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May 19, 2005

Via Electronic Filing and U.S. Mail

OREGON PUBLIC UTILITY COMMISSION
ATTENTION: FILING CENTER
PO BOX 2148
SALEM OR 97308-2148

RE: OPUC Docket Nos. DR 10, UE 88, UM 989 (UE 88 Remand) - In the Matters of:

The Application of Portland General Electric Company
For an Investigation into Least Cost Plan Plant
Retirement (DR 10)

Revised Tariffs Schedules for Electric Service in Oregon
Filed by Portland General Electric Company (UE 88)

Portland General Electric Company's Application for an
Accounting Order and for Order Approving Tariff Sheets
Implementing Rate Reduction (UM 989)

Enclosed for filing in the above-captioned docket are the Public Utility Commission's DR 10, UE 88, and UM 989 (UE 88 Remand) Direct Testimony. This document is being filed by electronic mail with the PUC Filing Center. Staff Exhibit 202 is not available in electronic format.

/s/ Judy Ogilvie

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PUBLIC UTILITY COMMISSION
OF OREGON

DR 10, UE 88, UM 989
(UE 88 Remand)

STAFF TESTIMONY

OF

ED BUSCH AND JUDY JOHNSON
THOMAS MORGAN

In the Matters of:

The Application of Portland General Electric Company
For an Investigation into Least Cost Plan
Plant Retirement (DR 10)

Revised Tariffs Schedules for Electric Service in Oregon
Filed by Portland General Electric Company (UE 88)

Portland General Electric Company's Application for an
Accounting Order and for Order Approving Tariff Sheets
Implementing Rate Reduction (UM 989)

Redacted Version

May 19, 2005

CASE: UE 88 (Remand)
WITNESS: Ed Busch & Judy Johnson

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 100

Direct Testimony

May 19, 2005

Q. PLEASE STATE YOUR NAMES, BUSINESS ADDRESS AND POSITIONS.

A. My name is Ed Busch. I am the Administrator of the Electric & Natural Gas Division in the Utility Program of the Public Utility Commission of Oregon (OPUC). My qualifications are shown in Exhibit Staff/101, Busch-Johnson/1.

My name is Judy Johnson. I am the Program Manager for Electric & Natural Gas Revenue Requirements in the Utility Program of the OPUC. My qualifications are shown in Exhibit Staff/101, Busch-Johnson/2.

Our business address is 550 Capitol Street NE, Suite 215, Salem, Oregon 97301-2551.

Introduction and Summary

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. We review the direct testimony and exhibits of Portland General Electric Company (PGE or company) in remand proceedings related to Dockets UE 88, UM 989 and DR 10 (referred to collectively as “UE-88 remand”). We evaluate the arguments and recommendations of the company’s witnesses, and make recommendations to the Commission regarding the rates resulting from UE 88 and UM 989.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. We begin by summarizing our understanding of the legal and policy requirements in this proceeding. We then assess PGE’s approach and recommendations. Finally, we discuss an alternate scenario that the Commission might consider in making its determination in this case.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

A. We reached the following conclusions in our review:

1. The scope of the Commission's decision in the first phase of this proceeding is to determine "What rates would have been approved in UE 88 if ORS 757.355 had been interpreted to prohibit a return on Trojan?"

2. PGE's proposed structure for the analysis—comparing the revenue requirement of alternative scenarios against actual rate case results over the period April 1, 1995 through September 30, 2000—provides a rational basis for judging whether the original UM 989 decision was appropriate.

3. PGE provided three revenue requirement approaches for the Commission's consideration. Staff recommends the Commission also consider PGE's Approach II with staff's modifications or staff's alternate approach. These scenarios reflect what we believe the Commission most likely would have concluded to meet, as closely as reasonably possible, the objectives of intergenerational equity, acceptable rate impacts, and maintaining PGE's financial integrity. Staff/102, Busch-Johnson/1 summarizes the revenue requirement elements (or "building blocks") for the scenarios presented by PGE and staff.

Legal and Policy Requirements

Q. WHAT IS THE PURPOSE OF THE UE-88 REMAND PROCEEDING?

A. The Commission reopened the three dockets to simultaneously address two remand orders by the Marion County Circuit Court (remanding to the Commission Order Nos. 93-1117, 93-1763, 95-322, and 02-227) stemming from the Oregon Court of Appeals decision that the Commission erred in allowing PGE to recover in rates a return on its undepreciated investment in its Trojan nuclear plant (Trojan) after Trojan was retired. *See Citizens' Utility Board of Oregon, et al., v. Public Utility Commission of Oregon*, 154 Or App 702 (1998). The two 1993 orders stem from a declaratory ruling proceeding, Docket No. DR 10, in which the Commission issued a declaratory ruling addressing general legal and policy issues regarding ratemaking treatment for retired utility plant. Order No. 95-322 stems from Docket No. UE 88, a general rate case in which the Commission decided, among other things, the appropriate ratemaking treatment of PGE's undepreciated investment in Trojan, which included the Commission's decision to allow PGE to recover a return on the undepreciated Trojan investment. Finally, Order No. 02-227 stems from Docket No. UM 989. That docket commenced after the Court of Appeals issued its 1998 opinion concluding that the Commission erred in allowing PGE to earn a return on its undepreciated investment in Trojan. In UM 989, the Commission decided the appropriate ratemaking treatment of the undepreciated Trojan investment remaining on PGE's books at that time.

In Administrative Law Judge Kirkpatrick's ruling of August 31, 2004, and Order Nos. 04-597 and 05-091, the Commission established the scope of the first phase of this remand proceeding. The Commission found the question that must be addressed is "What rates would have been approved in UE 88 if ORS 757.355 had been interpreted to prohibit a return on Trojan?" (Order 04-597, Appendix A, page 18.) The Commission stated:

> We concur with the [Court's] Ruling that the concurrent remand of all three dockets provides an opportunity to revisit rate determinations made in UE 88 in light of the Circuit Court's ruling regarding the UM 989 order, with subsequent reconciliation of the revised rate determinations against rates established in other dockets, such as UM 989, if necessary. (Order 04-597, page 6)

Q. IN ORDER TO REACH ITS DETERMINATIONS IN THE FIRST PHASE OF THIS PROCEEDING, WHAT ISSUES DID THE COMMISSION DETERMINE SHOULD BE ADDRESSED?

A. To determine what rate decisions it would have made in UE 88, the Commission stated that it must "engage in ratemaking," including considering "other factors" than simply earnings on Trojan. (Order 04-597, page 6).

