energy's goal is to boost PSE's equity ratio, it squandered an opportunity to implement that goal with the InfrastruX sale.

2006 PSE will again be capitalized with only [redacted] common equity.[189]

82 If the Commission's goal is to target a capital structure that will exist during the rate year, it should not target the upper end of a range that may exist. Rather, it should adopt a conservative approach by using a capital structure around which the actual capitalization will likely fluctuate.[190] That range for PSE is 39% to 45%. The mid-point, 42%, is below Staff's equity ratio of 43%.

c. PSE's 45% equity ratio is unreasonably costly for ratepayers

83 The additional 5% common equity that PSE requests in this case over its 2005 capital structure will cost ratepayers $35.8 million more per year.[191] PSE argues that that amount overstates the impact by ignoring partially offsetting decreases in the debt ratio.[192] Taking into account that decrease in debt ratio still increases the total cost of capital by $22 million per year without evidence of overriding benefits for ratepayers.[193]

d. PSE's 45% equity ratio is out of the mainstream

84 The 45% equity ratio requested by PSE contains significantly more equity and less total debt than is used on average in the electric industry today. The average common equity ratio of the combination gas and electric utility industry is 42%.[194] The average common equity ratio for combination utilities with a similar BBB bond rating to PSE is 38%.[195]

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[189] Exhibit No. 136C at 2, column (B) (Gaines). The Company confirmed that amount in a recent financing request in Docket No. UE-060822. (Exhibit No. 531C at 35:3-8 (Hill).)
[190] Exhibit No. 531C at 34:17-22 (Hill).
[191] Exhibit No. 531C at 31:6-18 (Hill).
[192] Exhibit No. 137C at 13:1-13 (Gaines).
[193] Exhibit No. 142 at 2:32 (Gaines).
[194] Exhibit No. 531C at 32:13-18 (Hill) and Exhibit No. 538 at 2 (Hill).
[195] *Id.* The Company disputes these figures because they represent equity ratios of holding companies. (Exhibit No. 137C at 17:1-18:18 (Gaines).) Holding company capital structures are the relevant measure for determining financial risk since investors can only purchase holding company stock. They cannot purchase stock of the regulated subsidiary.

85 The Company argues that it needs a higher equity ratio because purchased power contracts are treated as debt by the rating agencies.[196] However, PSE has lower purchased power risk than the companies selected by Mr. Hill for his cost of equity analysis (13.1% v. 23%), according to the same measurement (purchased power expense as a percent of electric plant) advocated by the Company.[197] PSE also has lower operational risk and a lower Standard & Poors business risk ranking than the companies selected by Mr. Hill.[198] These factors all warrant a much lower common equity ratio for PSE than the 45.7% common equity ratio maintained by the companies he selected.[199]

86 In sum, it remains safe and economical to use the 43% common equity ratio adopted by the Commission in PSE's 2004 general rate case. Actually, Staff's capital structure contains more equity than the Commission approved in 2004 because Staff replaced trust preferred securities with preferred securities.[200] That lowers PSE's financial risk with significantly less cost to ratepayers than PSE's proposal.[201]

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[196] Exhibit No. 131C at 7:15-8:14 (Gaines).

[197] Exhibit No. 531C at 33:1-13 (Hill) and Exhibit No. 145 (Gaines). Thus, it is untenable for the Company to argue (Exhibit No. 137C at 14:22-23 (Gaines) and Exhibit No. 315 at 41:9-10 (Morin)) that comparing purchased power expense per dollar of plant is valid to support its claim of abnormally high risk, but is "irrelevant" when Staff's sample group turns out to have more purchased power risk than PSE.

It is also untenable for PSE to claim that the only relevant measure of purchased power risk is what Standard & Poors uses to impute the effective debt ratio of the company in question. (Exhibit No. 137C at 15:8-14 (Gaines) and Exhibit No 315 at 41:18-42:2 (Morin).) When asked if he had made such an analysis, Dr. Morin stated he had not because it would be difficult if not impossible. (Exhibit No. 344 at 2.) PSE has estimated the amount of additional debt Standard & Poors might attribute for its purchased power obligations (Exhibit No. 144HC at 2 (Gaines)), but has made no such analysis of Dr. Morin's sample companies.

[198] Exhibit No. 531C at 33:13-16 (Hill). The average business risk of Mr. Hill's comparable companies is 6 compared to 4 for PSE.

[199] Exhibit No. 531C at 33:16-19 and 55:18-56:2 (Hill). Dr. Morin's claim (Exhibit No. 315 at 37:13-19) that Mr. Hill did not compare his recommended equity ratio to his comparable companies is, therefore, incorrect. He is also incorrect to claim (Exhibit No. 315 at 38:2-4) that the average equity ratio of Mr. Hill's comparable companies is about 50%. Dr. Morin excluded short-term debt in his calculation even though PSE's requested capital structure contains short-term debt. (Exhibit No. 343, part b.) Mr. Hill's recommended capital structure and his comparison capital structures both include short-term debt.

[200] Exhibit No. 531C at 36:3-18 (Hill).

[201] Exhibit No. 531C at 37:21-38:2 (Hill).

D. Staff's Gas Decoupling Mechanism Fairly Balances The Interests Of The Company And Its Customers

1. Compelling reasons exist for the Commission to implement decoupling

87 Under current rate structures, utility revenues are generated largely through volumetric charges. Therefore, gas conservation by consumers may reduce earnings for the utility and compromise its ability to recover fixed costs.[202]

88 Decoupling is designed to break the link between a utility's revenues and the gas consumption of its customers.[203] It does so through an annual adjustment that allows the company to recover deviations in actual revenue from the level of revenue authorized in a general rate case.[204]

89 There are compelling reasons for the Commission to implement a gas decoupling mechanism for PSE. First, removing the disincentive of the utility to promote conservation will assist customers in coping with gas commodity costs that have increased over 50% since the Fall of 2003.[205] A recent study suggests that accelerated energy efficiency and renewable energy investment in the Pacific Northwest may help reduce gas prices up to 38%.[206] An evaluation of the Northwest Natural decoupling mechanism in Oregon suggests that decoupling encourages a corporate culture that fosters conservation.[207]

90 Second, decoupling strikes an appropriate balance between PSE and consumers. PSE recovers the margin costs authorized in a general rate case despite declining customer

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[202] Exhibit No. 561 at 5:21-6:3 (Steward).
[203] Exhibit No. 561 at 6:3-6 (Steward).
[204] Exhibit No. 561 at 5:17-19 (Steward).
[205] Exhibit No. 561 at 9:19-22 (Steward) and Exhibit No. 569 at 17:20-18:4 (Steward). PGA increases for the last three years were: 9.8% in October 2003 (Docket No. UG-31485), 17.6% in October 2004 (Docket No. UG-014565), 14.7% in October 2005 (Docket No. UG-051297), and 9.8% in October 2006 (Docket No. UG-061394).
[206] Exhibit No. 561 at 9:22-10:3 (Steward), citing, William Prindle, R. Neal Elliott, Anna Shipley, *Impacts of Energy Efficiency and Renewable Energy on Natural Gas Markets in the Pacific West*, American Council for an Energy-Efficient Economy, Report No. E062, http://aceee.org, January 2006.
[207] Exhibit No. 803 at 75 and 77.

