EXHIBIT NO. \_\_\_\_\_ (RCC-1T)

 DOCKET NO. UE-111048/UG-111049

 2011 PUGET SOUND ENERGY, INC. GENERAL RATE CASE

 WITNESS: RALPH C. CAVANAGH

BEFORE THE WASHINGTON STATE

UTILITIES AND TRANSPORTATION COMMISSION

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| WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,Complainant, vs.PUGET SOUND ENERGY, INC.,Respondent. | ))))))))))) | DOCKET NOS. UE-111048and UG-111049 (*Consolidated)* |

PREFILED DIRECT TESTIMONY (NON-CONFIDENTIAL) OF

RALPH C. CAVANAGH

ON BEHALF OF NW ENERGY COALITION

December 7, 2011

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# I. IdentITY AND QUALIFICATIONS OF THE WITNESS

 **Q. Please state your name and address**.

 A. I am Ralph Cavanagh, and my address is c/o Natural Resources Defense Council, 111 Sutter Street, 20th Floor, San Francisco, California 94305.

 **Q. In what capacity are you submitting this testimony?**

 A. I am a witness for the NW Energy Coalition (“the Coalition”).

 **Q. What are your qualifications?**

 I am a graduate of Yale College and Yale Law School, and I joined the Natural Resources Defense Council (“NRDC”) in 1979. I am a long-time member of the faculty of the University of Idaho’s annual Utility Executive Course, and I have taught courses on utility regulation as a Visiting Professor at Stanford and the University of California, and as a Lecturer on Law at Harvard. From 1993-2003, I served as a member of the U.S. Secretary of Energy’s Advisory Board, and I am now a member of the Secretary’s Electricity Advisory Board. My current board memberships include the Bonneville Environmental Foundation, the Center for Energy Efficiency and Renewable Technologies, the Bipartisan Policy Center, the Renewable Northwest Project, and the Coalition. I have received the Heinz Award for Public Policy (1996) and the Bonneville Power Administration’s Award for Exceptional Public Service (1986). My first testimony to the Washington Utilities and Transportation Commission (“WUTC”) was submitted in 1986 on the issue of Puget Power’s energy efficiency investments, and my first article on revenue decoupling for utilities was published in 1988.[[1]](#footnote-1) I recently submitted testimony on revenue decoupling in the Avista rate proceeding, which is still pending before the Commission.

# II. SUMMARY OF TESTIMONY

 **Q. Please summarize your testimony.**

 A. Judge Moss’s October 5, 2011 Notice of Bench Request in this proceeding reiterated the Commission’s “policy preference for full decoupling” from its November 2010 Policy Statement,[[2]](#footnote-2) and invited intervenors to provide the Commission with full decoupling proposals. This testimony responds to that invitation, proposing full decoupling for Puget Sound Energy’s (“PSE”) retail electricity sales. I do not address the company’s proposed natural gas lost margin recovery mechanism. My testimony addresses each of the issues related to full decoupling raised by the Commission in its Policy Statement. The case for approving this full electric decoupling proposal is underscored by a straightforward summary of the record in this proceeding: if PSE helped its customers save just one percent of system wide electricity use per year every year for the next five years, the company would automatically lose more than $75 million in authorized recovery of costs unrelated to electricity production (hereafter referred to as “fixed costs” or “nonproduction costs”).[[3]](#footnote-3) These PSE losses would occur regardless of the cost-effectiveness of those savings.

# III. A BRIEF HISTORY OF REVENUE DECOUPLINGIN WASHINGTON STATE

 **Q. Could you briefly review the history of electric decoupling in Washington, which dates to the early 1990s?**

 A. The Commission approved a decoupling mechanism based on a per-customer revenue cap mechanism for Puget Power in 1991. As the Commission determined at that time:

[T]he revenue per customer mechanism does not insulate the company from fluctuations in economic conditions, because a robust economy would create additional customers and hence, additional revenue. Furthermore, the Commission believes that a mechanism that attempts to identify and correct only for sales reductions associated with company-sponsored conservation programs may be unduly difficult to implement and monitor. The company would have an incentive to artificially inflate estimates of sales reductions while actually achieving little conservation.[[4]](#footnote-4)

 The Commission implemented Puget’s revenue-per-customer cap by “set[ting] up a deferred account allowing a reconciliation of revenue and expenses that would be subject to hearing and review.”[[5]](#footnote-5) In its initial review of the mechanism that it had adopted two years earlier, the Commission in 1993 “accept[ed] the parties’ representations” that the revenue-per-customer cap had “achieved its primary goal—the removal of disincentives to conservation investment,” and concluded that “Puget has developed a distinguished reputation because of its conservation programs and is now considered a national leader in this area.”[[6]](#footnote-6) Based on these findings, the Commission granted a three-year extension of the revenue-per-customer cap.[[7]](#footnote-7) In 1995, as part of a litigation settlement proposal intended to create no precedent, Puget and several other parties filed a request with the Commission to terminate a complex system of rate adjustment mechanisms that included the revenue-per-customer cap (along with, e.g., a controversial approach to allocating risks of hydropower fluctuations). The Commission approved that request, but the proposal itself expressly reserved the right of all parties to bring forward in the future “other rate adjustment mechanisms, including decoupling mechanisms, lost revenue calculations, [and] similar methods for removing or reducing utility disincentives to acquire conservation resources.”[[8]](#footnote-8)

 **Q. Could you summarize the more recent history of electric decoupling proposals in Washington?**

 A. In 2004, the Commission invited PacifiCorp and other stakeholders to begin discussions regarding the design of a decoupling mechanism in its order approving a settlement proposal by NRDC, the Commission staff, and PacifiCorp.[[9]](#footnote-9) In 2006, the Commission rejected a specific proposal by PacifiCorp and NRDC, in part because continuing disputes over multi-state allocation of the company’s fixed-cost revenue requirement made it impossible to calculate Washington’s share of that revenue requirement, a prerequisite for any decoupling mechanism.[[10]](#footnote-10)

 The most important recent development, however, is the Commission’s Report and Policy Statement on Regulatory Mechanisms, Including Decoupling, to Encourage Utilities to Meet or Exceed Their Conservation Targets (“Policy Statement”), issued on November 4, 2010.[[11]](#footnote-11) My proposal is informed by the history of revenue decoupling in Washington State (and other states), but it is shaped most prominently by the Policy Statement, and in particular by the elements that it calls for as part of the Commission’s commitment “[i]n the context of a general rate case,” to “consider a full decoupling mechanism for electric and natural gas utilities, which will allow a utility to either recover revenue declines related to reduced sales volumes or, in the case of sales volume increases, refund such revenues to its customers.” (p. 17).