> [T]he ruling identifies the scope of the first phase of these proceedings to be consideration of “only those aspects of the ratemaking process in UE 88 that are affected by the Court of Appeals’ statutory interpretation” of ORS 757.355. Again the goal is to determine what rates would have originally been set under this statutory interpretation. The Ruling further identifies three specific rate determinations in UE 88 that are affected by the Court of Appeals decision, as follows: 1) the appropriate recovery period for the Trojan investment balance; 2) the cost of capital effects of the utility’s change of circumstances; and 3) the application of the net benefits formula given that PGE is precluded from recovering the cost of capital represented by the Trojan investment.
>
> The ruling did not prohibit Staff, URP or other parties from raising additional issues that are consistent with the general framework of the scope for the first phase. . . (Order 04-597, pages 6-7)

Q. HOW DO YOU INTERPRET THE COMMISSION’S RULING ON THE SCOPE OF THIS PHASE OF THE PROCEEDING?

A. The ruling noted three separate elements of the UE 88 rate determination that might change with the understanding that there could not be any return on Trojan: recovery period for Trojan, cost of capital effects, and application of the net benefits test. The Commission also stated that parties could raise other issues or factors as long as they are consistent with the Commission’s responsibility to set just and reasonable rates. In other words, parties should make recommendations regarding the revenue requirement decision the Commission would have made as of April 1, 1995 (the effective date of Order 95-322), had the Commission known it was prohibited from approving rates that included a return on the retired Trojan plant investment.

Q. WHAT CONSIDERATIONS DID PGE RECOMMEND THE COMMISSION TAKE INTO ACCOUNT IN MAKING ITS DETERMINATIONS?

A. On page 14 through 18 of PGE Exhibit 6000, Ms. Lesh identifies three criteria by which PGE (and the Commission) should evaluate the factual and policy decisions in UE 88 and UM 989. To summarize, PGE asserts that the decision should: (1) encourage electric utilities to analyze and make resource decisions that provide an adequate supply of energy at least cost to both the utility and its customers; (2) equitably allocate the costs and benefits of resource decisions to customers over time; and (3) preserve the utility's financial integrity and retain the ability to attract debt and equity capital at reasonable cost.

Q. DO YOU AGREE WITH PGE'S PROPOSED CRITERIA?

A. Generally, yes. Regarding the first and third criteria, utilities should have the incentive to acquire the resources needed to serve customers at the least cost. If a utility performs an analysis demonstrating that acquiring a new resource to replace an existing, uneconomic resource will result in lower costs for customers—including recovery of the undepreciated cost of the uneconomic resource—the utility should take that action.[1] If the Commission then required the utility to recover the uneconomic investment over a period of time without a return on investment (rather than "immediately"), the utility's investors would be short-changed through the loss of opportunity cost on their funds. Depending on the period of recovery and magnitude of the lost return on investment, investors might view such treatment as increasing risk, which could lead to higher costs of capital and increased rates in the future. As Ms. Lesh points out, the potential for these effects would provide the utility little incentive to take the proper resource action.

The second criteria, equitably allocating benefits and costs of a resource over time, can conflict with the first criterion that suggests immediate recovery of the retired investment. In the case of Trojan, the cost-benefit study performed in UE 88 covered the costs of the plant and alternative resources over the projected life of the plant (ending in the year 2011). That time frame is reasonable, because we would expect customers over the entire 1995-2011 period to be affected by the decision to either close or continue to operate the plant. In setting recovery of the retired investment in UE 88 on that basis, the Commission adhered to the "matching costs and benefits" principle.

In short, while we agree that the Commission should attempt to meet these criteria in this remand proceeding, the Commission should recognize that the ratemaking decision may not be able to do so fully for each principle.

Q. WHAT ADDITIONAL RATE IMPACTS DOES STAFF BELIEVE THE COMMISSION WOULD HAVE ALLOWED IN UE 88 IN ORDER TO MINIMIZE THE EFFECT OF TROJAN NOT EARNING A RETURN ON INVESTMENT?

A. We believe the Commission most likely would have allowed a moderate level of additional increase in rates with the intent of minimizing the amount of "return on" PGE loses, and would have spread the rate impact over a number of years. For example, the Commission has allowed recovery of PGE's, PacifiCorp's and Idaho Power Company's 2001 deferred excess power costs over several years.[2] While the annual amortization amounts were, in fact, limited by ORS 757.259, the multi-

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[1] This example assumes that a resource that was prudently acquired has, through no fault of the utility, become uneconomic compared to other alternatives. If a utility, during the course of operating the resource, were to make imprudent decisions or the Commission were to otherwise determine that certain costs were not recoverable (as with Trojan steam generator investment—see Order 95-322 at 60-63), those amounts would be excluded from the cost-benefit analysis.

year recovery represents sound policy. To mitigate the loss of return on investment, we might expect the Commission to allow rapid recovery of Trojan but at the same time make other adjustments to mitigate rate shock.

Q. WHY DO YOU BELIEVE THE COMMISSION, IF IT HAD KNOWN THAT A RETURN ON ABANDONED PLANT COULD NOT BE INCLUDED IN REVENUE REQUIREMENT, WOULD HAVE ALLOWED RAPID RECOVERY OF TROJAN?

A. The Commission's previous decisions regarding Trojan cost recovery suggest the Commission would have attempted to make PGE whole for ratepayers' share of investment retired for economic reasons. In Docket DR 10, Order No. 93-117, the Commission stated "After review, the Commission may decide that PGE is entitled to full recovery of unrecovered plant costs, or it may determine that some cost sharing should occur between customers and investors."

In its subsequent rate case decision in UE 88, the Commission found that, after the combined disallowance of the negative net benefit and post-1991 disallowances, recovery of 87 percent (as explained earlier, $340.2 million pre-tax) of remaining Trojan investment was in the public interest. (Order No. 95-322 at 52.) By authorizing recovery of the investment over the original remaining life of 17 years and including a return on the undepreciated balance in rates, the Commission explicitly approved recovery of the present value of $340.2 million. To argue in this remand proceeding that the Commission would have made a ratemaking decision in UE 88 that resulted in a significantly different recovery amount is inconsistent with the original decision.

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[2] See, e.g., PGE Dockets UM 1008/1009 and UE 136, PacifiCorp Dockets UM 995, UE 121 and UE 127, and Idaho Power Dockets UM 1007, UE 123 and UE 131.

