Exhibit No. _____ (RCC–1T)

BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PACIFICORP d/b/a PACIFIC POWER & LIGHT COMPANY Respondent.	)	DOCKET NO. UE-050684

DIRECT TESTIMONY OF RALPH CAVANAGH

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I. Background and Qualifications

Q. PLEASE STATE YOUR NAME, ADDRESS, AND EMPLOYMENT.

A. My name is Ralph Cavanagh. I am the Energy Program Director for the Natural Resources Defense Council, 111 Sutter Street, 20th Floor, San Francisco, CA 94104.

Q. PLEASE OUTLINE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I am a graduate of Yale College and Yale Law School, and I joined NRDC in 1979. I am a member of the faculty of the University of Idaho's Utility Executive Course, and I have been a Visiting Professor of Law at Stanford and UC Berkeley (Boalt Hall). From 1993-2003 I served as a member of the U.S. Secretary of Energy's Advisory Board. My current board memberships include the Bonneville Environmental Foundation, the Center for Energy Efficiency and Renewable Technologies, the California Clean Energy Fund, and the Northwest Energy 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; I was most recently a witness in the 2004 PacifiCorp rate case (Docket No. UE – 032065).

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying for the Natural Resources Defense Council, an intervenor in this proceeding with more than 26,000 individual members residing in Washington.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My testimony identifies significant financial disincentives to sustained investments in cost-effective energy efficiency, fuel substitution, and small-scale "distributed" generating resources by PacifiCorp, and proposes a solution.

Q. WHAT MATERIALS HAVE YOU REVIEWED IN PREPARATION FOR THIS TESTIMONY?

A. I have reviewed the company's Application in this proceeding and its response to the discovery request of the Natural Resources Defense Council, which is cited below where relevant.

II. Summary of Conclusions and Recommendations

Q. SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

A. One of the company's most important responsibilities involve what the Commission's regulations call "least cost planning" or "integrated resource planning": assembling a diversified mix of demand- and supply-side resources designed to minimize the societal costs of reliable electricity supplies.[1] The company is effectively a resource portfolio manager for its customers, and in the volatile financial markets of the early twenty-first century, the stakes and challenges have never been more daunting. Yet the regulatory status quo undercuts sound portfolio management by penalizing utility shareholders for reductions in electricity throughput over the distribution system, regardless of the cost-effectiveness of any contributing energy-efficiency, distributed-generation or fuel substitution measures.[2] From customers' perspective, increases in throughput (above those contemplated when rates were established) result inappropriately in an uncompensated over-recovery of fixed costs by their utility. And from a least-cost-planning perspective, a grave if unintended pathology of current ratemaking practice is the linkage of utilities' financial health to retail electricity throughput. Increased retail electricity sales produce higher fixed cost recovery and reduced sales have the opposite effect. **My testimony includes a demonstration that a reasonably aggressive five-year energy efficiency investment program in its Washington service territory would automatically inflict almost $21 million in losses on PacifiCorp's shareholders, regardless of the cost-effectiveness of the electricity savings.** To address all these problems, I recommend that the Commission adopt a simple system of periodic true-ups in electric rates, designed to

[1] See WAC 480-100-238 ("Least-Cost Planning"). The Commission filed a Notice of Proposed Rulemaking on September 7, 2005, to revise these rules, but the proposed changes are not material for purposes of this testimony.
[2] This by no means exhausts the barriers to cost-effective resource portfolio management, and I hope for future opportunities to work with the Commission and interested parties on the full range of issues. One example is the way that the regulatory status quo penalizes shareholders for buying electricity from independent providers as opposed to owning generation, since there is a prospect of returns on investment only for owned (and rate-based) resources.

correct for disparities between the company's actual fixed cost recoveries and the revenue requirement approved by the Commission in this proceeding. The true-ups would either restore to the company or give back to customers the dollars that were under- or over-recovered as a result of fluctuations in retail electricity sales. I also recognize the need explicitly and equitably to accommodate the possibility that sometimes wholesale power sales could compensate partly or wholly for underrecovery of fixed costs in retail sales. My recommendations build on precedents established earlier by this Commission.