usage.[208] The retention of volumetric pricing maintains for customers the benefit of lower bills that comes from conservation. This is superior to sharp increases in basic charges or straight fixed/variable rate design, which reduce potential bill savings for customers.[209]

91 Decoupling will also align ratemaking with Commission policy that supports conservation.[210] The National Association of Regulatory Utility Commissioners also encourages states to examine decoupling and other rate designs that foster conservation.[211] Decoupling has been adopted in five states (California, Maryland, North Carolina, Oregon and Ohio) and is being considered in nine other states.[212]

92 Finally, the benefits of decoupling are not limited to ratepayers and the utility. Society in general may benefit from reduced pollution and greenhouse gases that result from conservation that may otherwise not occur.[213]

2. Staff's decoupling mechanism is superior to other proposals

93 Staff, the Company and the NW Energy Coalition ("NWEC") recommend decoupling mechanisms for fixed costs related to the delivery of gas ("margin"). Only Staff's proposal, however, targets specifically the public policy that underlies decoupling.

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[208] Exhibit No. 566 (Steward) and Exhibit No. 24 (Amen) demonstrate this decline in use by PSE's customers.

Public Counsel agrees that gas volumes have declined on a per customer basis for reasons beyond PSE's control. (Exhibit No. 506 at 33:2-13 (Brosch) and Exhibit No. 509 at 3:16-17 (Brosch).) Public Counsel argues, however, that gas sales and margins associated with new customers offset declining use by existing customers. (Exhibit No. 509 at 6:4-6 and 9:9-12 (Brosch).) However, the fact of three general rate cases in five years dispels any notion that customer growth alone adequately compensates PSE.

Public Counsel also fails to acknowledge that growth itself has costs. (Exhibit No. 31 at 26:10-19 (Amen).) It is incorrect for Public Counsel to argue that all revenue from customer growth is retained by shareholders. (Exhibit No. 509 at 6:1-4 (Brosch) and Tr. 665:11-14 (Brosch).)

[209] Exhibit No. 561 at 12:3-8 (Steward).

[210] Commission support for gas conservation is reflected in WAC 480-90-238 (Integrated Resource Planning), which treats conservation as a resource to meet system demand. The Commission also stated that "[a]s a matter of policy, the Commission favors utility efforts to accomplish cost-effective conservation that reduces both the utility's costs and enables consumers to manage their natural gas bills." *Rulemaking to Review Natural Gas Decoupling,* Summary, Analysis of Comments and Decision to Close Docket Without Action at 10, Docket No. UG-050369 (October 17, 2005).

[211] Exhibit No. 21 at 42:9-43:10 (Amen).

[212] Exhibit No. 50 (Amen) and Tr. 486:1-4 (Amen).

[213] Exhibit No. 561 at 9:19-22 (Steward).

Staff's proposal also considers all factors listed by the Commission in its recent PacifiCorp order.[214] Public Counsel's criticisms of decoupling have no merit or are accommodated in Staff's proposal.

a. Decoupling should be limited to non-weather related changes in consumption (PacifiCorp Order Factor 1)

94 The decoupling mechanism proposed by Staff defers margin variances based on weather normalized volumes. Therefore, Staff includes only changes in usage that result from customer conservation and efficiency improvements. Conservation and efficiency improvements include the effects of price elasticity, improved building codes and appliance standards, customer-financed conservation, and utility-sponsored conservation.[215]

95 In contrast, the mechanisms proposed by PSE and NWEC capture all weather-related effects. Their proposal to include the effects of weather is irrelevant to the public policy of decoupling to remove the disincentive for PSE to promote conservation.[216]

96 The proposals of PSE and NWEC to include the effects of weather will stabilize revenue for the Company, but at an unfair cost to ratepayers of increased bill volatility.[217] The potential magnitude of that volatility is significant. A simulation of the three years doubles the decoupling surcharge when the effects of weather are included.[218]

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[214] PacifiCorp Order at ¶109.
[215] Tr. 762:3-22 (Steward). Public Counsel argues that including all of these causes for gas sales decline makes decoupling an unreasonably broad response to concerns about regulatory disincentives for utility-sponsored conservation. (Exhibit No. 509 at 6:19-7:2 (Brosch).) The Company is not an island, however, and has the ability to influence other factors that drive down consumption. Thus, it is reasonable to include these other factors in the decoupling mechanism.
[216] Exhibit No. 569 at 12:16-22 (Steward).
[217] Exhibit No. 561 at 9:3-5 (Steward) and Exhibit No. 569 at 10:3-16 (Steward).
[218] Exhibit No. 563 (Steward) and Exhibit 569 at 10:18-11:6 (Steward). It is untenable for NWEC to argue that this simulation should be ignored since these three years were warmer than normal. (Exhibit No. 504 at 10:2-6 (Weiss).) The simulation is based on actual weather occurrences and, thus, is a very good example of the possible effects of including weather in a decoupling mechanism.

97 NWEC is wrong to argue that including the effects of weather will reduce bill volatility.[219] NWEC's decoupling mechanism, like PSE's, uses deferred accounting. PSE makes a two-sided accounting entry to reflect revenues as if weather were normal, but the customer is billed using actual metered volumes reflecting actual weather. The Company then recovers the deferred amount through a surcharge or credit in the following year. The difference in timing between when the deferral is recorded and when it is recovered in rates creates larger swings in year-to-year adjustments, not less.[220]

98 As discussed above, 69% of the Company's gas revenues are already protected from the impact of weather under the PGA. Revenue generated from customer charges and demand charges are also not impacted by weather. Further protection from the effects of weather is neither fair to ratepayers nor necessary for PSE.

b. Decoupling should include Staff's new customer adjustment (PacifiCorp Order Factor 9)

99 Decoupling compares the baseline revenue requirement authorized in a rate case and actual margin revenue generated in subsequent years. Thus, decoupling must consider new customers added after a rate case test year in order to make the comparison valid.[221]

100 The Company proposes to add new customers and the margin they create to the baseline margin revenue set in this case. PSE's new customer adjustment uses average use per customer from the test year.[222]

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[219] Exhibit No. 504 at 10:17-18 (Weiss).
[220] Exhibit No. 569 at 10:3-16 (Steward) and Tr. 769:5-770:3 (Steward).
[221] Exhibit No. 561 at 13:11-19 (Steward).
[222] Exhibit No. 561 at 13:19-14:2 (Steward).