 **Q. What makes you think that the Commission might be prepared to endorse full decoupling for PSE’s electric operations, despite the extended hiatus between the initial Puget decoupling order back in 1991 and this proceeding?**

 A. The Commission’s November 2010 Policy Statement concludes that “while a close call, we believe that a properly constructed full decoupling mechanism that is intended, between general rate cases, to balance out both lost and found margin from any source can be a tool that benefits both the company and its ratepayers.” (p. 16).

 **Q. Why aren’t you proposing full decoupling in this proceeding for PSE’s gas operations?**

A. The Commission’s Policy Statement is less clear regarding a preference for full decoupling on the gas side.[[12]](#footnote-12) Given that, as well as resource constraints, this testimony focuses on electric decoupling.

# IV. APPLYING FULL DECOUPLING TO PSE’SELECTRICITY REVENUES

 **Q. What is the problem that you are trying to solve by recommending adoption of a full decoupling mechanism for PSE?**

 A. Under traditional regulation, recovery of fixed costs is directly linked to commodity sales, encouraging increased use and discouraging investments in energy efficiency programs, peak load pricing, and distributed generation that may reduce electricity throughput. Utilities are discouraged from investing in the best performing and lowest-cost resource—energy efficiency—because it hurts them financially. Utilities’ interest in increasing sales conflicts with customers’ interest in reducing their energy costs.

 **Q. What do you mean by “full decoupling,” and why do you view it as a generally desirable part of utilities’ business model?**

 A. Full decoupling is a simple, effective, and proven way to remove the conflict that I just described. Full decoupling breaks the link between the utility’s recovery of nonproduction costs and the amount of energy it sells, using modest periodic adjustments in rates to ensure that the utility collects no more and no less than its authorized nonproduction costs, regardless of changes in retail electricity sales. Combined with other policies to encourage energy efficiency, such “full decoupling” mechanisms can free utilities to help customers save energy whenever it is cheaper than producing and delivering it.

 **Q. Why does PSE need a full electric decoupling mechanism?**

 A. My response relies substantially on PSE’s responses to the Coalition’s discovery requests, which are attached as Exhibits \_\_\_ (RCC-2-4). Using accounting definitions derived from a recent Regulatory Assistance Project treatise,[[13]](#footnote-13) the Coalition asked PSE for data on how much of the company’s fixed-cost revenue requirement would be recovered in variable energy charges. PSE’s response shows that more than 60 percent of its proposed revenue requirement ($1.3 billion of $2.1 billion) represents fixed costs of service, of which almost $643 million is outside the “production” category. Only $142 million of the utility’s total revenue requirement would be recovered through preset monthly charges. See Exhibit \_\_\_\_\_ (RCC-2). This means that, disregarding any fixed costs of electricity production, every one percent reduction in electricity use on the company’s system would cut annual fixed cost recovery totals by just over $5 million; every one percent increase in consumption would have the opposite effect. Since many efficiency measures last ten years or more, these one-year impacts must be multiplied at least tenfold when assessing the full financial impacts on the company.

 But the losses get even worse in the context of multi-year programs initiated under a long-term resource plan. Consider a five-year program that pursues annual savings equivalent to one percent of system load in the initial year, with each year adding new savings equivalent to the savings achieved during the previous year, and all savings persisting for at least five years. The first year impact on fixed-cost recovery is then just over $5 million, followed by $10 million in the second year (as an equal amount of savings is added), and so on: **the five-year loss in fixed- cost recovery from this steady-state utility investment program would be more than $75 million**,[[14]](#footnote-14) with losses continuing to escalate in succeeding years as initial electricity savings persisted (with some gradual erosion) and more savings were added. Note that the company would be absorbing these losses even as society gained from substituting less costly energy efficiency for more costly generation.

 **Q. What makes you think PSE can sustain annual savings equivalent to one percent of system load, or indeed that the company could or would pursue incremental conservation if full decoupling were in place as you recommend?**

 A. On the issue of the one percent figure, I note that the Northwest Power and Conservation Council set a slightly more ambitious savings target for the region in its Sixth Power Plan (1200 aMW of savings by 2015, equivalent to 85% of projected load growth and about 1.2% of system load annually, with comparable or increased annual targets through 2030).[[15]](#footnote-15) PSE's approved I-937 savings target for 2010-2011 is greater than one percent of its load for the same time period.[[16]](#footnote-16) The company reports 2004-2009 savings from its energy efficiency programs that cumulatively represent about 4.3% of 2009 Test Year load. See Direct Testimony of Tom DeBoer, p. 18, Table 3. On the issue of incremental results, I have great respect for the company’s management and energy efficiency leadership and have no doubt of their capacity to perform at even higher levels if financial obstacles are removed. I am often asked why we should reward (or at least not punish) utility management for “doing the right thing,” and I find the most persuasive answer in the clear likelihood that more of “the right thing” will emerge as a result.

 **Q. How would full decoupling for PSE promote energy efficiency progress, when Initiative 937 (“I-937”) already requires the company to achieve all cost-effective energy efficiency?**

 A. The Commission’s own Policy Statement begins with an invocation of I-937 (p. 3), notes the Washington legislature’s continuing interest in better aligning shareholder and customer interests in achieving that objective, and concludes that “the Commission is receptive to applying a well-designed full decoupling mechanism to either electric or gas utilities.” (p. 19). I agree with the Commission that the I-937 mandate does not moot the decoupling issue, and I believe that it is past time to ensure that PSE and other utilities are not automatically penalized for progress in achieving the worthy energy efficiency requirements of I-937. In my opinion, full decoupling will increase the likelihood that these requirements will be achieved, along with their extraordinary economic and environmental benefits.