III. Eliminating Financial Disincentives for PacifiCorp's Demand-Side Investments

a. The Nature of the Problem

Q. WHAT IS THE BASIS FOR YOUR CONCLUSION THAT PACIFICORP'S FIXED COST RECOVERY IS STRONGLY TIED TO ITS RETAIL SALES VOLUMES?

A. Like most utilities, PacifiCorp recovers most of its fixed costs through the rates it charges per kilowatt-hour. In other words, a part of the cost of every kWh represents the system's fixed charges for existing plant and equipment; the rest collects the variable cost of producing that kilowatt-hour. After approving a fixed-cost revenue requirement, the WUTC sets rates based on assumptions about annual kilowatt-hour sales. If sales lag below those assumptions, the company will not recover its approved fixed-cost revenue requirement. By contrast, if the company were successful in promoting consumption increases above regulators' expectations, its shareholders would earn a windfall in the form of cost recovery that exceeded the approved revenue requirement. And whether consumption ends up above or below regulators' expectations, every reduction in sales from efficiency improvements yields a corresponding reduction in cost recovery, to the detriment of shareholders.

Q. WHY RECOVER FIXED COSTS IN VOLUMETRIC CHARGES AT ALL? WHY NOT SIMPLY MAKE THEM FIXED CHARGES?

A. Recovering all or most fixed costs as fixed charges would require radical changes in rate design; Attachment 1, Exhibit No._____ (RCC-2) to my testimony shows (based on the company's response to NRDC's discovery request) that more than 60 percent of the

company's proposed revenue requirement from the five major rate classes represents fixed costs of distribution, transmission and generation ($154.8 million out of $257.4 million). Current fixed charges would recover less than one-tenth of this fixed-cost revenue requirement ($15 million out of $154.8 million), and the Company's proposed rate structure adjustments would still leave more than $136 million annually in fixed charges to be recovered through variable demand charges or energy charges. Under both proposed and existing rate structures, energy charges alone would be recovering more than $110 million annually in fixed costs for PacifiCorp in Washington.

Q. BUT DOESN'T CONTINUING TO RECOVER FIXED COSTS AS PART OF VOLUMETRIC CHARGES MAKE ADDITIONAL CONSUMPTION LOOK MORE COSTLY THAN IT SHOULD?

A. That amounts to contending that the Commission is suppressing beneficial increases in electricity use through its rate structure, and I strongly disagree. The rationale for integrated resource planning rests in part on the conclusion that extensive market failures continue to block energy savings that are much cheaper than additional energy production at today's electricity prices. We would make a bad situation worse by reducing customers' rewards for conserving electricity, which is precisely what would happen if the Company shifted costs from volumetric to fixed charges.

Q. DESCRIBE THE EVIDENCE THAT MARKET FAILURES CONTINUE TO BLOCK HIGHLY COST-EFFECTIVE ENERGY SAVINGS AT TODAY'S ELECTRICITY PRICES.

A. Overwhelming evidence has been marshaled in recent years by the National Research Council of the National Academy of Sciences, the U.S. Congress's Office of Technology Assessment, the National Association of Regulatory Utility Commissioners, and the national laboratories, among many others. Although "[t]he efficiency of practically every end use of energy can be improved relatively inexpensively,"[3] "customers are generally not

[3] U.S. National Academy of Sciences Committee on Science, Engineering and Public Policy, Policy Implications of Greenhouse Warming, p. 74 (1991). A more recent review of energy-efficiency opportunities and barriers appears in National Research Council, Energy Research at DOE: Was it Worth It? (September 2001).

motivated to undertake investments in end-use efficiency unless the payback time is very short, six months to three years . . . The phenomenon is not only independent of the customer sector, but also is found irrespective of the particular end uses and technologies involved."[4] Typically, customers are demanding rates of return of 40-100+%, and such expectations differ sharply from those of investors in electric generation. Utilities' returns on capital average 12% or less. The imbalance between the perspectives of consumers and utilities invite large, relatively low-return investments in generation that could be displaced with more lucrative energy efficiency. These widely documented market failures generate "systematic underinvestment in energy efficiency," resulting in electricity consumption at least 20-40% higher than cost-minimizing levels.[5]