101 Staff modifies this approach to reflect the fact that new customers use less energy than existing customers.[223] That below-average use by new customers is a contributing factor to why overall consumption is declining.[224]

102 Staff's modification also ensures that the decoupling mechanism restores margin that is actually lost from reduced sales. The Company's proposal to use average use per customer from the test year will result in a larger margin deficiency than would occur with annual rate cases because it calculates more volumes for new customers than they will actually use.[225]

103 Finally, since Staff's new customer adjustment uses actual revenue from new customers, there is no change to the Company's current incentive to pursue productivity gains between rate cases in order to optimize earnings.[226] Indeed, the more PSE can reduce its operating expenses below its authorized revenue requirement (which is the baseline for calculating authorized revenue in Staff's decoupling mechanism), the more PSE can maximize earnings. Thus, Staff's proposal dispels Public Counsel's claim[227] that decoupling discourages the regulatory lag incentive for management to pursue productivity gains.[228]

104 NWEC agrees with Staff's treatment of new customers in the decoupling mechanism.[229] The Company offered no rebuttal to Staff's approach.

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[223] The calculation of Staff's new customer adjustment uses actual use of new customers added since the test year multiplied by the delivery charge. (Exhibit No. 561 at 15:20-16:5 (Steward).) A simulation demonstrates that Staff's adjustment reduces the revenue adjustment to be deferred by 6-11%. (Exhibit No. 565 (Steward).)
[224] New customer use is below average because updated building codes and higher appliance standards have made new homes more efficient. Increased penetration of multi-family housing also contributes to the decline. (Exhibit No. 561 at 14:6-8 (Steward).) Residential customers added in 2003 and 2004 used 10-11% less gas than the overall average in 2005. (Exhibit No. 564 (Steward).)
[225] Exhibit No. 561 at 14:20-15:2 (Steward). An example of this deficiency in the Company's new customer adjustment demonstrates that PSE would collect $1 million more in margin revenue based on usage that will not occur. (Exhibit No. 561 at 15:3-18 (Steward).)
[226] Exhibit No. 569 at 18:12-14 (Steward).
[227] Exhibit No. 506 at 37:8-39:3 (Brosch).
[228] Exhibit No. 569 at 18:6-11 (Steward) and Exhibit No. 31 at 24:15-18 (Amen). Public Counsel's remaining concern that decoupling places significant administrative burdens on Staff is unfounded. Minimal time is required to administer a decoupling mechanism. (Exhibit No. 569 at 16-20 (Steward).)
[229] Exhibit No. 504 at 9:4-5 (Weiss).

c. Decoupling should be a three-year pilot (PacifiCorp Order Factor 7)

105 Staff recommends a three-year pilot that would be evaluated before it can be reauthorized only in a general rate case.[230] This will allow the Commission and parties to investigate important policy and implementation issues for a mechanism that will be new to PSE. Three years is a reasonable period in which to monitor the initial effects of decoupling and evaluate it for continued application.[231]

106 Moreover, while decoupling addresses variances between actual and authorized *revenues*, it does not address variances between actual and authorized *costs*. Thus, a three-year pilot minimizes the potential violation of the matching principle over time.[232] This alleviates Public Counsel's concern that decoupling is a radical departure from "holistic test year" ratemaking.[233]

d. Decoupling should include a surcharge cap (PacifiCorp Order Factor 8)

107 Staff proposes a cap on the decoupling surcharge for residential customers (1.5% of total class revenue) and commercial customers (0.50% of total class revenues).[234]

108 These caps will allow PSE to recover fully its lost margins due to non-weather-related changes in gas use. Thus, the caps help to remove PSE's disincentive to pursue energy efficiency.[235]

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[230] Exhibit No. 561 at 16:17-17:6 (Steward) and Tr. 764:18-765:4 (Steward). NWEC supports Staff's pilot proposal. (Exhibit No. 504 at 9:4-5 (Weiss).
[231] Exhibit No. 561 at 17:8-12 (Steward) and Tr. 765:5-8 (Steward).
[232] Exhibit No. 561 at 17:13-18:6 (Steward) and Tr. 771:14-21 (Steward).
[233] Exhibit No. 506 at 37:8-39:3 (Brosch).
[234] Exhibit No. 561 at 18:10-12 (Steward).
[235] Exhibit No. 561 at 18:12-15 (Steward).

109 The caps will also give customers certainty as to the maximum rate impacts from decoupling. Customers will also be assured that decoupling will not reduce significantly the benefit of a lower bill for pursuing energy efficiency.[236]

110 PSE offered no rebuttal to Staff's proposed cap on the annual surcharge. NWEC proposes a cap, although at a higher level of 3% since its decoupling mechanism includes the effects of weather.[237] This difference between Staff and NWEC is addressed above.

e. Decoupling should be limited to residential and commercial classes (PacifiCorp Order Factor 3)

111 Staff recommends that decoupling should be limited to Residential General Schedule 23, Commercial and Industrial General Service Schedule 31, and Special Commercial Heating Service Schedule 36. These schedules have experienced declining use per customer.[238] They also have simple rate structures (a customer charge and one block delivery rate), so calculating a surcharge is simple and easy for customers to understand.

112 The Company includes Special Multiple Housing Unit Service Schedule 51, but that schedule has not had a consistent decline in per customer use. In fact, the average annual change in use in the last five years is a 4.33% increase.[239] This suggests that Schedule 51 does not contribute to PSE's lost margins. Schedule 51 is also a relatively small schedule (340 customers in six buildings).[240] PSE did not rebut Staff's exclusion of Schedule 51.

113 PSE includes Propane Service Schedule 53. However, that schedule only has five customers and provides only a temporary service for customers awaiting gas service. Again, the Company did not respond to Staff's exclusion of Schedule 53.

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[236] Exhibit No. 561 at 18:12-18 (Steward).
[237] Exhibit No. 502 at 24:17-18 (Weiss).
[238] Exhibit No. 566 (Steward).
[239] Exhibit No. 566 at 2 (Steward).
[240] Exhibit No. 561 at 19:14-15 (Steward).

3. Staff's decoupling proposal considers all other factors listed in the PacifiCorp Order

a. Low income (PacifiCorp Order Factor 10)

114 There is no specific provision in any proposed decoupling mechanism to account for low-income gas customers. However, Staff, the Company, Public Counsel and the Northwest Industrial Gas Users support an increase of $525,000 (net of taxes and revenue sensitive items) for low-income bill assistance.[241] Thus, no specific element for low-income customers is necessary in Staff's decoupling mechanism.

b. Incremental conservation savings and target (PacifiCorp Order Factors 11 and 12)

115 The Commission has stated that decoupling must "be designed to fit within the utility's particular circumstances."[242]

116 PSE has already shown a strong commitment to conservation by assessing potential efficiency opportunities through its resource planning, by setting reasonably aggressive efficiency targets, and by actively engaging its Conservation Resource Advisory Group ("CRAG").[243] PSE currently has a gas efficiency goal for 2006-2007 of 4.2 million therms, which is equivalent to serving over five thousand residential customers for a year.[244] Additionally, PSE is subject to penalties if it fails to achieve its gas savings target.[245]

117 Given the particular circumstances of PSE's efforts, Staff is satisfied that PSE will fulfill its responsibility to promote conservation and assist customers in making efficient