Moreover, the Commission supported this view in its UM 989 decision, Order 02-227 at 10-11:

> The Commission could determine that if Trojan should not have been included in rate base, PGE should have recovered the entire Trojan balance immediately instead of over 17 years, as provided in Order No. 95-322. This would provide PGE and customers with the same outcome as Order No. 95-322, and PGE would not owe refunds. The Court of Appeals decision expressly did not address this issue. *Id.* At 712 n.5.
>
> Contrary to URP's position, we believe that the "no refund" outcome is consistent with the public interest. In Order No. 95-322 at 2, we expressed the goal of holding customers harmless for the premature closure of Trojan while also providing PGE with the appropriate incentives. If we required PGE to give refunds (leaving aside the fact that we have no power to do so) utilities would have an incentive to continue to operate plants past their economic or efficient useful lives.

In short, these orders lead us to conclude that the Commission intended that PGE should recover the value of customers' share of remaining Trojan investment in rates. We expect the Commission, in revisiting its UE 88 decision, would have allowed PGE to recover Trojan expeditiously so as to minimize loss of return on investment. At the same time, the Commission might well have adjusted other cost elements to keep rates reasonably stable.

<u>PGE's Proposed Approach and Analysis</u>

Q. WHAT IS PGE'S PROPOSED QUANTITATIVE APPROACH IN ITS DIRECT TESTIMONY AND EXHIBITS?

A. To address the primary question that the Commission identified for the first phase of the proceeding—"What rates would have been approved in UE 88 if ORS 757.355 had been interpreted to prohibit a return on Trojan?"—PGE provided three separate scenarios with different factual and policy decisions the

Commission might have made. Each scenario consists of a different combination of a number of elements modified from UE 88, including amortization period for undepreciated Trojan investment, return on common equity and capital structure, calculation and application of the net benefits test, classification of certain Trojan components as plant-in-service, amortization period for certain regulatory assets and liabilities, and treatment of forecasted net variable power costs. PGE refers to these elements as "building blocks."

For each scenario, PGE provides a 5.5-year incremental cost analysis, from April 1, 1995, the effective date of UE 88 rates, through September 30, 2000, the effective date of the UM 989 rates. The analysis compares the revenue requirement change for the particular scenario (the sum of the revenue requirement for each element or building block modified) to the actual revenue requirement for those elements over the five and one-half year period. Note that, although we will refer to the "UE 88 revenue requirement", the Commission's revised revenue requirement decision on certain elements would affect not only UE 88 (4/1/95), but also the revenue requirement in UE 93 (11/28/95) and UE 100 (12/1/96).

PGE then calculates a "Derivation of Balance owed PGE at 9/30/2000" for each of its three scenarios. This calculation consists of the regulatory assets and revenue requirement effects[3] that would have existed at the time of the UM 989 decision if that particular scenario had occurred. PGE refers to the balance owed as its balance sheet. The balance at 9/30/2000 under each scenario is intended

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[3] The "balance owed" figure includes both the difference and the associated time value of money on the difference, calculated at PGE's rate of return.

to inform the Commission's determination in this remand proceeding regarding UM 989.

Q. PLEASE EXPLAIN THE IMPLICATIONS OF THE BALANCE OWED TO PGE AT 9/30/2000 ON THE UM 989 REMAND.

A. The UM 989 settlement and final order removed both the remaining Trojan balance of $180.5 million and $161.9 million of customer credits (primarily related to Enron-related merger credits and a power sale contract settlement with Southern California Edison Co.) from the company's balance sheet. As PGE describes on pages 2-3 of PGE Exhibit 6200, the Commission can review PGE's balance sheet at 9/30/2000 under PGE's alternate scenarios to see whether the premise behind the UM 989 settlement is still valid and customers received a benefit from the settlement. Specifically, if the Commission finds that customers owe PGE at least the $180.5 million at that date, the UM 989 settlement and rates should be determined reasonable. If not, refunds to customers may be required.[4]

Q. DO YOU AGREE WITH THE STRUCTURE OF PGE'S ANALYSIS?

A. Yes. We agree with the basic structure of comparing revenue requirements of a particular scenario with actual rate case results over the 5.5 year period. This accomplishes two objectives. First, replacing actual UE 88 rates with rates based on different elements will allow the Commission to retroactively exclude from PGE's revenue requirement any unlawful return on retired Trojan. Second, replacing UE 88 rates with rates based on decisions the Commission would likely have made had it known that allowing a return on Trojan was unlawful will enable the Commission to determine whether sufficient regulatory assets would have existed at September 30, 2000, to have allowed it to make the same decision in UM 989.

Q. EACH OF PGE'S SCENARIOS INVOLVES AN INCREMENTAL COST ANALYSIS FOR THE 5.5-YEAR PERIOD DURING WHICH PGE EARNED A RETURN ON TROJAN. DOES PGE BELIEVE THAT THE 5.5-YEAR PERIOD IS THE APPROPRIATE RATE PERIOD UNDER CONSIDERATION IN THESE PROCEEDINGS?

A. No. PGE asserts that, notwithstanding the fact that it earned a return on its undepreciated Trojan investment over a five and one-half year period encompassing rates issued in three rate cases, the only rates at issue are those set under the Commission's UE 88 order, and in effect for only eight months. Portland General Electric Company's Opening Brief at 20. PGE asserts that because the rates issued in Docket No. UE 93 (in effect from November 1995 to December 1996) and UE 100 (in effect from December 1996 to September 2000) were not challenged; any Trojan return earned by PGE is outside the scope of this proceeding.

Q. DOES STAFF AGREE WITH THIS POSITION?

A. No. Assuming, as we are for purposes of this remand proceeding, that the filed rate doctrine does not prohibit the Commission from making retroactive changes to filed rates, Staff's counsel advises that the fact the UE 93 and UE 100 rates were not challenged is not a decisive factor in determining the scope of the rate

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[4] On PGE/6200/3, PGE states that "In fact, remaining balances of less than $180 million, as long as above $161 million, would imply that customers still benefited from the UM 989 settlement." In Order 02-227 at 19, the Commission cited analyses showing a range of customer benefit of $16.4

period at issue. Contrarily, assuming the filed rate doctrine does not apply, and in light of the fact the court of appeals has decided that allowing PGE to earn a return on its undepreciated investment in retired plant was unlawful, the Commission has sufficiently broad authority to remove from rates any return on Trojan investment that PGE was allowed to earn.