There are many explanations for the almost universal reluctance to make long-term energy efficiency investments.[6] Decisions about efficiency levels often are made by people who will not be paying the electricity bills, such as landlords or developers of commercial office space. Many buildings are occupied for their entire lives by very temporary owners or renters, each unwilling to make long-term improvements that would mostly reward subsequent users. And sometimes what looks like apathy about efficiency merely reflects inadequate information or time to evaluate it, as everyone knows who has rushed to replace a broken water heater, furnace or refrigerator.

Market failures like these mean that energy prices alone are a grossly insufficient incentive to exploit even the most inexpensive savings: customers who insist on two-year paybacks and see average rates of 7 cents/kWh "can be expected to forego demand-side measures with costs of conserved energy of more than 0.9 cents/kWh."[7] That is, energy prices would have to increase about eightfold to overcome the gap that typically emerges in practice between the perspectives of investors in energy efficiency and production, respectively.

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[4] National Association of Regulatory Utility Commissioners, Least Cost Utility Planning Handbook, Vol. II, p. II-9 (December 1988).
[5] See M. Levine, J. Koomey, J. McMahon, A. Sanstad & E. Hirst, Energy Efficiency Policy and Market Failures, 20 Annual Review of Energy and the Environment 535, 536 & 547 (1995).
[6] An extensive assessment appears in U.S. Congress, Office of Technology Assessment, Building Energy Efficiency, at pp. 73-85 (1992).
[7] National Association of Regulatory Utility Commissioners, note 4 above, p. II-10.

Q. ARE YOU ADVOCATING PUNITIVELY HIGH ELECTRICITY RATES AS A SOLUTION TO THESE MARKET FAILURES?

A. Certainly not, any more than I advocate changes in rate structure that would reduce rewards for saving electricity. Instead, I urge increased reliance on the very solution that both the Commission and the PacifiCorp have endorsed in their longstanding support for integrated resource planning: pursuit of cost-effective energy efficiency through utility investments rather than punitive prices.

Q. WHAT WOULD HAPPEN TO PACIFICORP'S PROSPECTS FOR RECOVERING AUTHORIZED FIXED COSTS IF IT WERE TO EXPLOIT MORE FULLY THE HUGE POTENTIAL FOR COST-EFFECTIVE ELECTRICITY SAVINGS?

A. Although the societal and customer benefits would be significant, including avoided pollution and savings in both generation purchases and grid infrastructure investment, every additional unsold kilowatt-hour would reduce the company's fixed-cost recovery and undercut shareholder welfare, unless the Commission changed current ratemaking policies. Until this problem is solved, PacifiCorp will lag in both aspirations and achievements on the demand side.

b. The Potential Magnitude of the Problem

Q. HOW SUBSTANTIAL ARE POTENTIAL SHAREHOLDER LOSSES FROM REDUCED KILOWATT-HOUR SALES?

A. The Company's proposed fixed cost revenue requirement for the five major customer classes (see Attachment 1, Exhibit No. _____(RCC-2) is $154.8 million, of which $139.9 million would be recovered from variable demand and energy charges if current fixed charges are retained; energy charges alone would account for $120 million. The Company's proposed rate structure adjustments would reduce these numbers only slightly, to $137 million and $112.2 million, respectively. Either way, every one percent reduction in electricity use and demand on the Company's system would cut annual fixed cost recovery totals by $1.37 million or more; every one percent increase 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 shareholder interests.

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 at least $1.37 million dollars, followed by $2.74 million dollars in the second year (as an equal amount of savings is added), and so on: **the automatic five-year loss to shareholders from this steady-state utility investment program would be almost twenty-one million dollars**,[8] with shareholder losses continuing to escalate in succeeding years as initial electricity savings persisted (with some gradual erosion) and more savings were added. Note that the shareholders would be absorbing these losses even as society gained from substituting less costly energy efficiency for more costly generation.