# V. RECOMMENDED ELEMENTS OF A FULLDECOUPLING MECHANISM

 **Q. Could you describe your proposed decoupling mechanism for PSE’s electric revenues?**

 A. Consistent with the Commission’s own 1991 Puget precedent, I recommend a straightforward form of per-customer decoupling based on the fixed costs approved in this proceeding (except for those covered in the Power Cost Adjustment (“PCA”) mechanism), with annual reconciliations of actual to authorized fixed cost recovery and subsequent rate true-ups for all participating customer classes. Any associated annual rate increases would be capped at 3 percent (no limit on reductions), with unrecovered balances carried forward. As with the per-customer decoupling mechanism that the Commission approved twenty years ago for Puget, I recommend “set[ting] up a deferred account allowing a reconciliation of revenue and expenses that would be subject to hearing and review.”[[17]](#footnote-17) I recommend that, for this purpose, the Commission adopt two per-customer fixed-cost revenue requirements, one covering the residential class and the other representing a weighted average for all other classes included in the mechanism.

 In calculating the revenue per customer, I would use the same methodology as that used in Jon Piliaris’s testimony to calculate “lost revenue” for purposes of applying PSE’s proposed Conservation Savings Adjustment (“CSA”), multiplied by the use per customer in the test year. For example, for residential customers, Mr. Piliaris calculates the 2009 General Rate Case fixed cost rate of $.022665/kWh (Exhibit \_\_\_\_\_ (JAP-13, cell D17). Taking the test year sales figure in JAP-13, cell D15, and dividing by the residential customer count in PSE response to NWEC data request 4 (Exhibit \_\_\_\_\_ (RCC-4), yields 11,492 kWh, which in turn produces a revenue per residential customer of $260.47. This calculation is illustrative only, since the revenue requirement approved in this case is likely to differ from that proposed by PSE. If the Commission decides in favor of full decoupling as proposed here, I recommend requiring a prompt compliance filing from the company that applies the proposed decoupling methodology to the approved revenue requirement.

 **Q. How do you respond to PSE’s concerns (e.g., Direct Testimony of Tom De Boer, p. 17-18) that its expense-per-customer growth rate now substantially exceeds growth in both electricity use and customer count, and that revenue per customer allowances should make some accommodation for the cumulative impact of energy efficiency on consumption?**

 A. First, my proposal won’t widen any such gap compared to the status quo, because (as indicated below) the company’s customer growth rate has been about the same as its rate of growth in retail sales over the last decade (and my proposal substitutes customer count for retail sales as the basis on which nonproduction cost recovery changes between rate cases). Second, although I believe that PSE’s concerns deserve the Commission’s attention, I disagree with PSE’s proposed solution, which is a lost revenue recovery mechanism called a Conservation Savings Adjustment (“CSA”). Beyond my proposal for full decoupling, I do not advance a specific recommendation at this time for addressing PSE’s concerns, but I note that alternatives include (1) earnings opportunities linked to energy efficiency performance in addition to full decoupling and/or (2) upward annual adjustments to the authorized per-customer revenue requirement, reflecting the impact on per-customer electricity consumption of meeting or exceeding the company’s energy efficiency targets. I believe that it is critical, however, that any such approach be linked to PSE’s approved efficiency targets under Initiative 937, and in particular to strong low-income savings results and implementation of energy efficiency programs across all sectors.

 **Q. Why do you propose two separate per-customer revenue requirements?**

A. Certainly it would be possible to have only one, representing a weighted average across all rate classes included in the mechanism, and this was the approach the Commission used to good effect in the original Puget decoupling mechanism. That option is admirable for its simplicity and its elimination of any incentive for the utility to reclassify customers to boost its annual authorized revenue recovery between rate cases. I think that the relatively homogenous character of PSE’s residential class, and the ease of verifying the residential / nonresidential distinction, argues for two separate revenue requirements this time around, and indeed PSE has proposed a similar approach for its CSA.[[18]](#footnote-18) I would not favor further differentiation, however, which might introduce an incentive to reclassify customers into rate classes with higher per-customer revenue requirements.

 **Q. Why do you exclude electricity production costs from the proposed mechanism?**

 A. Cost recovery associated with generation is handled for PSE by a Power Cost Adjustment mechanism that the Commission adopted in 2002 and modified in 2009;[[19]](#footnote-19) the Commission has not invited any proposed changes in that mechanism. I note that generation costs are also excluded from PSE’s proposed CSA, which addresses lost margins from electricity saved through the company’s programs.[[20]](#footnote-20)

 **Q. Would shareholders automatically gain by substituting per-customer decoupling for the status quo, which effectively allows PSE’s annual fixed-cost revenue requirement to grow in proportion to its retail sales instead of its customer count?**

 A. That would be true only if growth in the company’s customer count were likely to outstrip its retail sales growth rate significantly. In fact, differences between the two have been relatively modest in recent years. Between 2001 and 2010, PSE’s normalized retail electricity sales grew by 14% and its customer count increased by 15%. See Exhibits \_\_\_\_\_ and \_\_\_\_\_\_ (RCC-3‑4).[[21]](#footnote-21) In sum, a switch to per-customer decoupling does not appear to create any substantial advantage for shareholders compared to status quo practices, but it will remove a significant financial disincentive for energy efficiency progress. Moreover, a statistical analysis by Lawrence Berkeley National Laboratory of the impact of changes in sales or number of customers on nonfuel costs showed that “one-year changes in the number of customers have a fairly strong one-year impact on nonfuel costs but that one-year changes in sales have a rather weak effect.”[[22]](#footnote-22)

 **Q. What is the basis for the proposed three percent limit on any annual rate increases?**

 A. A three percent limit on any annual rate increase should provide customers with insurance against rate volatility while still allowing high confidence that the mechanism can function as designed without generating significant accumulating balances. The largest annual reduction in residential electricity use recorded by the company in the last twenty years was about six percent, at the very beginning of that period, as indicated in Exhibit \_\_\_\_ (RCC-3); an even larger reduction would be needed in order to reach the rate impact limit, and, of course, any such rate increase would occur at a time when average bills were declining as consumption dropped.[[23]](#footnote-23)