Q. DOES PGE'S LEGAL POSITION REGARDING THE APPROPRIATENESS OF EXAMINING RATES OTHER THAN THOSE SET IN UE 88 AFFECT STAFF'S ANALYSIS OF PGE'S ALTERNATE SCENARIOS?

A. No. Despite the company's legal position, PGE's scenarios assume that the period at issue in this proceeding is the 5.5-year period during which PGE earned a return on Trojan, and are not predicated on the assumption that the only rates at issue are the UE-88 rates. Staff agrees the analysis should be performed on that basis.

Q. HOW DO YOU RECOMMEND THE COMMISSION EVALUATE ANY SCENARIO ANALYSIS?

A. We acknowledge that there are numerous revenue requirement scenarios, with many combinations of elements, which the Commission might have approved in UE 88. However, we believe it would be sensible for the Commission to determine a "most likely" scenario based on both the individual elements and the reasonableness of the overall result. PGE's proposed criteria can be used to assist in judging the overall result.

Q. WHERE ARE PGE'S THREE REVENUE REQUIREMENT SCENARIOS DESCRIBED?

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million and $18.4 million. That suggests that the lowest point at which customers would no longer

A. PGE summarizes the three different approaches or scenarios on pages 26-34 of PGE Exhibit 6200. The spreadsheet analysis for each of these approaches is shown on pages 1-3 of PGE Exhibit 6202.

Q. WHAT ARE THE OVERALL RESULTS OF PGE'S THREE APPROACHES?

A. In each case, PGE's revenue requirement is higher over the 5.5-year study period than PGE's actual revenue requirement during this period by a range of $19.0 million to $65.1 million. In addition, the "balance owed" PGE at 9/30/2000 ranges from $183.5 million to $275.0 million. Therefore, under each approach, PGE concludes that rates would be fair and reasonable, there were no excess payments made by customers during the 5.5 years ending September 30, 2000, and the customer liability at that date was greater than the actual amount, supporting the original UM 989 decision. (*See* PGE Exhibit 6000 at 40 and PGE Exhibit 6200 at 28, 31 and 34.)

Q. PLEASE DESCRIBE PGE'S FIRST APPROACH.

A. In Approach I, the $340.2 million of net Trojan investment is assumed to be amortized over one year, rather than the 17-year recovery period actually authorized in UE 88.[5] In addition, this scenario allows recovery of $23.1 million of the original $26.8 million disallowed in Order No. 95-322 at 52 ($20.4 million after-tax disallowance), on the basis that net benefits test would be adjusted to reflect the loss of return on Trojan over one year.

The result of this approach is that PGE's revenue requirement would have been $285.4 million higher in the first 12 months beginning April 1, 1995, and

receive a benefit from the UM 989 settlement is $164.1 million ($180.5-16.4).

$65.1 million higher over the 5.5 year study period. The balance owed PGE at 9/30/2000, consisting of the revenue requirement difference and associated interest, would be $183,492. [6]

Q. DO YOU BELIEVE THE ASSUMPTIONS OR RESULTS OF THE FIRST APPROACH ARE REASONABLE?

A. No. A one-year recovery period for Trojan, with no attempt to spread other costs over time, would severely violate PGE's second criteria, equitably allocating costs and benefits to customers over time. The likelihood of the Commission approving a one-year increase of $285 million (representing another 30.5 percent increase over UE 88 sales revenues for test year 1995), is small. Raising rates by 30 percent simply to recover Trojan quickly, then lowering them by a like amount a year later, is clearly adverse to rate stability.[7] While a two- or three-year amortization, for example, might reduce the rate impact to a more acceptable level, it would also force PGE to absorb even more return on investment.

Q. PLEASE DESCRIBE PGE'S SECOND APPROACH.

A. PGE's Approach II provides for a one-year recovery for retired Trojan investment but also assumes the Commission would make the following adjustments to several other elements of the original UE 88 revenue requirement:

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[5] The $340.2 million is the pre-tax Trojan investment equivalent of $263.9 million after-tax investment at 4/1/95, which in turn is comparable to the $250.7 million after-tax investment (the average of the 1995 and 1996 test period in UE 88) the Commission allowed PGE to recover in Order 95-322. As does PGE in its testimony, we will refer to pre-tax figures except as noted.

[6] In the "Derivation of Balance Owed PGE at 9/30/2000," each of the approaches or scenarios described in our testimony includes the revenue requirement difference (between the scenario result and actual revenue requirement per rate case results) over the 5.5 year study period, plus interest. At the end of our testimony, we discuss this element and show the scenario results with and without-including this difference in the calculation.

[7] We recognize that the Commission authorized a 37 percent overall rate increase for PGE in 2001 (Docket UE 115, Order 01-777). However, that increase was caused primarily by a normalized level of power costs that was expected to persist, rather than a one-time event.

- Restore (for recovery) the $26.8 original disallowance from the UE 88 net benefits test, based on a positive net benefit result that allows recovery of steam generator investment in the closure scenario.

- Leave $80.2 million of Trojan investment as Plant in Service rather than abandoned, because certain assets provide service in the form of safety, environmental protection or decommissioning. These assets would be amortized on a 17-year schedule.

- Reduce the remaining retired, undepreciated Trojan assets by the $111 million remaining customer share of the Boardman gain (which the Commission ordered PGE to amortize to customers over 27 years in Dockets UE 47/48, Order No. 87-1017).

- Authorize a return on equity of 11.85 percent, an increase of 0.25 percent.

- Defer $138 million of PGE's test period net variable power costs for recovery over the subsequent ten years, to improve matching of the costs and benefits of Trojan and achieve better rate stability.

- Recover certain regulatory assets—the AMAX termination payment, pre-UE 88 deferred power costs, and SAVE incentive—over ten years.

The result of this approach is that PGE's revenue requirement would have been $16.1 million higher in the first 12 months beginning April 1, 1995, and $19.0 million higher over the 5.5 year study period. The balance owed PGE at 9/30/2000, consisting of the remaining balance for Trojan plant, regulatory assets and deferred power costs, revenue requirement difference and associated interest, would have been $198,222.

Q. DO YOU BELIEVE THE ASSUMPTIONS OR RESULTS OF THE SECOND APPROACH ARE REASONABLE?

A. We agree with most, but not all, of PGE's assumptions.

Q. WHICH OF THE PGE-PROPOSED ASSUMPTIONS IN APPROACH II DOES STAFF AGREE?

A. We agree with classification of $80.2 million of Trojan investment as plant in service to be recovered over 17 years, and offsetting the remaining Trojan balance by the Boardman gain with recovery over one year. We also agree the Commission might have deferred a portion of first year net variable power costs and amortized these costs[8], along with the three regulatory assets (AMAX, pre-UE 88 deferrals and SAVE incentives) over a 10-year period.