Q. WHAT MAKES YOU THINK UTILITIES CAN SUSTAIN COST-EFFECTIVE ENERGY EFFICIENCY PROGRAMS EQUIVALENT TO ABOUT ONE PERCENT OF SYSTEM CONSUMPTION?

A. Recent history proves as much.[9] The California Public Utilities Commission recently adopted comparable electricity savings targets for California's utilities. These targets represent 1.08% of system load in 2007 for the state's three principal utilities, ramping up to 1.13% in 2013.[10] By comparison, for 2004 and 2005, annual savings targets represent about 0.85% of those utilities' system loads.[11] The Northwest Power Planning Council's recent estimate of cost-effective and achievable regional potential is of comparable magnitude, even though it largely

[8] The minimum loss figure is the sum of $1.37 million + $2.74m + $4.11m + $5.48m + 6.85m = $20.55 million.
[9] This reflects a comparison of the most recent reported annual statewide savings (220,277 MWh for 2003 and 239,257 MWh for 2004) and the most recent data on statewide electricity use (68,007,000 MWh for 2003). See Wisconsin Public Benefits Program, Annual Report, July 1, 2003 to June 30, 2004, p. 7; and State of Wisconsin, Department of Administration, Wisconsin Energy Statistics 2004, p. 46.
[10] See California Public Utilities Commission, Decision No. 04-09-060 (September 23, 2004).
[11] The annual energy savings for the 04-05 programs are from California Public Utilities Commission, D.03-12-062 (2003); the demand forecast for 2004-05 is from CEC, California Energy Demand 2003-2013 Forecast (Publication #100-03-002: 2003), Appendix A.

excludes the industrial sector.[12] In 1993, as reported by the Public Service Commission of Wisconsin itself, statewide savings reached 621 gigawatt-hours, or about 1.2 percent of statewide electricity use.[13] Moreover, given longstanding disparities in electricity prices, I would expect Washington to have untapped energy efficiency opportunities at least equal to California's and Wisconsin's, in relative terms.

Q. WOULD COST-EFFECTIVE FUEL SUBSTITUTION AND DISTRIBUTED GENERATION PROGRAMS HAVE THE SAME KIND OF ADVERSE EFFECT ON COMPANY EARNINGS?

A. Yes. Substituting efficient gas applications for electricity, or adding distributed generation on the customer's side of the meter, reduces retail kilowatt-hour sales and has adverse effects on fixed-cost recovery that are identical (per kWh of lost retail sales) to those described above.

Q. WHY COULDN'T PACIFICORP RECOUP THESE LOST REVENUES BY REDIRECTING THE UNSOLD KILOWATT-HOURS TO WHOLESALE MARKETS?

A. This would of course not be possible if, as would normally be true in competitive wholesale power markets, wholesale prices reflect operating costs only, leaving no opportunity for recovery of fixed costs associated with retail services. Moreover, for many utilities, power cost adjustment mechanisms ensure that customers receive all or most of any wholesale revenues exceeding generation costs.

However, as of early November 2005, wholesale electricity prices are at least intermittently spiking above PacifiCorp's Washington State retail rates, and the company does not have a power cost adjustment mechanism. Reduced retail sales under such circumstances do not yield reductions in fixed cost recovery; indeed, when wholesale rates exceed retail rates,

[12] An April 2004 Council report estimated the achievable, cost-effective regional energy efficiency potential at about 150 average MW per year over the next 20 years (with an average cost of savings under 2.5 cents/kWh), equivalent to just under one percent of current system loads per year, and this figure assumed only a five percent improvement in average industrial sector efficiency over that period. See Northwest Power Planning Council, Conservation Resource Potential in the Fifth Power Plan: Economically Achievable Potential and Total Resource Cost Tests (April 8, 2004).