 **Q. Would you apply the proposed mechanism to all customer classes?**

 A. The Commission’s Policy Statement indicates that “[g]enerally, a full decoupling proposal should cover all customer classes” (p. 18), but also states that the Commission will consider alternatives “where in the public interest and not unlawfully discriminatory or preferential.” I do not propose to include Schedules 40, 46 and 49, or 448, 449 and 459 in the mechanism, because they have so few members (less than 140) and account for a relatively small fraction of PSE’s projected revenues from energy charges (just over 4%, although these Schedules account for almost 14% of retail electricity sales).[[24]](#footnote-24)

 **Q. Would you calculate separate decoupling adjustments for each class?**

 A. No, I would average the adjustments across all classes, to minimize administrative complexity and intra-class rate volatility. This is the approach recommended in the Arizona Commission’s recent decoupling policy statement.[[25]](#footnote-25)

 **Q. Wouldn’t this potentially result in inequitable results for some classes?**

 A. Only if opportunities for either lost or found revenues are not distributed with rough equality across the classes over time, which I do not believe to be the case. The rate of growth for the two classes was essentially the same from 2001-2010, for example (see Exhibit \_\_\_\_\_ RCC-4) (14% and 15%, respectively). The pervasiveness of untapped cost-effective energy efficiency is attested in, e.g., the Northwest Power and Conservation Council’s latest regional plan.[[26]](#footnote-26) Opportunities for inequitable outcomes are further reduced by the proposed cap of 3% on any decoupling-related rate increases, and the limited initial duration (five years) of the proposed mechanism, as described later in my testimony. The simpler the administration of the mechanism and the lower the likelihood of unrecovered balances, the greater the benefits in terms of removal of barriers to energy efficiency progress. This was also the conclusion of the Arizona Commission, the regulatory body that has most recently addressed the issue.[[27]](#footnote-27)

 **Q. Would you treat new and existing customers differently?**

 A. No, because it would increase the complexity of administration and because I am unaware of any compelling justification for vintaging of this kind. It is worth noting that neither the Oregon nor the Idaho electric decoupling mechanisms have this feature.[[28]](#footnote-28)

 **Q. What about a weather adjustment mechanism?**

 A. I propose no application of any weather-adjustment to revenues for purposes of the true-up, in accord with the Policy Statement (p. 18) and consistent with Coalition testimony in earlier WUTC proceedings.[[29]](#footnote-29) In other words, I recommend against weather-normalizing electricity sales and revenues prior to calculating the annual true-up; instead, like the Commission, I favor “including the effects of weather in a full decoupling mechanism.” (id.). For customers, decoupling works well to counter weather volatility by providing rebates after particularly cold weather, and surcharges generally follow milder weather.

 **Q. The Policy Statement indicates (p. 17) that a full decoupling mechanism “must include . . . a proposed earnings test to be applied at the time of the true-up.” What is your recommendation?**

 A. I respectfully encourage the Commission to reconsider, since it is not obvious why removing the linkage between retail sales and fixed-cost recovery should hinge on the company’s earnings. Moreover, a constraint of this kind serves as an obvious inhibition on the company’s incentive to control costs, about which the Commission is rightly concerned (Policy Statement, p. 16). Decoupling would have no such effect per se, as explained further below, but linking any upward adjustments to an earnings threshold certainly could. There is a much stronger rationale for including an earnings test in a partial decoupling mechanism, because its annual lost revenue awards otherwise would yield automatic rate increases, while leaving open the possibility that the company could asymmetrically pocket both “found” and “lost” revenues (see Policy Statement, p. 16, citing NRDC’s concerns on this point, and the Direct Testimony of Jon A. Piliaris, pp. 42-43). If the Commission nonetheless determines after further review to include an earnings test in a full decoupling mechanism for PSE, I recommend that the Commission provide that the company will not recover any decoupling deferral amounts to the extent that the company would then be earning more than 25 basis points above its authorized return on investment.

 **Q. How would you propose to address the Commission’s concern about the potential that reduced fixed-cost recovery from lower retail sales could be partly or wholly offset by margins on increased off-system sales (p. 17)?**

 A. PSE’s Power Cost Adjustment (“PCA”) already responds to this concern; it is designed to strike a reasonable balance between shareholder and customer interests in allocating risks associated with power supply costs and cost recovery at both wholesale and retail levels. My testimony proposes no change in the PCA.

 **Q. But isn’t it possible that the PCA could fail to compensate PSE fully for revenues lost if retail sales drop?**

 A. Yes, and this is likely when wholesale prices drop well below retail rates, as is the case currently. If the Commission is committed to full decoupling, as I hope, it should encourage consensus-based proposals from PSE and other stakeholders on adjustments to my proposed mechanism that would address this issue.

 **Q. What about rate impacts of revenue decoupling, and in particular potential impacts on low-income customers (Policy Statement, p. 18)?**

 A. First, I want to acknowledge the struggles faced by low-income households in meeting their electricity bills. Low-income customers spend a higher percentage of their annual income on energy costs compared with average residential customers. During cold winters, low-income households may be faced with agonizing decisions regarding whether to heat or to eat.

 However, neither full decoupling in general, nor my proposal in particular, add any additional costs to low-income customers’ bills; they simply ensure that previously approved fixed costs are neither over- nor under-recovered. If any party to this proceeding thinks low-income customers are paying too high a share of PSE’s costs of service, decoupling does not add to the problem. In terms of rate adjustments needed to achieve decoupling of fixed-cost recovery from retail sales, experience shows that effects are minimal in practice, with adjustments that go in both directions. A comprehensive industry-wide assessment (Exhibit \_\_\_\_ (RCC-5)) found that, of 88 gas and electric rate adjustments from 2000-2009 under decoupling mechanisms, less than one-seventh involved increases exceeding 3 percent. (Refunds accounted for a much larger fraction.) Typical adjustments in utility bills “amount[ed] to less than $1.50 per month in higher or lower charges for residential gas customers and less than $2.00 per month . . . for residential electric customers.”[[30]](#footnote-30) For electricity, that represents about seven cents a day for the average household, which sometimes comes in the form of a rebate and serves only to ensure that the utility recovers no more and no less than the fixed costs of service that regulators have reviewed and approved.