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[241] Exhibit No. 581 at 14:18-20 (Joint Parties) and Tr. 98:22-99:19 (Harris). This proposal will enable the low-income bill assistance program to maintain a similar level of benefit relative to total bills for low income customers. The increase would be recovered through the existing tariff rider (Schedule 129) on an equal percent of margin basis. (Exhibit No. 581 at 15:2-13 (Joint Parties).)
[242] *Rulemaking to Review Natural Gas Decoupling*, Summary, Analysis of Comments and Decision to Close Docket Without Action at 10, Docket No. UG-050369 (October 17, 2005).
[243] Exhibit No. 561 at 10:10-15 (Steward).
[244] Exhibit No. 561 at 10:15-17 (Steward).
[245] Exhibit No. 561 at 11:3-4 (Steward).

decisions for end-uses, even with a decoupling mechanism. Staff is also satisfied that the current penalty mechanism and target setting process should be retained. Thus, Staff did not include in a PSE decoupling mechanism additional conditions related to incremental conservation measures.[246]

c. Rate of return implications (PacifiCorp Order Factor 5)

118 Mr. Hill estimated that PSE's decoupling proposal reduces the cost of equity by 50 basis points.[247] The Company agreed that decoupling reduces risk by improving fixed cost recovery and stabilizing credit matrices and ratings.[248] Dr. Morin estimated a total 25-50 basis point impact on the cost of equity from PSE's decoupling mechanism, Depreciation Tracker and proposed PCA revisions.[249]

119 Mr. Hill's DCF and corroborating methodologies indicate a range of equity cost of 9.25% to 9.75%.[250] His recommendation of 9.375% reflects the impact of decoupling and the Company's existing regulatory mechanisms (PCA, PGA, and PCORC) that all serve to reduce PSE's operational risk.

d. Tariff details and administration (PacifiCorp Order Factors 4, 6 and 8)

120 The Company included a proposed tariff for its decoupling mechanism that details the method of cost recovery, and timing and calculation of rate adjustments.[251] The tariff may be modified to reflect Staff's proposals to: (1) limit the mechanism to three years; (2)

[246] Tr. 747:6-748:10 and 765:19-23 (Steward).
[247] Exhibit No. 531 at 63:4-6 (Hill).
[248] Exhibit No. 176 at 191 and 192.
[249] Exhibit No. 315 at 94:10-12 (Morin).
[250] Exhibit No. 531 at 52:1-4 (Hill).
[251] Exhibit No. 29 (Amen).

use margins revenues based on weather normalized volumes; (3) use actual volumes for new customers; and (4) cap the surcharge.[252]

121 Staff also provided workpapers that detail the accounting and calculations of any true-up. Staff will work with PSE and interested parties to develop any additional documentation or calculations that are necessary.[253]

4. Conclusion on decoupling

122 PSE has effectively responded to rising gas costs by stepping up its conservation efforts. These efforts enable customers to minimize hardship from recent gas cost increases.

123 Staff's decoupling mechanism is an appropriate response that will advance the benefits of conservation for ratepayers, while improving the Company's ability to recover its fixed costs. It also complements Staff's proposed basic charge, discussed below, which retains for customers the conservation value of volumetric pricing and reduces for the Company revenue volatility associated with weather.

E. Staff's Electric Conservation Incentive Mechanism Is Balanced And Reasonable

124 Staff, the Company, Public Counsel and NWEC propose electric conservation incentive mechanisms with similar frameworks. Each sets a baseline target for 2007 and a dead-band where no incentive and/or penalty apply. Each includes a two-part *incentive* for energy savings beyond the dead-band: a dollar amount per MWh saved plus a share of the net value of the savings from the efficiency programs. Each includes a dollar amount per MWh *penalty* for savings that fall below the dead-band.

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[252] Exhibit No. 572.
[253] Exhibit No. 572.

125 Within this common structure the parties propose different baseline targets, dead-bands, and incentive and penalty levels. PSE also disagrees with certain requirements proposed by Staff and Public Counsel that PSE would have to meet to receive incentives.

126 Staff's conservation incentive mechanism conveys to the Company the simple and straightforward message to achieve a savings target that is itself achievable yet aggressive. It is the most balanced and reasonable approach offered.

1. Staff's conservation incentive mechanism reflects sound public policy

127 FEA opposes conservation incentives because efficiency programs are part of PSE's obligation to serve customers at least cost.[254] FEA's argument ignores several key points.

128 First, a conservation incentive mechanism furthers state public policy:

> The legislature finds and declares that the potential for meeting future energy needs through conservation measures . . . may not be realized without incentives to public and private energy utilities. The legislature therefore finds and declares that actions and incentives by state governments to promote conservation and the use of renewable resources would be of great benefit to the citizens of this state by encouraging efficient energy use and a reliable supply of energy based on upon renewable energy resources.[255]

Energy efficiency has particular appeal as the industry and consumers face higher fuel costs, more system constraints due to rising demand, and concern over greenhouse gas emissions.[256] Commission policy also encourages energy conservation.[257]

129 Second, PSE's electric energy efficiency investments may result in lost revenues and do not earn a return as do supply-side resources. Nevertheless, PSE has made a good faith

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[254] Exhibit No. 491 at 14:6-15 (Selecky).
[255] RCW 80.28.024.
[256] Exhibit No. 569 at 8:1-9 (Steward).
[257] *See*, WAC 480-100-238 (Integrated Resource Planning), which treats conservation as a resource to meet system demand.

effort to capture the benefits of energy efficiency. In 2006, it achieved 19.6 aMW. Since 2003, the Company has saved enough energy to serve over 40,000 customers per year.[258]

130 Finally, PSE is subject to penalties for failing to meet an annual savings target, but is not rewarded for meeting or exceeding the target.[259] Conservation incentives cure that deficiency that may have discouraged PSE from more aggressively pursuing savings that exceed the target.[260]

131 In sum, an *incentive mechanism* is a proper way to address disincentives for electricity conservation by the Company and will strengthen Commission support for the acquisition of cost-effective energy efficiency. Staff's recommendation for a *gas decoupling mechanism* is an appropriate response to issues specifically confronting the gas utility, which have not been shown to affect the electric utility to the same degree.[261]

2. Staff's conservation incentive mechanism is easier to implement and will not weaken the status quo

132 Staff will have an important role in setting the target, verifying the savings, and recommending the incentive or penalty amount. In anticipation of these efforts, Staff proposes an incentive mechanism designed to guard against unintended consequences that may tempt the Company to "game" the mechanism. Additionally, Staff has considered implementation of the mechanism beyond 2007 and has respected the current penalty-related savings target.