[13] PSC-reported savings are from Wisconsin's Environmental Decade Institute, Energy Efficiency Crisis Report, p. 1 (1999); statewide electricity consumption data for 1993 are from State of Wisconsin, Department of Administration, Wisconsin Energy Statistics 2004, p. 46.

substituting wholesale sales for retail sales is likely to benefit PacifiCorp shareholders. I do not expect these unusual circumstances to persist, and I do not think that they serve to eliminate financial barriers to utility investment in long-term energy-efficiency improvements, but – as explained below – I intend by December 7th to seek broad support for a way to address those barriers through a mechanism that also accommodates any wholesale market conditions and opportunities.

c. The Solution: Removing Disincentives with Rate True-Ups

Q. IF YOU OPPOSE HIGHER FIXED CHARGES, HOW WOULD YOU PROPOSE TO REMOVE THE FINANCIAL DISINCENTIVES DESCRIBED IN EARLIER SECTIONS OF YOUR TESTIMONY?

A. To eliminate a powerful disincentive for energy efficiency and distributed-resource investment, I support the use of modest, regular true-ups in rates to ensure that any fixed costs recovered in kilowatt-hour charges are not held hostage to sales volumes. The state regulatory community has more than two decades of experience with such mechanisms, which involve a simple comparison of actual sales to predicted sales, followed by an equally simple determination of actual versus authorized fixed cost recovery during the period under review. The difference is then either refunded to customers or restored to the Company. Note that the true-up can go in either direction, depending on whether actual retail sales are above or below regulators' initial expectations.

Q. IS THERE PRECEDENT FOR SUCH A MECHANISM IN WASHINGTON?

A. All the key elements of this proposal appeared in a revenue cap mechanism adopted by the Commission for Puget 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.[14]

[14] 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

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."[15]

Q. BUT DIDN'T THE COMMISSION SUBSEQUENTLY REPUDIATE THIS REVENUE-PER-CUSTOMER CAP?

A. No, and I can underscore that response based on my own involvement throughout the process. 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."[16] Based on these findings, the Commission granted a three-year extension of the revenue-per-customer cap.[17] 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."[18] In 2004, the Commission invited PacifiCorp and other stakeholders

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it did not perfectly match costs and rates: "even under the current system of ratemaking, costs and rates will diverge immediately following implementation of a rate change." Id. at p. 10.

[15] Id., at p. 10.

[16] See Washington UTC, Eleventh Supplemental Order, Docket No. UE-920433, p. 10 (September 21, 1993).

[17] See id. , p. 10 (concluding that "the PRAM/decoupling experiment should continue for at least another three-year cycle").

[18] Docket No. UE-921262, Joint Report and Proposal Regarding Termination of the Periodic Rate Adjustment Mechanism (April 20, 1995).

to begin discussions regarding the design of such a mechanism, in its order approving a settlement proposal by NRDC, the Commission staff, and PacifiCorp.[19]

Q. WOULD YOUR PROPOSED TRUE-UPS INTRODUCE SIGNIFICANT NEW VOLATILITY IN ELECTRICITY RATES?

A. No, because consumption does not fluctuate enough from year to year to require disruptive true-ups. Even aggressive conservation programs would not reduce loads by more than about one percent per year, as discussed above, and even under the extraordinary conditions prevailing in some recent years, PacifiCorp's retail electricity sales in Washington never dropped by more than 3.3 percent (actual) and 1.6 percent (weather adjusted), respectively.[20] My analysis of PacifiCorp's retail sales and rates indicates that the largest plausible annual impact of a true-up mechanism would be about two percent of retail rates: less than 1.5 mills per kilowatt-hour.

Q. EXPLAIN YOUR CONCLUSION ABOUT THE RATE IMPACTS OF A TRUE-UP MECHANISM.

A. A true-up mechanism would give back or restore the difference between authorized fixed-cost recovery and actual recovery based on actual sales. Assuming that the Commission approves the Company's requested fixed cost revenue requirement of $154.8 million for the five major customer classes (see Attachment 1), and assuming that current fixed charges are not increased, $139.9 million annually must be recovered from energy and demand charges. This means that about $1.4 million would be lost or gained for every one percent by which sales diverged from assumptions used to set rates.