 **Q. Are you proposing any specific adjustments to PSE’s low-income energy efficiency or low-income energy assistance programs or budgets?**

 A. I recognize that low-income customers are struggling to make ends meet, which is why it is vitally important for PSE to target energy efficiency services and payments specifically to low-income customers (as emphasized also in the Commission’s Policy Statement at p. 13), and to increase efforts to reach more customers who qualify for those programs. The Coalition has an interest in ensuring that increases in energy efficiency program budgets for low-income customers are at least roughly proportional to increases in funding for energy efficiency programs for other residential customers, assuming there is unaddressed need. I believe funding for PSE’s energy efficiency programs will be addressed in the Company’s annual Schedule 120 filing in the spring, but it is important for the Commission to consider such a principle.

 Finally, I recommend at a minimum that the Commission increase PSE’s funding for low-income energy assistance by a percentage at least commensurate with any rate increase approved in this proceeding.

 **Q. What do you recommend regarding the duration of your proposed full decoupling mechanism?**

 A. I recommend that the Commission establish a minimum five-year duration to allow time for the mechanism to influence utility planning and show results.

 **Q. How should the Commission evaluate the mechanism?**

 A. I recommend an independent evaluation, using a contractor selected by the company and Commission Staff early in the implementation process after consultation with all interested parties. The evaluation should be based on the first four years of data, so that findings are available before the mechanism expires. That evaluation should consider, among other items:

* Whether the mechanism was implemented and worked as intended.
* Detailed analysis of any positive and/or negative impacts of the decoupling mechanism on low-income customers in PSE’s service territory, which may be informed by analyses of decoupling mechanisms in other states (I note that such an analysis may need to consider impacts on low-income households beyond those specifically deemed eligible to participate in PSE’s low-income energy services offerings).
* Whether, for the duration of the mechanism, PSE’s “conservation programs provide[d] benefits to low-income ratepayers that are roughly comparable to other ratepayers.”[[31]](#footnote-31)
* Whether customer classes included in the mechanism received the substantial majority of the net economic benefits (the difference between the benefits of the measure and its cost) of PSE’s energy efficiency investments.

 I also recommend that PSE file annual progress reports on rate impacts with its annual energy efficiency progress reports, and make those available to all interested parties (see Policy Statement, p. 19).

 **Q. How would you recommend addressing “the impact of the proposal on risk to investors and ratepayers and its effect on the utility’s ROE” (Policy Statement, p. 17)?**

 A. My view is that the company should pass through to customers any cost savings associated with changes in its capital structure following adoption of the decoupling mechanism (e.g., a shift in the equity/debt ratio). This reflects what I understand to be the Commission’s position in the Policy Statement about flowing reductions in debt and equity costs through to utility customers (p. 16). In other words, any changes in capital structure following adoption of the mechanism should result in corresponding adjustments in the authorized per-customer revenue requirement used for purposes of calculating annual decoupling adjustments.

 **Q. Explain your conclusion that approving the Coalition’s proposal should not result in a prospective adjustment in PSE’s authorized return on equity.**

 A. The data that I summarized earlier from Pamela Lesh Morgan’s comprehensive survey provide the strongest support for my recommendation (see Exhibit \_\_\_\_\_\_ (RCC-5)); rate impacts this modest simply do not imply appreciable consequences for company-wide cost of capital, and I have seen no empirical evidence to the contrary. Indeed, in the specific context of natural gas utility decoupling, a March 2011 investigation by the Brattle Group reached the opposite conclusion:

The findings of our analysis do not support the belief that utilities with decoupling have a lower cost of capital than utilities without decoupling. Contrary to what some might expect to find, at least on the basis of the opinions of certain intervenors and the (minority set of) judgments where commissions reduced allowed rates of return because of decoupling, we found that the estimated cost of capital for decoupled utilities was higher by a small but statistically significant amount (emphasis in original).[[32]](#footnote-32)

 In light of this evidence, I agree with the Arizona Commission’s recent conclusion that “Commitment to and early implementation of decoupling should precede significant decoupling-specific adjustments to cost of capital if a revenue per customer decoupling mechanism is approved for a utility.”[[33]](#footnote-33) I also agree with the Regulatory Assistance Project that, to the extent decoupling makes possible changes in utilities’ capital structure that reduce total costs to customers, those savings can and should be passed through to customers once achieved.[[34]](#footnote-34)

 **Q. But how specifically should the Commission assess “the impact of the proposal on risk to investors and ratepayers and its effect on the utility’s ROE”?**

 A. Such an analysis could be conducted as part of the recommended evaluation of the mechanism. Allowing the mechanism to operate for five years should allow sufficient time for any such ROE effects to emerge. Any extension of the mechanism should be considered within the context of a general rate case.

# VI. THE BROADER CASE FOR ELECTRICITY DECOUPLING

 **Q. How many states have adopted full decoupling mechanisms for electric or natural gas utilities?**

 A. Nationally, the count of states with full decoupling for at least one utility stands at 14 for electricity (including the District of Columbia) and 22 for natural gas. In the West, Hawaii, California, Idaho, and Oregon have adopted full decoupling for at least one electric utility. California, Utah, Oregon, and Wyoming have adopted full decoupling mechanisms for natural gas. Arizona’s Corporation Commission has adopted a Final Policy Statement endorsing full decoupling for both electric and natural gas utilities.[[35]](#footnote-35) New Mexico’s Public Service Commission has left open “the determination of whether a decoupling mechanism should be approved or required for any utility,” and the New Mexico Legislature has acknowledged the need to “identify regulatory disincentives or barriers for public utility expenditures on energy efficiency and load management measures and ensure that they are removed in a manner that balances the public interest, consumers’ interests, and investors’ interests.”[[36]](#footnote-36)

 **Q. What do you say to those who are concerned that revenue decoupling reduces incentives to save energy, by raising rates and depriving customers of rewards from consumption reductions?**

 A. Experience proves the opposite. Revenue decoupling results in very modest rate adjustments that go both ways, and do not materially affect rewards to consumers for reducing their use of electricity and natural gas. As the Oregon Public Utility Commission found when it adopted a decoupling mechanism for Portland General Electric in January 2009, responding to analogous claims that decoupling would rob customers of the rewards of conservation: “We believe the opposite is true: an individual customer’s action to reduce usage will have no perceptible effect on the decoupling adjustment, and the prospect of a higher rate because of actions by others may actually provide more incentive for an individual customer to become more energy efficient.”[[37]](#footnote-37) Finally, note that unlike so-called “fixed-variable rate designs” that load fixed costs into monthly customer charges, my proposal does not establish a ‘fixed bill’ that would make customers indifferent to the amount of electricity that they use.