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[258] Exhibit No. 561 at 22:13-17 (Steward).
[259] This penalty mechanism was established in Docket Nos. UE-011570, *et.al.*, (Exhibit No. 373 at 10, ¶43).)
[260] Exhibit No. 561 at 22:18-23 (Steward).
[261] Tr. 766:4-767:8 (Steward).

a. Staff's dead-band signals to PSE that program performance is expected

133 Staff proposes a dead-band in which no penalty or incentive applies between 90% and 100% of the target. Therefore, PSE receives an incentive if it achieves 100% of the target and incurs a penalty if it achieves less than 90% of the target. NWEC, Public Counsel and PSE also propose dead-bands of 10%; however, they differ on where the dead-band falls in relation to the target. NWEC and the Company propose that the dead-band fall from 95% to 105% of the target.[262] Public Counsel proposes that the dead-band fall between 80% and 90% of the target.[263]

134 The simplest and most straightforward message to convey to PSE is that PSE should achieve a conservation savings target that is aggressive, but itself achievable. That message is compromised if incentives start anywhere other than 100% of the target.[264] The Company will strive to achieve an incentive. If the incentive starts somewhere above or below the target, then the target itself loses meaning.[265]

b. Staff's calculation of incentives produces steady results and removes any temptation for PSE to "game" the mechanism

135 Staff's mechanism provides incentives for savings that exceed 100% of the target with escalating levels of incentives in five ranges above the target. The incentive is calculated in each range for the incremental savings above the prior range, or above 100% of the target.[266]

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[262] Exhibit No. 499 at 6:13-15 (Glaser) and Exhibit No. 379 at 13:8-9 (Shirley).
[263] Exhibit No. 510 at 9:10 (Klumpp).
[264] Exhibit No. 569 at 3:7-11 (Steward).
[265] Exhibit No. 569 at 3:18-22 (Steward).
[266] Exhibit No. 561 at 24:15-22 (Steward).

136 Staff's calculation produces a steady and continuous increase in the incentive for PSE to achieve the next MWh saved.[267] In contrast, the mechanisms proposed by the Company, Public Counsel and NWEC produce unsteady, inconsistent incentives for the Company to achieve the next MWh of savings.[268]

137 A mechanism that either scales upwards significantly or has a "lumpy" slope creates an inherent temptation for PSE to seek a lower target than it could actually achieve in order to maximize the incentive.[269] Such a perverse temptation could also create a more contentious target setting process and increase the burden on Staff to oversee the mechanism. Staff's mechanism avoids these pitfalls.

c. Staff's 2007 baseline target properly preserves the status quo for the first year of the incentive mechanism

138 The baseline target for 2007 proposed by Staff is 18.3 aMW.[270] This compares to a 16.5 aMW baseline of PSE and NWEC, and Public Counsel's baseline of 20 aMW.[271]

139 PSE currently faces a penalty-related target of 16.5 aMW for 2007.[272] As a result of where each party places the dead-band, the penalty would start below this amount in the mechanism of Public Counsel, NWEC and PSE. Only Staff's target for 2007 respects the current penalty-related target and does not weaken PSE's risk of incurring penalties.[273]

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[267] Exhibit No. 569 at 4:9-11 (Steward).
[268] Exhibit No. 569 at 4:12-13 (Steward). A visual comparison of this difference is clearly seen in Tables 1 and 2 in Exhibit No. 569 at 4-5 (Steward) and in Exhibit No. 574.
[269] Exhibit No. 569 at 6:2-4 (Steward).
[270] The savings counted towards the target include all savings from programs funded by PSE through its conservation tariff rider, Schedule 120. Savings may also be recognized from PSE programs that receive funding from the Bonneville Power Administration (BPA), such as through the Conservation and Renewables Discount. (Tr. 759:8-10 (Steward).) It is reasonable to include BPA funded programs because ratepayers benefit from the associated savings. (Tr. 761:3-9 (Steward).)
[271] Exhibit No. 569 at 6:Table 3 (Steward). PSE would receive an incentive payment of $1.7 million for meeting Staff's proposed 2007 target. (Exhibit No. 567 (Steward).)
[272] Exhibit No. 561 at 31:12-14 (Steward). The target for 2006-2007 is 33 aMW. For one year, the target is half of this, or 16.5 aMW.
[273] Exhibit No. 569 at 6:16-7:13 (Steward). After 2007, Staff proposes that the Company work with the CRAG to develop the annual target, based on program experience in the prior year and analysis from PSE's most

d. The requirements jointly presented by Staff, Public Counsel and NWEC should be adopted

140 Staff and Public Counsel presented a list of requirements to implement the incentive mechanism.[274] NWEC joined in these requirements.[275] PSE accepts all but four.

141 First, PSE argues that the requirement for the program portfolio to meet a minimum average measure life of nine years will decrease the Company's flexibility to implement programs.[276] This argument is unfounded. Since 1999, the average measure life of PSE's electric efficiency programs has been nine years or greater.[277] Thus, this requirement ensures that the Company maintains its *current* course by pursuing measures with longer lives that are significant resources for customers.[278] The requirement is also not unduly burdensome for PSE and will ensure that PSE does not take advantage of the incentive mechanism by over-relying on measures with short-lives.

142 Second, PSE opposes the requirement that it could only count savings from the Northwest Energy Efficiency Alliance ("NEEA") for activities being funding in that year. NEEA is a market transformation organization. As a result of its mission, it will often continue to track and count savings from past programs that it no longer funds.[279] This is very different from a utility program that only counts savings for its current programs. Counting only the energy savings from NEEA for currently funded activities allows us to be consistent in the savings for which the Company may receive an incentive.

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recent integrated resource plan. The Company would file the new target for Commission approval at an Open Meeting. (Exhibit No. 561 at 32:13-16 (Steward).) If PSE and the CRAG disagree on the annual target, the Commission may resolve that dispute at an Open Meeting or at hearing. (Tr. 757:10-758:19 (Steward).)

[274] Exhibit No. 568 (Steward) and Exhibit No. 513 (Klumpp).

[275] Exhibit No. 499 at 9:3-7 (Glaser).

[276] Exhibit No. 379 at 20:4-7 (Shirley).

[277] Exhibit No. 413.

[278] Exhibit No. 561 at 29:7-16 (Steward) and Exhibit No. 413.

[279] Exhibit No. 384. As this exhibit shows, the question of when to stop counting savings is still a matter under discussion by NEEA members.

143 Third, PSE argues that establishing an evaluation committee is duplicative of the role of the CRAG.[280] This committee, however, will assist Staff in delving deeper into evaluating measure savings assumptions, program design, and realization rates. These are the backbone of any savings to be claimed by the Company, and, therefore, are imperative to ensure that ratepayers get what they pay for.[281] The creation of this committee, on which participation for all but Staff is voluntary, reaffirms this importance. Participation is also not unduly burdensome for PSE.

144 Fourth, PSE suggests that a more reasonable time period for this mechanism is five years rather than three, as proposed by Staff, Public Counsel and NWEC.[282] As with Staff's decoupling mechanism, a three-year pilot allows sufficient time to implement and evaluate the mechanism. PSE may always request to extend or modify the incentive mechanism beyond the three-year pilot period, in a rate case or separate filing.[283]

F. The Commission Should Adopt The Joint Parties' Gas Rate Spread And Rate Design

145 Staff's proposed rate spread and rate design for the Company's gas operations is presented jointly with Public Counsel and the Northwest Industrial Gas Users ("Joint Parties"). PSE does not object to our proposed rate spread, but does contest rate design. Seattle Stream's objections are aimed only at rate spread.[284]

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[280] Exhibit No. 379 at 22:12-14 (Shirley).
[281] Exhibit No. 561 at 30:16-31:2 (Steward).
[282] Exhibit No. 379 at 23:10-17 (Shirley).
[283] Exhibit No. 568 at 3, item 11 (Steward) and Exhibit No. 513 at 3, item 11 (Klumpp).
[284] There is no dispute over PSE's electric rate spread, rate design and low income bill assistance. (Exhibit Nos. 2 and 3.)