Q. WHY DO YOU AGREE WITH THE CLASSIFICATION OF $80.2 MILLION TROJAN INVESTMENT AS PLANT IN SERVICE?

A. There are several reasons that support classification of a portion of Trojan investment as plant in service. First, while the assets in question no longer provided service related to generating electricity after Trojan shut down, they were not abandoned. Rather, they were "used and useful" in carrying out activities related to safety, environmental protection or decommissioning. Order No. 95-322 at 53 acknowledged that the assets "provide the service necessary for safety

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[8] As we discuss later, the Commission would need to conclude that deferral and amortization of a portion of test period power costs is consistent with the Court of Appeals' 1998 opinion.

and asset preservation pending decommissioning and dismantling of the plant." It is hard to argue that these are not legitimate and necessary utility services.

Second, following the closure of Trojan, PGE requested the FERC Chief Accountant's approval to continue to use Account 101, Plant in Service, "for Trojan assets that will continue to operate and provide utility benefit following the plant closure." The Chief Accountant approved PGE's request in April 1993. (*See* PGE Exhibit 6301), and PGE's financial statements reflected that accounting.

Third, as PGE points out, in UE 88 "neither Staff nor the Commission explicitly disagreed with PGE's method to identify Trojan plant-in-service." Using that same method for this proceeding, PGE performed an asset-by-asset study that identified which Trojan assets, or portion of asset, were in fact used and useful from 1995 going forward. The company's study, shown in PGE Exhibit 6303, identified $113.6 million net plant in service. This amount exceeds the $80.2 million level PGE requested be classified as plant in service in UE 88 and again in this remand proceeding.

Finally, Order 95-322 at 53 stated the Commission's belief that "[b]ecause both [FERC 101 and 182.2] accounts are included in PGE's rate base, transferring investment between the accounts will not affect the rate base." In other words, it didn't make a difference in the original UE 88 decision whether Trojan assets were classified as plant in service or abandoned plant. We believe that it is highly likely the Commission would have allowed these assets to remain in plant in service had it known that plant which was truly "abandoned" could not be included in rate base and earn a return.

Q. WHY DO YOU AGREE WITH THE ASSUMPTION THAT THE COMMISSION WOULD HAVE OFFSET THE REMAINING TROJAN INVESTMENT AGAINST THE BOARDMAN GAIN?

A. It would be reasonable to reduce the remaining Trojan investment by the amount of the Boardman gain because it would improve the matching of costs and benefits among generations of customers, as well as improve rate stability. In two separate decisions, the Commission spread the rate effect of recovering the undepreciated Trojan investment (cost to customers) over a period ending in 2011, and customers' share of the Boardman gain (credit to customers) over a period ending 2013. By offsetting Trojan investment with the balance of the Boardman gain in a revisited UE 88 decision, the Commission would achieve roughly the same objective.

Q. WHY DO YOU AGREE THE COMMISSION MIGHT HAVE DEFERRED A PORTION OF FIRST YEAR POWER COSTS AND AMORTIZED THOSE COSTS, ALONG WITH REGULATORY ASSETS, OVER 10 YEARS?

A. Again, for rate stability and intergenerational equity purposes, the Commission could have exercised its discretion and determined that a portion of power costs should be deferred and amortized with certain regulatory assets over an extended period of time. As we stated earlier, increasing rates substantially for customers in one year while reducing rates significantly for customers in subsequent years would be poor regulatory policy.

We note, however, that test period power costs typically are an expense rather than an asset. While deferral and amortization of test period expense amounts would smooth the rate effect of rapid recovery of Trojan, staff is uncertain whether the treatment would be consistent with the intent of the Court of Appeals' decision.

Q. WITH WHICH OF THE ASSUMPTIONS IN APPROACH II DOES STAFF DISAGREE, AND WHY?

A. Staff disagrees that the Commission would have authorized a higher rate of return on equity. In Staff/200, witness Thomas Morgan explains why the Commission would have been unlikely to increase PGE's cost of capital. Removing PGE's assumed 0.25 percent higher ROE results in a $24.5 million lower revenue requirement over the period. (*See* PGE response to staff data request 56.)

We also disagree that the Commission would restore the entire $26.8 million disallowance from the net benefits test on the basis that steam generator replacement costs would be recoverable in the closure scenario. Instead, we recommend restoration of $17.66 million of the original disallowance. This amount represents the "return on" lost due to recovering the remaining Trojan investment, net of the plant in service amount, over one year.

Q. EXPLAIN WHY YOU DISAGREE WITH PGE'S PROPOSAL THAT THE COMMISSION REVERSE ITS DISALLOWANCE OF THE $183.1 MILLION STEAM GENERATOR REPLACEMENT COSTS FOR PURPOSES OF THE NET BENEFITS TEST.

A. We believe it would be inconsistent for the Commission to find that it would not have allowed recovery of these costs in rates if the plant continued to operate, yet consider them as savings in the net benefits test in the closure scenario.

In Order 95-322 at 62, the Commission stated: "Even if PGE is faultless, PGE is better situated to pursue remedies against Westinghouse than its ratepayers are." In the current proceeding, PGE attempted to address this issue:

"Subsequent to UE 88, PGE resolved its claims against Westinghouse. The settlement of that litigation resulted in a payment of about $4 million by Westinghouse, which PGE credited to customers in the UM 989 stipulation. The $187 million excluded by the Commission from the net benefits test dwarfs the amount PGE was ultimately able to recover from the manufacturer." (PGE Exhibit 6000 at 27.) PGE's statement, however, is misleading. We note staff's understanding that the $4 million related to a settlement for replacement power costs, <u>not</u> defective steam generators that caused the plant to be shut down prematurely. Staff is unaware of any effort PGE made to pursue remedies against Westinghouse for the faulty steam generators.

Q. WHY DO YOU PROPOSE THAT THE LOST RETURN ON INVESTMENT BE CALCULATED WITHOUT RECOGNIZING THE BOARDMAN GAIN OFFSET?

A. For purposes of the net benefit test, the Commission should consider only Trojan-related effects. Including the Boardman offset in the calculation of the lost return on investment as a savings to customers in the net benefit test would mistakenly incorporate non-Trojan elements. Consideration of any offsets or other ratemaking adjustments should occur outside of the net benefit test and only after the Commission has determined the amount of Trojan investment that is recoverable.