 **Q. Doesn’t your decoupling proposal result in paying PSE for savings that it didn’t help achieve?**

 A. No, because the proposed mechanism doesn’t “pay” PSE any incremental amount for anything; it is simply a mechanism that allows the company to receive no more and no less than the fixed-cost revenue requirement per customer that the Commission has reviewed and approved.

 **Q. Revenue decoupling has been criticized as “use less, pay more” and shifting risk to customers; do you believe those are valid concerns regarding your proposal?**

 A. No. As indicated earlier in my testimony, customers who find ways to use significantly less energy will not be appreciably affected by decoupling-induced rate adjustments, and of course a principal justification for the company’s energy efficiency programs is to reduce the costs of providing reliable energy services, with long-term bill reductions for PSE customers (reflecting reductions in the company’s revenue requirements and fuel purchases) that revenue decoupling will not affect. With regard to risk shifting, an appealing feature of the proposal is that it reduces risks for *both* customers and shareholders; customers get prompt relief from cost increases driven by extreme weather events, and PSE avoids downside risk on recovery of its authorized non-production costs (although, as noted earlier, I do not view this as justification for a prospective reduction in the company’s ROE). Risk reduction is not a zero sum enterprise here.

 **Q. Why not simply pay PSE the fixed costs determined to have been lost as a result of electricity savings achieved by its energy efficiency programs?**

 A. That is indeed essentially what PSE itself has proposed in the Direct Testimony of Jon A. Piliaris (pp. 32-43), which represents the very kind of lost revenue recovery mechanism whose deficiencies are addressed in the Commission’s Policy Statement (pp. 7-8). PSE’s CSA would result in automatic penalties, in the form of reduced fixed-cost recovery, for all cost-effective electricity savings not directly associated with “the load reducing impacts of Company-sponsored energy efficiency.”[[38]](#footnote-38) Cost-effective savings in this category include those from efficiency standards administered by government agencies, which can benefit greatly from utility support;[[39]](#footnote-39) informal intervention by utility staff to encourage customer patronage of independent energy efficiency contractors; and effective public education campaigns with multiple participants, including utilities. The CSA would also create a powerful and perverse new incentive for the company to promote programs that look good on paper but deliver little or no savings in practice (because then the company would get a double recovery). For example, poorly designed efficiency measures that customers later replaced or disconnected might well result initially in lost revenue recovery, while allowing the utility also to gain later from higher energy sales after the measures ceased to function. By contrast, revenue decoupling removes any prospect of that wholly inappropriate upside opportunity for the utility when efficiency measures fall short for any reason. Moreover, the CSA would leave unimpaired strong utility incentives to promote increased electricity use, since (unlike the full decoupling proposal presented here), PSE would keep any non-production cost recovery in excess of that authorized by the Commission (except to the extent that the resulting gains exceeded PSE’s proposed earnings limit). Paying utility bonuses for both increases in its retail electricity sales and its programmatic electricity savings is the metaphorical equivalent of encouraging the CEO to drive with one foot on the brake and the other on the accelerator. Finally, the CSA would yield an automatic rate increase whenever it was applied, whereas rate adjustments under full decoupling can be either positive or negative (see Pamela Lesh Morgan’s review of 88 decoupling adjustments across 45 utility systems nationwide, which is attached as Exhibit \_\_\_\_\_ (RCC-5).

 **Q. Where has decoupling helped support aggressive investment in cost-effective energy efficiency?**

 A. In 2010, seven of the ten states with the highest per-capita investment in electric energy efficiency programs[[40]](#footnote-40) and eight of the ten states with the highest per-capita investment in natural gas energy efficiency programs[[41]](#footnote-41) had decoupling mechanisms in place or had adopted decoupling as state policy. The presence or absence of revenue decoupling rightly figures prominently in the authoritative energy-efficiency rankings of the states compiled annually by the American Council for an Energy Efficient Economy.[[42]](#footnote-42) Washington State is often and appropriately credited as a pioneer in electric decoupling, and this testimony is an appeal to return to a proven approach that this Commission first road-tested two decades ago.

 **Q. Does decoupling benefit all customers?**

 A. In the short term, because decoupling can produce both refunds and surcharges for customers, decoupling alone has no predictable effect on customers, including those who have already invested in energy efficiency or those who use little energy. Over the long term, decoupling benefits all customers, by clearing the way for energy efficiency investments that (i) reduce peak and overall demand for energy, (ii) delay the construction of costly new generation capacity or pipelines, (iii) reduce demand for underlying fuels and put downward pressure on commodity prices,[[43]](#footnote-43) and (iv) reduce pressure on the transmission and distribution system, reducing the likelihood of costly outages and delaying the need for costly upgrades. In addition, as noted earlier, decoupling benefits both customers and utilities by reducing volatility in utilities’ earnings and customers’ bills due to weather events.

 **Q. Should concerns that decoupling is “single-issue ratemaking” prevent the Commission from adopting your proposal?**

 A. No. “Single issue ratemaking” usually refers to the increase of rates between rate-setting processes based on an increase in a single cost driver, without taking into account other factors that could offset a utility’s increased costs. Decoupling mechanisms that use per-customer revenue requirements authorized by the Commission in a rate case, with no attempt to change them in subsequent years to take cost drivers into account, are certainly not single issue ratemaking.