Under these assumptions, a "worst case" annual rate impact of a true-up mechanism would come in a year comparable to 2002, when retail sales dropped by just over three percent (actual) and under two percent (normalized) at a time when the Company was not making substantial energy efficiency investments. Assuming that the higher of these impacts were added to those of robust efficiency programs with savings equivalent to one percent of system-wide

[19] See Washington UTC v. PacifiCorp, Docket No. UE-032065, Order No. 06, pp. 29-30 (October 2004) (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").

[20] See Attachment 1, which provides actual and normalized annual electricity sales over the past decade. Normalized retail kWh sales dropped by 1.6 percent in 2002; actual sales dropped by 3.3 percent.

consumption, the true-up mechanism would still only have to restore about $5.6 million to compensate for a four percent reduction in consumption and associated fixed-cost recovery (and less if the initial forecast had anticipated the energy-efficiency impacts). With a total revenue requirement of $257.4 million (assuming that the Company's request is granted), this implies a rate increase of 2.2% for the true-up under worst-case conditions (average for all classes). Such an increase would be equivalent to less than 1.4 mills/kWh, on average, based on a weighted average rate for all classes of 6.42 cents per kWh.[21]

Under more typical circumstances in which consumption increases outpaced efficiency impacts, of course, the true-up could easily result in a modest rate reduction. Since 1996, PacifiCorp's actual and normalized retail sales in Washington have increased by 9.5% and 9.1%, respectively (see Attachment 1, Exhibit No. _____ (RCC-2). As shown in the illustrative calculation above, rate impacts up or down under a true-up mechanism will necessarily be modest as long as corrections occur on a regular basis and balances do not accumulate significantly over multiple years.

Q. IS THERE RELEVANT RECENT EXPERIENCE WITH COMPARABLE MECHANISMS IN OTHER STATES?

A. The most extensive recent activity with which I am familiar is in California, Oregon, Idaho, and Wisconsin. **California** has embraced a true-up policy for all its investor-owned utilities, covering fixed costs of delivering both electricity and natural gas;[22] in California today utilities' recovery of fixed costs is completely independent of retail sales. Not coincidentally, California utilities are conducting the nation's most aggressive energy efficiency programs (measured in savings as a percentage of retail electricity and natural gas use).

Oregon's PUC adopted a true-up mechanism for PacifiCorp in 1998, covering fixed costs of electricity distribution.[23] Initial rate impacts of the Oregon "Alternative Form of

[21] See Exhibit WRG-3 (Griffith).
[22] In 2001, the legislature enacted Public Utilities Code section 739.10, directing the PUC to "ensure that errors in estimates of demand elasticity or sales do not result in material over- or under-collections." The PUC has responded by reestablishing true-up mechanisms covering retail sales of both electricity and natural gas.
[23] Oregon PUC, Order No. 98-191 (May 5, 1998) (covering 1998 – 2001). Rate impact data were supplied to me by PacifiCorp's Paul Wrigley.

Regulation" were extremely modest for all classes, and (as predicted) adjustments went in both directions; the largest annual rate increase for any class was 1.9%, the largest annual rate reduction was 0.83%, and out of a total of fifteen true-ups from 1999 – 2001, seven resulted in rate reductions and eight resulted in rate increases. More recently (in 2002), the Oregon PUC also adopted a modified true-up mechanism for Northwest Natural Gas; an independent evaluation concluded in March 2005 that the mechanism was "effective in altering Northwest Natural's incentives to promote energy efficiency" and should be retained, although the authors recommended removing some rather complex features that were not relevant to the mechanism's primary purpose.[24] The Commission adopted an order in August 2005 adopting a stipulation that simplified the mechanism and extended it for another four years.[25]

The **Wisconsin** Public Service Commission determined in July 2005 that utilities' financial disincentives were inappropriately constraining statewide energy efficiency development, and that ""the time is right to fully explore true-up mechanisms and performance-based incentives."[26] Those efforts are now underway as Alliant, one of the state's principal utilities, convenes multi-party workshops to seek consensus on proposals to present to the Commission as part of the Company's next rate case.