Q. WHAT DO YOU CONCLUDE REGARDING PGE'S SECOND APPROACH?

A. PGE's Approach II, with staff's proposed adjustments, meets the criteria of encouraging economic resource decisions, ensuring a high degree of intergenerational equity, and preserving PGE's financial integrity. Since the year-to-year revenue requirements are very similar to what the Commission actually authorized, this approach does not cause material incremental rate impacts. With the two changes noted above, PGE's revenue requirement would have been $8.6 million lower than what actually occurred over the 5.5-year study period, and the "Balance owed PGE" at 9/30/2000 would have been $158.9 million. (*See* Staff/102, Busch-Johnson/2.) We believe this is a likely scenario.

Q. PLEASE DESCRIBE PGE'S THIRD APPROACH.

A. PGE's Approach III is based on a 17-year recovery of both the net Trojan investment classified as abandoned plant and 20 percent of a $256 million positive result for the net benefit test that is retained by shareholders. The abandoned plant amount includes $26.8 million of disallowance restored and is reduced by $80.2 million classified as plant in service (amortized over 17 years) and the $111 million Boardman gain. This approach also assumes the Commission would increase PGE's authorized ROE by 150 basis points, and amortizes the three regulatory assets over three years.

The result of these changes is to increase PGE's total revenue requirement over the 5.5-year study period by $58.5 million, with a resulting "Balance Owed PGE at 9/30/2000" of $274.9 million.

Q. DO YOU BELIEVE THE ASSUMPTIONS OR RESULTS OF THE THIRD APPROACH ARE REASONABLE?

A. We disagree with several assumptions in, and therefore the results of, this scenario. First, a 17-year recovery for Trojan abandoned plant with no return on investment does not seem reasonable to us, regardless of what other changes might be made in an attempt to minimize the loss of the return. Second, as we stated earlier, the assumption of sharing savings from a net benefit test result that relies on recovery of the $183 million steam generator replacement costs—without allowing recovery of that investment in rates—is counter-intuitive. In addition, while the Commission has allowed shared savings incentive mechanisms such as SAVE (PGE Exhibit 6000, Lesh/29-30), it has done so for situations where the utility has a great deal of discretion to "do the right thing." The analysis of whether or not to close Trojan, on the other hand, was conducted in a highly visible forum and was based on clear least-cost planning principles. Third, while investors could perceive an increase in regulatory risk if the Commission set rates based on a 17-year recovery period with no return on investment, staff has not estimated the impact on rate of return and is not persuaded by PGE's testimony that the Commission would authorize an increase of 150 basis points in PGE's return on equity. (*See* Staff/200.) Given that we do not believe this is a plausible scenario that the Commission could adopt, staff did not rigorously analyze the potential impacts on the return required by investors.

<u>Staff's Alternate Approach</u>

Q. HAVE YOU PREPARED ANOTHER SCENARIO FOR THE COMMISSION TO CONSIDER?

A. Yes. In order to allow a one-year recovery of net Trojan investment, the Commission may have been willing to allow a significant rate increase and limit the number of unusual ratemaking adjustments. This scenario uses the same building blocks as PGE's Approach II with staff's modifications, except that there is no deferral and subsequent amortization of first year power costs.

Q. WHY DO YOU PROPOSE THIS SCENARIO FOR THE COMMISSION'S CONSIDERATION?

A. The Commission might decide that deferring a significant portion of ongoing power costs—as opposed to a short-term increase in power costs—is not a reasonable approach, even if it were to help offset rate instability caused by other factors (i.e., Trojan recovery). We estimate this approach would result in a one-year incremental rate increase of approximately 12 percent, which we believe is a plausible outcome. (Note that earlier, we stated our belief that it is unlikely the Commission would have authorized a one-year 30 percent additional increase as contemplated in PGE's Approach I.)

Q. WHAT IS THE RESULT OF THIS SCENARIO?

A. This scenario results in a $17.0 million higher revenue requirement over the study period, but the balance owed PGE at 9/30/2000 is the same as staff's modified Approach II: $158.9 million. (*See* Staff/102, Busch-Johnson/3.)

Other Issues

Q. EACH OF APPROACHES OR SCENARIOS YOU'VE DESCRIBED INCLUDES THE REVENUE REQUIREMENT DIFFERENTIAL OVER THE 5.5 YEAR STUDY PERIOD, ALONG WITH ASSOCIATED INTEREST IN THE CALCULATION OF THE BALANCE OWED PGE. DO YOU BELIEVE THAT IS REASONABLE?

A. For the analysis in these remand proceedings, we believe this differential must be included. The purpose of the analysis is not to restate PGE's actual balance sheet. Rather, this analysis is intended to assess whether PGE's rates over the 5.5-year period and the UM 989 rates were just and reasonable. To do so, it is necessary to compare what PGE would have collected over the 5.5 year period to its actual revenue requirement. For that reason, it makes sense that if the Commission determines a revenue requirement that concludes PGE should have collected more dollars than it actually did over the 5.5-year period, that difference should be recognized along with the associated time value of money.

Moreover, this assumption provides symmetry. If the scenario the Commission adopts results in the finding that PGE was not owed at least $180.5 million (or at least $164.1 million) at 9/30/2000, the effective date of the UM 989 offset decision, it is possible PGE will owe refunds to customers. Logically, the refund would be based on the amount that customers overpaid during the 5.5-year period, including the time value of money. The effect of the revenue requirement difference over the 5.5 years must be included in the calculation of the "Balance Owed PGE at 9/30/2000" to accurately measure how much customers underpaid or overpaid as of that date.

Q. WHAT WOULD BE THE IMPLICATIONS FOR PGE'S CURRENT ACCOUNTS OR RATE BASE IF THE COMMISSION MADE RATEMAKING DECISIONS THAT LED TO THE CONCLUSION PGE DOES NOT OWE REFUNDS?

A. Under the structure of this analysis, if the Commission were to conclude that PGE did not owe refunds, it would mean that the implied regulatory asset owed PGE at 9/30/2000 was at least $180.5 million, the amount against which $161 million in customer credits was used in UM 989 as an offset. Conceptually, it could be argued that if the Commission found PGE were owed more than the actual remaining Trojan investment at 9/30/2000, customers would still owe that amount (plus interest).