 **Q. Is decoupling an example of “retroactive ratemaking?”**

 A. No. Decoupling is not “retroactive ratemaking” because it compares actual revenues to the revenues authorized by the Commission in a rate proceeding. Decoupling rate adjustments are the result of the application of a fully adjudicated method for changing rates, and the rate adjustments can go in both directions. Ken Costello of the National Regulatory Research Institute has investigated whether decoupling mechanisms meet the traditional tests justifying state utility regulators’ use of “tracking mechanisms that adjust rates and revenues whenever sales deviate from their targeted level,” and has concluded that “[u]nless a commission faces legal restrictions in implementing a ‘sales tracker’ or has a built-in policy of limiting trackers in general, [revenue decoupling] would seem to meet the regulatory threshold for a tracker.”[[44]](#footnote-44)

 **Q. Is decoupling likely to reduce the frequency of rate cases, thus limiting Commission oversight?**

A. No, although the absence of decoupling can have this effect, whenever utilities’ retail sales growth equals or outstrips growth in costs of serving their customers.

 **Q. Could decoupling increase rates for customers if they conserve energy during an economic downturn?**

 A. In an economic downturn with an associated decrease in utility sales, *rates* of a utility operating with decoupling may temporarily increase while *bills* for conserving customers will decrease because of their lower consumption. With or without decoupling, decreases in sales due to economic downturns are likely to result in rate increases, since utilities must act to maintain revenue to cover their fixed costs at the new, lower level of sales. But without decoupling, rates will almost never *decrease* when sales are higher than expected due to economic recovery, weather, or other factors. Decoupling protects customers from paying utilities more than necessary to enable them to recover their authorized fixed costs.

 **Q. Does decoupling guarantee profits or affect a utility’s incentive to control costs?**

 A. No and no. I agree with the Regulatory Assistance Project that “[i]n fact, precisely the opposite is true.”[[45]](#footnote-45) Decoupling provides assurance to a utility and its customers that the utility will recover only authorized *revenues* (that is, the amount that regulators have already determined is necessary and prudent in order to deliver energy services to customers). A utility’s profit will continue to be driven by both its revenues and its costs, as well as other regulatory decisions that determine the utility’s authorized rate of return on capital. Without decoupling, profit is tied both to sales growth and cost control. With decoupling, controlling costs takes on even greater importance, since the utility can no longer increase profits by increasing sales. This should remove any “lingering concerns regarding possible reduced incentives for companies to manage in an efficient manner,” which the Commission noted in its Policy Statement (p. 16).