1. Gas rate spread

146 The rate spread recommended by the Joint Parties is explained in Exhibit No. 585 at page 1 and is reflected on page 1 of Exhibit No. 586 at the Company's requested revenue requirement. There are several reasons for the Commission to adopt our proposal.

147 First, two cost of service studies were presented in this case: a PSE study and a "Commission Basis" study.[285] The Joint Parties' rate spread is a fair and balanced application of both studies.[286] Classes that are above parity receive a below average increase and classes that are below parity receive an above average increase.[287]

148 Second, cost of service studies are an important guide in allocating and designing rates, but they are not the sole guide.[288] Other factors, such as customer impacts, are also relevant.[289] The Joint Parties rate spread avoids a mechanistic application of the cost of service studies presented in this case in order to minimize severe customer impacts.[290]

149 Seattle Steam argues that any share of the increase that is assigned to interruptible classes should be significantly less than the share assigned to other classes.[291] Seattle Steam offered no specific proposal to address its concern. In contrast, the Joint Parties' rate spread accommodates Seattle Steam by allocating Schedule 57 a below average increase.[292]

150 Moreover, Seattle Steam's position is based on the theory that, merely because it is interruptible on days of extreme weather, it should be excluded from paying for system

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[285] Exhibit No. 41 (Amen) and Exhibit No. 584 (Joint Parties). The Commission Basis study uses methodologies approved previously by the Commission for natural gas cost studies. (Exhibit No. 581 at 4:5-6 (Joint Parties).)
[286] Exhibit No. 581 at 5:7-10 (Joint Parties).
[287] Exhibit No. 581 at 6:7-7:22 (Joint Parties).
[288] *WUTC. v. Puget Sound Power & Light Co.*, 3rd Suppl. Order at 72-73, Cause Nos. U-89-2688-T, *et al.*, (January 17, 1990).
[289] Exhibit No. 581 at 3:16-22 (Joint Parties).
[290] Exhibit No. 581 at 8:9 (Joint Parties).
[291] Exhibit No. 497 at 8:15-18 (Gent).
[292] Exhibit No. 586 at 7 (Joint Parties).

capacity costs.[293] Seattle Steam made virtually the same argument in the seminal gas cost allocation case for Washington Natural Gas Company and it was accorded no credibility at that time:

> It is inconceivable to us that this Commission could approve a cost study methodology that refuses to apportion any overhead or capital responsibility to regular and consistent users of the system, merely because they can avoid use at the peak.[294]

Seattle Steam has not presented any evidence why this previous decision should not stand.

151 The Joint Parties do allocate a $576,000 increase to interruptible Schedules 85, 86 and 87, transportation Schedule 57, and special contracts at any revenue deficiency determined by the Commission.[295] That allocation recognizes that the vast majority of any rate increase will be placed on the firm classes, given the range of potential revenue requirement outcomes (Staff at $21 million versus PSE at $39 million).[296] This dispenses with Seattle Steam's criticism that the revenue requirement of these classes should not be fixed, with the benefits of any revenue reduction from the Company's case being assigned only to other classes.[297]

152 In sum, the rate spread of the Joint Parties minimizes severe customer impacts, but also heeds the results of the different cost of service studies by moving all classes toward parity. Our rate spread is in the public interest and should be adopted.

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[293] Exhibit No. 497 at 4:23-5:13 (Gent). In reality, Seattle Steam has been interrupted on extremely rare occasions. (Exhibit Nos. 701-702.)
[294] *WUTC v. Washington Natural Gas Co.*, 5th Suppl. Order at 12, Docket Nos. UG-940034, *et al.*, (April 11, 1995).
[295] Exhibit No. 581 at 6:13-17 (Joint Parties).
[296] Tr. 837:7-15 and Tr. 842:16-843:15.
[297] Exhibit No. 497 at 9:1-2 (Gent).

2. Rate design

153 The rate design recommended by the Joint Parties is explained on pages 2-3 of Exhibit No. 585 and is shown on pages 2-6 of Exhibit No. 586 at the Company's requested revenue requirement. Our rate design balances several important principles, including cost causation, sending appropriate price signals to customers while also minimizing rate shock, providing PSE a reasonable opportunity to recover its revenue requirement, and setting rates that are understandable to customers.[298]

a. Residential Schedule 23

154 The Joint Parties propose a $0.75 increase in the basic charge (from $6.25 to $7.00), with any remaining increase applied to the delivery charge. This is a 12% increase, which is more than double the class average increase. It also makes a gradual move toward recovering customer-related costs, maintains the benefit of lower bills for customers that pursue conservation, and places lesser burden on small users.[299]

155 The Company argues that the Joint Parties' customer charge calculation is flawed and erroneously low because it excludes certain costs without explanation.[300] The criticism is untenable. Our calculation mirrors PSE's calculation in the 2004 Rate Case.[301] It also mirrors the Company's customer charge calculation for electric service in this case.[302]

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[298] Exhibit No. 581 at 8:19-9:5 (Joint Parties).
[299] Exhibit No. 581 at 10:3-16 (Joint Parties) and Exhibit No. 587 (Joint Parties).
[300] Exhibit No. 186 at 2:16-17, 8:11-14 and 10:3-5 (Hoff).
[301] Compare Exhibit No. 587 (Joint Parties) and Exhibit No. 203 (2004 Rate Case).
[302] Compare Exhibit No. 587 (Joint Parties) and Exhibit No. 194 (Hoff).

156 PSE originally proposed a customer charge of $8.25 *with* decoupling or $17 *without* decoupling. On rebuttal, PSE proposed a $17 customer charge *with* decoupling and a corresponding decrease to the delivery charge.[303]

157 A $17 customer charge would be exceeded by only one other gas utility in the Nation.[304] It also violates clear Commission guidance that increasing the basic charge more than 25% constitutes unacceptable rate shock.[305]

158 The Company's attempt to rebut this conclusion is without merit. PSE states that bill impact is best analyzed by examining the annual average monthly bills of each customer.[306] However, the vast majority of the Company's customers do not receive annual average monthly bills.[307] Their bills are based on actual consumption and, thus, they expect higher than average bills in winter months and lower than average bills in summer months. The abrupt shift in rate design proposed by PSE will constitute rate shock when customers see summer bills increase by over $10 per month even though gas consumption is at its lowest.

159 Finally, a $17 customer charge, as proposed by PSE, will increase the amount of margin recovery from fixed charges from 24% to 60%,[308] which decreases the percent of the

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[303] Exhibit No. 186 at 2:7-15 (Hoff). The Commission has previously admonished PSE for presenting a new rate design proposal on rebuttal:

> The Commission is concerned that the company waited to present its alternative rate design proposal until rebuttal. This tactic is unacceptable, since it severely limits the opportunity for other parties to examine the proposal. In future cases, the company will be expected to present its proposals in its direct case.