In May 2004, the **Idaho** Public Utilities Commission opened a proceeding to address financial disincentives for Idaho Power's energy efficiency investments and performance-based incentives tied to the utility's success in delivering cost-effective savings.[27] Subsequent workshops yielded a report to the Commission, embraced by all participants, which included the conclusions that "the workshop participants agreed that material financial disincentives to the implementation of DSM programs do exist," and called for detailed retrospective and prospective financial analyses "to evaluate incorporation of a true-up mechanism into the [Company's next] rate filing," along with pilot testing of a performance-based DSM incentive.[28]

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[24] D. Hansen & S. Braithwait, A Review of Distribution Margin Normalization as Approved by the Oregon Public Utilities Commission for Northwest Natural (March 2005), pp. 67-68.
[25] Oregon PUC, Order No. 05-934 (UG 163, August 25, 2005).
[26] Public Service Commission of Wisconsin, Order No. 6680-UR-114, p. 55 (July 2005).
[27] Case No. IPC-E-03-13, Order No. 29505 (May 25, 2004), pp. 68-69.
[28] Final Report on Workshop Proceedings, Case No. IPC-E-04-15 (Feb. 14, 2005), pp. 6 & 10-11.

Idaho Power is now conducting that analysis and further proceedings are likely at the Commission later in 2005.

Q. WHY DON'T MORE STATES HAVE TRUE-UP MECHANISMS IN PLACE TO ELIMINATE DISINCENTIVES FOR UTILITY INVESTMENT IN DEMAND-SIDE RESOURCES?

A. A strong trend in that direction was interrupted in the mid-1990s by a stampede toward an industry restructuring model (pioneered in California) that denied utilities any substantial role in resource planning or investment. On that theory, there was no reason to worry about utilities' energy efficiency incentives, because utilities would be transferring their resource management responsibilities to unregulated participants in wholesale and retail electricity markets. The Western electricity crisis of 2000-2001 has discredited that model, which in any case never took hold in Washington. Most states are now restoring full or at least significant utility responsibility for resource portfolio management, and I can attest from frequent appearances at regulatory and utility forums that interest in true-up mechanisms is reviving.

Q. WHAT ARE THE MOST IMPORTANT DESIGN ISSUES THAT THE COMMISSION NEEDS TO RESOLVE IN CREATING A TRUE-UP MECHANISM FOR PACIFICORP?

A. Once the Commission has approved a fixed-cost revenue requirement in this proceeding and established retail rates based on test year sales, several basic questions remain to be resolved:

- Will an opportunity be created for the company's fixed-cost recovery to change between rate cases to reflect changing conditions, including system growth?
- For purposes of calculating and applying the true-ups, will the Commission merge the major customer classes or treat each one separately?
- Will annual retail sales be adjusted for weather-driven fluctuations before the true-ups are calculated?
- How often will true-ups occur, and will they be capped at some level of maximum annual rate impact, with balances carried forward as necessary?

Q. HAVE YOU CONSULTED WITH OTHER PARTIES IN DEVISING YOUR RECOMMENDATIONS FOR ADDRESSING THESE ISSUES?

A. I made a commitment to do so at the prehearing conference in this proceeding, and I have discussed the proposals in this testimony with PacifiCorp, Commission Staff, ICNU, the Energy Project and Public Counsel. Responsibility for the recommendations remains mine alone at this time, in part because an important issue surfaced late in these discussions that needs further work. As explained below, that issue involves adjustments to reflect wholesale market prices, on which I hope to finalize a proposal in time for inclusion in either the Company Rebuttal Testimony or All Party Testimony on the Decoupling Proposal, which are due on December 7th.[29] I note my appreciation for the willingness of all involved to work with NRDC since the prehearing conference, and I acknowledge the constructive spirit that has prevailed throughout these discussions.