In response to staff requests 47 and 48, PGE stated: "[I]f the Commission decision in this proceeding resulted in customers owing PGE more than $180.5 million at 9/30/2000, PGE would not propose to recover the incremental amount from customers" or "propose to re-state its accounts or rate base going forward to reflect any change in the elements included in that scenario." PGE noted that such a Commission decision would mean that the benefits received by customers in UM 989 exceeded the original estimate of benefits since customers would have offset a larger receivable with the same credits. Staff agrees with PGE that if the Commission makes that finding, there should be no effect on customer rates going forward, given its understanding that PGE is not requesting any revenues.

Q. HAS PGE RAISED OTHER POTENTIAL REVENUE REQUIREMENT ISSUES IN ITS FILING?

A. Yes. In PGE's Opening Brief at 17-18 and Exhibit/6000 at 37-38, the company discusses whether, with respect to interpreting ORS 757.355, the Commission could allow recovery of debt and interest payments related to Trojan investment. PGE states that other jurisdictions have differentiated between debt related to uncompleted generating plant and potential equity return. However, none of PGE's three approaches propose recovery of debt payments. Likewise, as explained in Staff/200, we do not recommend the Commission consider that as a possible ratemaking element in this case.

Conclusion

Q. PLEASE SUMMARIZE YOUR RECOMMENDATION TO THE COMMISSION REGARDING THE REVENUE REQUIREMENT IN THIS REMAND PROCEEDING.

A. We believe previous Commission decisions indicate that retired Trojan plant should be included in rates in a manner that provides PGE recovery of essentially all of the present value of the investment. There are two scenarios with ratemaking elements we believe represent what the Commission reasonably would have done in UE 88 had it known it is unlawful to allow PGE to earn a return on retired plant. These scenarios meet the objectives of intergenerational equity, rate stability, and maintaining PGE's financial integrity. If the Commission concludes that it would have set UE 88 rates to minimize additional rate fluctuations related to Trojan recovery, we recommend the Commission endorse PGE's Approach II with staff's modifications. Alternatively, if the Commission concludes that it would have set rates that allowed a moderate incremental rate impact with as few changes as possible to non-Trojan rate elements, we recommend the Commission accept staff's alternate approach. The result in both scenarios would be the same, with $158.9 million owed PGE and available for the UM 989 offset at 9/30/2000.

Q. AFTER THE COMMISSION ADOPTS A REVISED REVENUE REQUIREMENT FOR UE 88, WHAT SHOULD BE THE NEXT STEPS IN THIS PROCEEDING?

A. In this phase of the proceeding, we expect the Commission will adopt one of the recommended approaches for PGE's UE 88 revenue requirement. Following that determination, we believe the parties should be provided the opportunity in the next phase to propose what action the Commission should take, given the revised UE 88 results. Specifically, the parties should address whether the Commission would have made the same or a different ratemaking decision in UM 989, whether a refund is required, and if so, how the refund should be calculated.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

CASE: UE 88 (Remand)
WITNESS: Ed Busch & Judy Johnson

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 101

Witness Qualifications Statements

May 19, 2005

WITNESS QUALIFICATIONS STATEMENT

NAME:	ED BUSCH
EMPLOYER:	PUBLIC UTILITY COMMISSION OF OREGON
TITLE:	ADMINISTRATOR ELECTRIC & NATURAL GAS DIVISION
ADDRESS:	550 CAPITOL STREET NE, SUITE 215, SALEM, OR 97308-2148

RELEVANT WORK EXPERIENCE:

Currently the Administrator of the Electric and Natural Gas Division, Utility Program, Public Utility Commission of Oregon (OPUC).

From 1989 through 2003, served in the Electric & Natural Gas Revenue Requirement Section. Responsible for revenue requirements analysis and forecasting, including workforce and wage levels, promotional activities, memberships and dues, income taxes, deferred accounting, and budgets of expenditures. Participated in staff investigations into Trojan nuclear plant costs and benefits, decoupling, utility incentives for acquiring conservation, and alternative forms of regulation.

From March 1985 to February 1989, primary responsibility was determining proper capital recovery rates to be used for Oregon's regulated electric, gas and telephone utilities. Also prepared staff cost of capital recommendations in four separate proceedings. Testified before the Commission on matters of capital recovery and finance recommendations, cost effective fuel use, and avoided costs.

Joined the staff of the OPUC in May 1983. Through February 1985, responsible for coordination of OPUC's cogeneration and small power production program.

Financial Analyst, Office of Financial Management at Bonneville Power Administration, April 1982 to May 1983.

Assistant Budget Analyst, State of Oregon Executive Department,
July 1981 to April 1982.

EDUCATION:

Master of Business Administration degree, Atkinson Graduate School of Management, Willamette University (1981). Program included graduate coursework in economics, finance, accounting and statistics.

Bachelor of Science degree in Journalism, University of Oregon (1976)

As member of the Commission's staff, have participated in several programs on regulatory studies and public utility accounting practices.

WITNESS QUALIFICATIONS STATEMENT

NAME:	JUDY A. JOHNSON	
EMPLOYER:	PUBLIC UTILITY COMMISSION OF OREGON	
TITLE:	PROGRAM MANAGER ELECTRIC & NATURAL GAS REVENUE REQUIREMENTS	
ADDRESS:	550 CAPITOL ST. N.E., SALEM, OREGON 97310-1380	
EDUCATION:	MBA with an emphasis in Statistics from Eastern Washington University Cheney, Washington	
	BA in Accounting from Eastern Washington University Cheney, Washington	
EXPERIENCE:	3/95-Present	I have been employed by the Oregon Public Utility Commission since March of 1995. My primary area of responsibility in my current position has been managing the review of electric and natural gas utility results of operations filings, general rate case filings, deferred accounting applications, and budgets of expenditures.
	6/77-2/95	I was employed by Avista Corporation, an electric and natural gas utility located in Spokane, Washington. The majority of my employment was spent in the Rates and Regulatory Affairs Department as a Senior Rate Analyst. I have prepared testimony and exhibits in numerous electric and natural gas rate cases, primarily in the area of results of operations and cost of service.