WUTC v. Puget Sound Power & Light Co., 3rd Suppl. Order at 79, Cause Nos. U-89-2688-T, *et al.*, (January 17, 1990). This same tactic should not be condoned in this case. As PSE notes, decoupling and rate design are complementary. (Exhibit No. 186 at 6:11-14 (Hoff).) Thus, PSE's new proposal is a significant change that undermined the parties' ability to fully rebut the Company's case on both issues. PSE's new proposal is merely a case of second thoughts. It did not present any new information that it could not have presented in direct.

[304] Exhibit No. 45 (Amen).

[305] *WUTC v. Cascade Natural Gas Corp.*, 84 PUR 4th 119, 1987 WL 257887.

[306] Exhibit No. 186 at 14:15-18 (Hoff).

[307] Tr. 566:1-15 (Hoff).

[308] Exhibit No. 186 at 7:3-8 (Hoff).

bill that is tied to volumes from 92% to 80%.[309] Thus, considerably less of a customer's bill will be subject to volumetric rates, which may undermine the conservation price signal to customers and result in greater gas usage. The Joint Parties' recommended customer charge of $7 avoids such undesirable consequences.

b. Large Volume Schedule 41

160 The goal of the Company's rate design for Schedule 41 is to send a price signal that will encourage small, low load factor customers to take service under Schedule 31.[310] The Joint Parties' rate design serves that goal by providing a considerable increase (40%) to the demand charge, but with a better balance across the remaining charges.[311] This is superior to the PSE's proposal for a 100% increase in the demand charge, which reduces the delivery charges by 10%.[312]

161 The Joint Parties also recommend that the Company not rely solely on price signals, but that it also notify those Schedule 41 customers that would be better off taking service under Schedule 31. PSE does not object to that notice requirement.[313]

c. Interruptible Schedules 87 and 57, and Schedules 85 and 86

162 The overriding goal of the Joint Parties for Schedule 57 transportation service and Schedule 87 sales service was to narrow the very large cost of service disparity between the tariffs. The most straightforward way to accomplish that goal is to set unique balancing

[309] Tr. 461:4-10 (Amen).
[310] Exhibit No. 31 at 31:5-8 (Amen).
[311] Exhibit No. 581 at 11:14-16 (Joint Parties).
[312] Exhibit No. 581 at 11:10-12 (Joint Parties).
[313] Tr. 559:6-18 (Hoff).

charges for Schedule 57 and unique procurement charges for Schedule 87.[314] Sales service Schedules 85 and 86 are also subject to the procurement charge.[315]

163 Our rate design alleviates the situation under current rates where Schedule 57 customers pay more than their cost of service.[316] Moreover, customers under Schedules 57 and 87, and 85 and 86, do not pay a single charge. They pay a single bill that includes several components. Thus, while individual rate components may not strictly correspond to unit costs from the cost of service studies, total customer bills and overall revenues from these classes will more closely and fairly reflect the cost of service.

d. Demand-related gas costs

164 The Company proposes, for Schedules 101 and 106, to allocate demand-related gas costs based upon a revised cost allocation approach that includes the use of design-day peak allocation methods.[317] The current approach allocates peak demand using the average of the five highest days in the most recent three years in order to allocate peak demand.[318]

165 PSE's approach requires the Commission to abandon a long-standing cost allocation methodology.[319] This is unnecessary given the fair and reasonable results of the Joint Parties overall recommendations.

e. Remaining Schedules

166 The Joint Parties rate design recommendations for Commercial and Interruptible Schedules 31, 36 and 51, and Rental Schedules 71, 72 and 74, were not rebutted by the Company, and should be adopted by the Commission.

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[314] Exhibit No. 581 at 11:20-12:13 (Joint Parties).
[315] Exhibit No. 581 at 12:14-13:5 (Joint Parties).
[316] Exhibit No. 581 at 5, Table 1 (Joint Parties).
[317] Exhibit No. 31 at 32:14-16 (Amen).
[318] Exhibit No. 581 at 4:1-19 (Joint Parties).
[319] *WUTC v. Washington Natural Gas Co.*, 5th Suppl. Order at 7-9, Docket Nos. UG-940034, *et al.*, (April 11, 1995).

3. Rate Schedule Structural Review

167 Staff recommends that the Company review its current rate schedules and consider how they may be combined or separated to better reflect similar types of usage and cost causation.[320] This review would be completed before the Company's next general rate case.

168 PSE agrees that such review is advisable.[321] Therefore, the review should be ordered by the Commission.

G. The Commission Should Adopt Staff's Revenue Requirement Adjustment Recommendations

1. Directors and Officers Insurance

169 During the test period, premiums of $1,123,513 (electric) and $756,214 (gas) for Director and Officer ("D&O") insurance for the parent, Puget Energy, were charged to the regulated operations of PSE, even though its unregulated subsidiary, InfrastruX, was also covered, but charged only $46,974.[322] Staff's adjustment allocates insurance premiums to InfrastruX and other subsidiaries using an allocator based on plant, number of employees, and number of officers and directors.[323] Staff's adjustment results in 55% of D&O insurance premiums being charged to PSE's regulated operations.[324]

170 The Company's adjustment does not allocate any D&O insurance premiums to InfrastruX. This approach results in 99.34% of the total premium being allocated to PSE's regulated operations.[325]

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[320] Exhibit No. 561 at 5:1-9 (Steward).
[321] Exhibit No. 31 at 30:2-13 (Amen).
[322] Exhibit No. 521 at 11:15-17 (Russell) and Exhibit Nos. 522 at 17 and 524 at 24 (Russell).
[323] Exhibit No. 521 at 11:17-20 (Russell).
[324] 55% is derived by adding the Staff restated D&O amounts of $638,032 (electric) and $429,447 (gas), from Exhibit Nos. 522 at 17 and 524 at 24 (Russell) and dividing the sum by the total D&O insurance premium of $1,926,701 (the sum of premiums charged to electric, gas, and InfrastruX).
[325] 99.34% is derived by adding PSE's restated amounts of $1,143,960 (electric) and $769,977 (gas), from Exhibit No. 440 at 20.12 (Story) and Exhibit No. 230 at 20.20 (Karzmar), and dividing the sum by the total D&O insurance premium of $1,926,701 (the sum of premiums charged to electric, gas, and InfrastruX).

171 PSE argues that InfrastruX has been sold and D&O premiums were not reduced.[326] The burden, however, is on PSE to reassess its need for insurance subsequent to the sale of InfrastruX and to justify the amount of premiums ratepayers should support in regulated operations. The Company is silent on those issues.

172 PSE refers to precedent from Docket No. UE-921262, *et al.*, to justify using assets to allocate D&O premiums.[327] The Company provided no other reason why that approach is rational. In contrast, Staff's allocation method bears a rational relationship to D&O coverage. PSE also fails to mention that, in Docket No. UE-921262, the Commission adjusted D&O insurance to exclude premiums for half of the test year insurance coverage.[328]

173 For these reasons, Staff's D&O insurance adjustment should be adopted. The Company should be required to prove in its next rate case that the insurance costs and allocations it proposes are appropriate for ratemaking purposes.