 **Q. Does this conclude your testimony?**

 A. Yes.

1. R. Cavanagh, Responsible Power Marketing in an Increasingly Competitive Era, 5 Yale Journal on Regulation (July 1988); more recently, see R. Cavanagh, Reinventing Competitive Procurement of Electricity Resources, Electricity Policy.com (October 2010). [↑](#footnote-ref-1)
2. Docket No. U-100522. [↑](#footnote-ref-2)
3. In NWEC’s discovery requests to PSE and throughout this testimony, “production costs” and “non-production costs” are assigned the definitions established in the Regulatory Assistance Project’s treatise, Revenue Regulation and Decoupling: A Guide to Theory and Application (June 2011), pp. 4 & 6 (distinguishing between “production costs” which “are those that vary more or less directly with energy consumption in the short run,” and non-production costs, which “include . . . everything that is related to the delivery of electricity (transmission, distribution and retail services) to end users”). [↑](#footnote-ref-3)
4. Docket No. UE-901183-T, Third Supplemental Order (April 10, 1991), p. 10. The Commission also determined that the mechanism did not constitute retroactive ratemaking, and that it was “fair, just and reasonable” even though it did not perfectly match costs and rates. “[E]ven under the current system of ratemaking, costs and rates will diverge immediately following implementation of a rate change.” Id., p. 10. [↑](#footnote-ref-4)
5. Id., p. 10. [↑](#footnote-ref-5)
6. See Washington UTC, Eleventh Supplemental Order, Docket No. UE-920433 (Sept. 21, 1993), p. 10. [↑](#footnote-ref-6)
7. See id., p. 10 (concluding that “the PRAM/decoupling experiment should continue for at least another three-year cycle”). [↑](#footnote-ref-7)
8. Docket No. UE-921262, Joint Report and Proposal Regarding Termination of the Periodic Rate Adjustment Mechanism (Apr. 20, 1995). [↑](#footnote-ref-8)
9. See Washington UTC v. PacifiCorp, Docket No. UE-032065, Order No. 06 (Oct. 2004), pp. 29-30 (inviting PacifiCorp, following discussion with other parties, to “propose a true-up mechanism, or some other approach to reducing or eliminating any financial disincentives to DSM investment”). [↑](#footnote-ref-9)
10. Docket No. UE-05084, Orders 03 & 04 (Apr. 17, 2004), p. 41. [↑](#footnote-ref-10)
11. Docket No. U-100522. [↑](#footnote-ref-11)
12. For example, in its Policy Statement at p. 15, the Commission indicates reasons for supporting” limited decoupling designed to compensate a natural gas utility for the effects of its conservation program.” See also p. 17. [↑](#footnote-ref-12)
13. Regulatory Assistance Project, Revenue Regulation and Decoupling, note 3 above, p. 4. [↑](#footnote-ref-13)
14. The minimum loss figure is the sum of $5 million + $10m + $15m + $20m + $25m = $75 million. [↑](#footnote-ref-14)
15. See the summary of the Council’s Sixth Regional Plan at http://www.nwcouncil.org/
library/2010/2010-08.htm. [↑](#footnote-ref-15)
16. See Docket No. UE-100177 (approval of PSE’s I-937 savings target of 71 aMW for the 2011-2012 biennium); Docket No. UE-100961/UG-100960 (PSE Integrated Resource Plan, annual energy need of approximately 2700 aMW in 2011 and 2012 at p. 5-5). [↑](#footnote-ref-16)
17. See note 3 above. [↑](#footnote-ref-17)
18. See Direct Testimony of Jon A. Piliaris (Exhibit \_\_\_\_\_ (JAP-1T), p. 34. [↑](#footnote-ref-18)
19. See Docket Nos. UE-011570 and UG-011571, Twelfth Supplemental Order, Exhibit A (2002); Dockets UE-072300 and UG-072301, Order 13 (Jan. 15, 2009). [↑](#footnote-ref-19)
20. See Direct Testimony of Jon A. Piliaris (Exhibit \_\_\_\_\_\_\_ (JAP-1T), pp. 32-43. [↑](#footnote-ref-20)
21. Over the decade beginning in 1991, on the other hand, growth in customer count substantially outstripped growth in electricity sales, suggesting that the average pace of efficiency gains may have slackened since 2001 and underscoring the importance of removing barriers to accelerated savings. [↑](#footnote-ref-21)
22. J. Eto, S. Stoft, and T. Belden, “The Theory and Practice of Decoupling,” Lawrence Berkeley National Laboratory, p. 32, 1994. [↑](#footnote-ref-22)
23. Even a six percent reduction in *system wide* consumption (which has not occurred in the post-1991 era) would imply less than a three percent decoupling-related true-up, since more than half of the resulting revenue reduction represents either variable costs that are not included in the decoupling mechanism, fixed costs recovered other than through energy charges, or energy production costs. For data on the energy charges in these three categories, see Exhibit \_\_\_\_\_, (RCC-2) to my testimony. [↑](#footnote-ref-23)
24. See Exhibits \_\_\_\_\_ (RCC-2-4); note that Schedule 448 is erroneously referred to in all three Exhibits as Schedule 48. [↑](#footnote-ref-24)
25. See Arizona Corporation Commission, Policy Statement Regarding Utility Disincentives to Energy Efficiency and Decoupled Rate Structures (Dec. 29, 2010), p. 31, item 12 (“Decoupling adjustments should be blended and applied across customer classes to discourage dramatic changes experienced by any one class”). [↑](#footnote-ref-25)
26. See Chapter 4, “Conservation Supply Assumptions,” http://www.nwcouncil.org/
energy/powerplan/6/final/SixthPowerPlan\_Ch4.pdf. [↑](#footnote-ref-26)
27. See Arizona Corporation Commission, Policy Statement Regarding Utility Disincentives to Energy Efficiency and Decoupled Rate Structures (Dec. 29, 2010), p. 31, item 12. [↑](#footnote-ref-27)
28. See Idaho PUC Case No. IPC-E-04-15, Order #30267, and Case No. IPC-E-09-28, Order # 31063 (these cases established a three-year decoupling pilot for Idaho Power Company and extended the pilot for two more years in 2009); Oregon PUC Order No. 09-020, p. 28 (Jan. 2009) (approving revenue decoupling mechanism for Portland General Electric). [↑](#footnote-ref-28)
29. See, e.g., Prefiled Direct Testimony of Steven Weiss on behalf of the NW Energy Coalition in UG-060256. [↑](#footnote-ref-29)
30. See Pamela Morgan, Rate Impacts and Key Design Elements of Gas and Electric Utility Decoupling: A Comprehensive Review, Electricity Journal (Oct. 2009), p. 67 (Exhibit \_\_\_\_\_ (RCC-5)). [↑](#footnote-ref-30)
31. Policy Statement, p. 19. [↑](#footnote-ref-31)
32. J. Wharton, M. Vilbert, R. Goldberg & T. Brown, The Impact of Decoupling on the Cost of Capital (Discussion Paper, The Brattle Group, Mar. 2011), p. 2. [↑](#footnote-ref-32)
33. Final ACC Policy Statement Regarding Utility Disincentives to Energy Efficiency and Decoupled Rate Structures, Docket Nos. E-00000J-08-0314 and G-00000C-08-0314 (Dec. 29, 2010), p. 31 [item 6]. [↑](#footnote-ref-33)
34. See Regulatory Assistance Project, Revenue Regulation and Decoupling: A Guide to Theory and Application (June 2011), pp. 36-41. [↑](#footnote-ref-34)
35. Final ACC Policy Statement, note 32 above. [↑](#footnote-ref-35)
36. See Case No. 08-00024-UT, Final Order Repealing and Replacing 17.7.2 NMAC (2010), p. 10; Efficient Use of Energy Act, Section 62-17-5.F. [↑](#footnote-ref-36)
37. Oregon PUC Order No. 09-020, p. 28 (Jan. 2009). [↑](#footnote-ref-37)
38. Direct Testimony of Jon A. Piliaris, p. 32: 15-16. [↑](#footnote-ref-38)
39. In the Pacific Northwest, over the past thirty years, efficiency standards have achieved results comparable in aggregate to all utility programs combined. See p. 8 of the most recent assessment by the Northwest Power and Conservation Council, available at http://www.nwcouncil.org/energy/rtf/consreport/2010/2011\_10presentation.pdf. [↑](#footnote-ref-39)
40. The states are California, Connecticut, Idaho, Massachusetts, New York, Oregon, and Vermont. See “State of Efficiency Program Industry Report,” Consortium for Energy Efficiency, Table 6, January 12, 2011, http://www.cee1.org/ee-pe/docs/Table%206.pdf. [↑](#footnote-ref-40)
41. The states are California, Massachusetts, Minnesota, New Jersey, New York, Oregon, Utah, and Wisconsin. See “State of Efficiency Program Industry Report,” Consortium for Energy Efficiency, Table 9, January 12, 2011, http://www.cee1.org/ee-pe/docs/Table%209.pdf. [↑](#footnote-ref-41)
42. See ACEEE, The 2011 State Energy Efficiency Scorecard (October 2011) http://aceee.org/research-report/e115, p. 26 (“ACEEE views decoupling as the preferred approach to properly align utility incentives.”). [↑](#footnote-ref-42)
43. An April 2005 study by the American Council for an Energy-Efficient Economy concluded that energy efficiency increases can yield greatly disproportionate percentage reductions in gas prices, by relieving demand pressures that drive high price volatility for this commodity. ACEEE, Impact of Energy Efficiency and Renewable Energy on Natural Gas Markets: Updated and Expanded Analysis (April 2005), http://aceee.org/research-report/e052. [↑](#footnote-ref-43)
44. K. Costello, “Briefing Paper: Revenue Decoupling for Natural Gas Utilities,” National Regulatory Research Institute, Apr. 2006, p. 9. [↑](#footnote-ref-44)
45. Regulatory Assistance Project, note 3 above, p. 45. [↑](#footnote-ref-45)