IV. Specific Recommendations for the Commission

Q. HOW WOULD YOU RESOLVE THE QUESTIONS THAT YOU POSED REGARDING THE DESIGN OF A TRUE-UP MECHANISM, AND WHAT SPECIFIC TRUE-UP MECHANISM DO YOU RECOMMEND THAT THE COMMISSION ADOPT IN THIS PROCEEDING?

A. My proposed responses appear below. My aim is to describe a true-up mechanism that minimizes administrative costs, opportunities for gaming, and rate instability, while ensuring that fluctuations in retail sales do not affect PacifiCorp's ability to recover its authorized fixed-cost revenue requirement. I will continue to work with all parties between now and December 7th in hopes of securing joint testimony in support of such a mechanism.

- *Will an opportunity be created for the company's fixed-cost recovery to change between rate cases to reflect changing conditions, including system growth?*

RECOMMENDATION: As in the original Puget decoupling mechanism, the Commission should establish in this proceeding an authorized revenue requirement per customer, which would not change between rate cases. Growth in the customer

[29] See Prehearing Conference Order, Docket No. UE-050684 (June 8, 2005).

count would yield revenue increases to help meet the needs of a growing system; the company's revenues would decline if the customer count dropped.

- *For purposes of calculating and applying the true-ups, will the Commission merge the major customer classes or treat each one separately?*

RECOMMENDATION: The Commission should establish an authorized revenue requirement on a per-customer basis, in two categories: (1) Residential, and (2) All Other (excluding industrial customers served under Schedule 48T). The mechanism would not apply to industrial customers served under Schedule 48T.

- *Will annual retail sales be adjusted for weather-driven fluctuations before the true-ups are calculated?*

RECOMMENDATION: Yes, so that no shift of weather-related financial risk to customers would occur as a result of the mechanism.

- *How often will true-ups occur, and will they be capped at some level of maximum annual rate impact, with balances carried forward as necessary?*

RECOMMENDATION: PacifiCorp should be directed to establish annual tracking of customer counts and revenue recovery based on retail sales, and to maintain a balancing account that reflects the differences between actual and authorized revenues. The company should be authorized to file annually to secure any true-ups necessary to eliminate positive or negative balances, following notice to the public and opportunity for hearing. The maximum annual rate impact of the true up mechanism for any customer class should be capped at 2%, with any residual account balances carried forward to the next true-up filing.

Q. HOW DO YOU PROPOSE TO INCORPORATE WHOLESALE MARKET CONDITIONS IN THE MECHANISM?

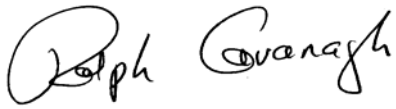
A. I think there is broad agreement that the issue needs to be addressed, and that if the Commission does not adopt a power cost adjustment mechanism for PacifiCorp, the balancing account created as part of the proposed true-up mechanism would need to incorporate an allowance for wholesale transactions when wholesale prices were high enough to compensate

wholly or partly for the company's financial losses from reduced retail sales. I will work with all parties to seek a mutually agreeable formula for accomplishing that result in time for joint and/or rebuttal testimony on these issues, for which the Commission has established a December 7th deadline.

Q. DOES THAT CONCLUDE YOUR TESTIMONY?

A. Yes.

Dated this 2nd day of November, 2005,



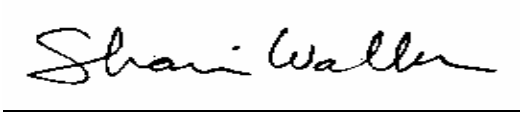
Ralph Cavanagh

Docket No. UE-050684

CERTIFICATE OF SERVICE

I hereby certify that I have this day served true and correct copies of the Direct Testimony of Ralph Cavanagh upon the persons and entities listed on the Service List below via e-mail and by depositing a copy of said documents in the United States mail, addressed as shown on said Service List, with first-class postage prepaid.

DATED at San Francisco, California this 2nd day of November, 2005.



Shari Walker

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