2. Weather Normalization Procedures

174 The weather normalization adjustment proposed by PSE uses multiple balance point temperatures to measure the response of customers to changes in temperature.[329] Staff accepts the adjustment because the results do not change materially if it is based on the most common used balance point temperature of 65 F that PSE used in its 2004 rate case.[330]

175 Staff, however, recommends that PSE develop a load research study to examine whether multiple balance point temperatures do, in fact, capture the impact of temperature

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[326] Exhibit No. 232 at 13:17-21 (Karzmar).
[327] Exhibit No. 232 at 13:4-6 (Karzmar).
[328] *WUTC v. Puget Sound Power & Light Co.*, 11th Suppl. Order at 59-60, Docket No. UE-920433, *et al.*, (September 21, 1993).
[329] Exhibit No. 552 at 6:3-8 (Mariam).
[330] Exhibit No. 552 at 5:1-2 and 6:14-18 (Mariam).

and other environmental factors on energy consumption.[331] The Company objects to that study as unnecessary and cost prohibitive.[332] Its objection should be overruled.

176 The purpose of a weather normalization adjustment is to estimate electric and gas loads, and resulting revenue, as if weather had been normal during the test year. This ensures that rates are just and reasonable.[333] Company has not met its burden to demonstrate that a change in balance point temperature will satisfy that goal. PSE agrees that energy consumption varies by customer class and by time of day.[334] Yet, the only data upon which it relies is aggregated system-wide daily data from all customer classes.[335] That data was also collected only from Sea-Tac International Airport even though average temperature and socio-economic differences between Sea-Tac and other counties served by PSE can impact energy consumption.[336] Aggregating data from such a limited portion of the Company's service territory has no practical or theoretical support.

177 The Company offered a 1985 thermal engineering model to support its multiple balance point temperatures.[337] That model is not used to set rates, but only as general evidence of the non-linear relationship between energy consumption and temperature.[338] The Company admitted that the thermal model was insufficient to model customer behavior.[339]

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[331] The details of that study are set forth at Exhibit No. 552 at 7:5-8:26 (Mariam). The data Staff recommends be collected include hourly (electric) and daily (gas) temperature and consumption data by rate class and county. Data on non-weather variables such as housing size and age would also be collected. PSE agrees that balance point temperatures are affected by these non-weather factors. (Exhibit No. 85 at 8:4-16 (Dubin).)
[332] Tr. 440:2-14 (Dubin).
[333] Exhibit No. 552 at 4:1-4 (Mariam).
[334] Tr. 442:25-443:7 (Dubin).
[335] Exhibit No. 81 at 14:16-17 (Dubin).
[336] Exhibit No. 552 at 8, n5 (Mariam) and Exhibit Nos. 553 and 554 (Mariam). Indeed, customer usage varies widely across counties and within counties served by PSE. (Exhibit No. 204.)
[337] Exhibit No. 85 at 8:15-16 (Dubin) and Exhibit No. 88 at 89-137 (Dubin).
[338] Exhibit No. 92.
[339] Exhibit No. 93.

178 PSE alleges that it did conduct detailed studies to model energy consumption under various balance point temperatures.[340] Those studies are based on a one-time survey from 2004 that was limited to the residential class.[341] The Company has no evidence that the survey results are representative of any other year or any other customer class.[342] The survey was conducted only to enable PSE "to better understand [the customer's] needs."[343] No empirical data on the energy consumption of surveyed customers was collected.

179 The Company argues that it worked long and hard with Staff in the weather normalization collaborative to improve its methodology.[344] PSE did not, however, propose multiple balance point temperatures in the collaborative.[345] It was not aware if it involved Staff in developing the 2004 survey upon which it bases its new proposal in this case.[346]

180 Finally, the Company objects to Staff's recommendation as cost prohibitive.[347] The Company's cost estimate is excessive on its face given that hourly load data can be collected through existing "smart" meters for only $7/month/customer.[348]

181 PSE's estimate also assumes a sample group of 10,000 customers.[349] Staff suggests that a much smaller sample can be used and is prepared to work with PSE toward that end.

182 Staff also suggests that the data it recommends be collected can be used in other analyses such as cost of service, capacity planning and demand side management. Thus, the benefits of the data collection extend beyond weather normalization issues.

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[340] Exhibit No. 85 at 7:3-9 and 9:3-8 (Dubin).
[341] Exhibit Nos. 88 at 4 and 89 at 2 (Dubin), Exhibit No. 93, and Tr. 443:22-444:3 (Dubin).
[342] Exhibit No. 94.
[343] Exhibit Nos. 88 at 18 and 89 at 16 (Dubin).
[344] Exhibit No. 85 at 3:6-8 (Dubin).
[345] Tr. 449:1-13 (Dubin).
[346] Tr. 444:10-13 (Dubin).
[347] Exhibit No. 186 at 21:6-11 (Hoff).
[348] Exhibit No. 552 at 9:13-15 (Mariam).
[349] Exhibit No. 190 (Hoff).

III. CONCLUSION

183 The Company states that it is "very disappointed" in the positions that have been "staked out" by Commission Staff, which PSE accuses of being satisfied with the "status quo" over changes that will benefit customers.[350] This testimony is blind to Staff's recommendations to establish new mechanisms for gas decoupling and electric conservation incentives, and to allow PSE to recover the costs of a separate credit line for its gas and electric hedging activities. The testimony also ignores Staff's support for the Company's capital building program by including in rates substantial amounts for new electric generation resources and a cost of capital that both captures current financial markets and protects the Company's credit quality.

184 In short, Staff's presentation logically connects the factual evidence to a fair and balanced approach that will allow the Company to satisfy its obligations to investors and ratepayers. We ask the Commission to adopt Staff's recommendations in this case.

DATED this 31st day of October, 2006.

Respectfully submitted,

ROB McKENNA
Attorney General

ROBERT D. CEDARBAUM
Senior Counsel
Counsel for Washington Utilities and
Transportation Commission Staff

[350] Exhibit No. 173 at 1:14 and 2:16-17 (Harris).

ATTACHMENT A

PUGET SOUND ENERGY
OVERALL COST OF CAPITAL

STAFF

Type of Capital	Percent	Cost Rate	Wt. Avg. Cost Rate
Common Equity	43.00%	9.38%	4.03%
Preferred Stock	3.75%	7.61%	0.29%
Preferred Trust	0.70%	8.54%	0.06%
Long-term Debt	47.88%	6.64%	3.18%
Short-term Debt	4.67%	6.66%	0.31%
	100%		7.87%

PUGET SOUND ENERGY
OVERALL COST OF CAPITAL

COMPANY

Type of Capital	Percent	Cost Rate	Wt. Avg. Cost Rate
Common Equity	45.00%	11.25%	5.06%
Preferred Stock	3.75%	7.61%	0.29%
Trust Preferred	0.70%	8.54%	0.06%
Long-term Debt	48.44%	6.64%	3.22%
Short-term Debt	2.11%	6.66%	0.13%
	100%		8.76%