CASE: UE 88 (Remand)
WITNESS: Ed Busch & Judy Johnson

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 102

Exhibits in Support of
Direct Testimony

May 19, 2005

Revenue Requirement Scenarios

Building Blocks	PGE Approach I	PGE Approach II	PGE Approach II with staff modifications	PGE Approach III	Staff Alternative
Recover Trojan regulatory asset over 1 year	√	√	√		√
Recover Trojan regulatory asset over 17 years				√	
Classify $80.2 million as plant in service; recover over 17 years		√	√	√	√
Recover of portion of $26.8 million original disallowance from net benefits test	√ ($23.1M)	√ ($26.8M)	√ ($10.1M)	√ ($26.8M)	√ ($10.1M)
Increase ROE by 25 or 150 basis points		√ (25)		√ (150)	
Defer portion of test year power costs and recover over 10 years		√	√	√	
Recover three regulatory assets (pre-UE 88 deferred power costs, AMAX payment and SAVE incentive) over 3 or 10 years		√ (10)	√ (10)	√ (3)	√ (10)
Allow PGE to retain & recover 20% of savings from revised net benefit test				√	
Balance Owed PGE at 9/30/2000 ($ millions)	$183.5	$198.2	$158.9	$274.5	$158.9

	A	B	C	D	E	F	G
					(E = A)	(F = A + B)	(G=A+B+C+D)
Start of Period	04/01/95	11/28/95	04/01/96	12/01/96	"8-month"	"One-Year"	"5.5 Year"
End of Period	11/27/95	03/31/96	11/30/96	09/30/00	Impact	Impact	Impact
Number of Months	7.90	4.10	8	46	7.90	12	66
Docket	UE 88	UE 93	UE 93	UE 100			
Annual Revenue Requirement ($000)	943,333	995,498	995,498	958,669			
Period Revenue Requirement ($000)	621,028	340,128	663,665	3,674,898			

PGE Approach II with Staff Proposed Changes: No ROE Increase, Revised Net Benefit Test

		A	B	C	D	E	F	G
	Scenario Revenue Requirement:							
1	Plant in Service - Return On	5,221	2,396	4,452	20,587	5,221	7,618	32,657
2	Plant in Service - Recovery Of	8,100	2,635	4,018	22,894	8,100	10,735	37,647
3	25 Basis Pts. ROE Increase							
4	Collection of Trojan and 17.66, Net of Class. In-Service and Board., Over One Year	109,593	56,877	-	-	109,593	166,470	166,470
5	First Year Power Costs	112,918	58,603	-	-	112,918	171,521	171,521
6	Reg. Assets Collection Over 10 Years	9,382	4,869	9,501	54,630	9,382	14,251	78,382
7	Deferred First-Year Power Cost Collection Over 10 Years	13,432	6,971	13,602	78,211	13,432	20,403	112,216
8	Total Scenario Revenue Requirement Changes	258,646	132,351	31,572	176,323	258,646	390,997	598,893
9								
10	Revenue Requirement per Rate Cases:							
11	First Year Power Costs	203,623	105,678	-	-	203,623	309,300	309,300
12	Trojan Revenue Requirement	56,502	21,338	35,923	184,424	56,502	77,840	298,187
13	Trojan and Power Cost Revenue Requirement	260,124	127,016	35,923	184,424	260,124	387,140	607,487
14								
15	Revenue Requirement Difference	(1,478)	5,335	(4,350)	(8,101)	(1,478)	3,857	(8,594)
16								
17								

18	Derivation of Balance Owed PGE @ 9/30/2000:	
19	80,200	Trojan Plant in Service Balance @ 04/01/95
20	(37,647)	Recovery of Plant in Service Balance Over Period 04/01/95 - 09/30/00
21	(8,594)	Revenue Requirement Differential (Scenario Revenue Requirement Less Rev. Req. per Rate Cases)
22	(1,754)	Interest on Revenue Requirement Differential
23	126,734	Remaining Balance for Reg Assets and Deferred Power Costs @ 09/30/00
24	158,939	Balance Owed PGE @ 9/30/2000

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		A	B	C	D	E	F	G
						(E = A)	(F = A + B)	(G=A+B+C+D)
	Start of Period	04/01/95	11/28/95	04/01/96	12/01/96	"8-month"	"One-Year"	"5.5 Year"
	End of Period	11/27/95	03/31/96	11/30/96	09/30/00	Impact	Impact	Impact
	Number of Months	7.90	4.10	8	46	7.90	12	66
	Docket	UE 88	UE 93	UE 93	UE 100			
	Annual Revenue Requirement ($000)	943,333	995,498	995,498	958,669			
	Period Revenue Requirement ($000)	621,028	340,128	663,665	3,674,898			

Staff's Alternate Scenario: No ROE Increase, Revised Net Benefit Test, No Power Cost Deferral

		A	B	C	D	E	F	G
	Scenario Revenue Requirement:							
1	Plant in Service - Return On	5,221	2,396	4,452	20,587	5,221	7,618	32,657
2	Plant in Service - Recovery Of	8,100	2,635	4,018	22,894	8,100	10,735	37,647
3								
4	Collection of Trojan and 17.66, Net of Class. In-Service and Board., Over One Year	109,593	56,877			109,593	166,470	166,470
5								-
6	Reg. Assets Collection Over 10 Years	9,382	4,869	9,501	54,630	9,382	14,251	78,382
7								
8	Total Scenario Revenue Requirement Changes	132,296	66,777	17,970	98,112	132,296	199,074	315,156
9								
10	Revenue Requirement per Rate Cases:							
11								
12	Trojan Revenue Requirement	56,502	21,338	35,923	184,424	56,502	77,840	298,187
13	Trojan and Power Cost Revenue Requirement	56,502	21,338	35,923	184,424	56,502	77,840	298,187
14								
15	Revenue Requirement Difference	75,794	45,439	(17,952)	(86,312)	75,794	121,233	16,969
16								
17								

18	Derivation of Balance Owed PGE @ 9/30/2000:	
19	80,200	Trojan Plant in Service Balance @ 04/01/95
20	(37,647)	Recovery of Plant in Service Balance Over Period 04/01/95 - 09/30/00
21	16,969	Revenue Requirement Differential (Scenario Revenue Requirement Less Rev. Req. per Rate Cases)
22	47,286	Interest on Revenue Requirement Differential
23	52,141	Remaining Balance for Reg Assets @ 09/30/00
24	158,949	Balance Owed PGE @ 9/30/2000

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CASE: UE 88 (Remand)
WITNESS: Thomas Morgan

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 200

Direct Testimony

<u>Contains Confidential Information</u>

May 19, 2005

INFORMATION CONTAINED IN STAFF EXHIBIT 200

IS CONFIDENTIAL AND SUBJECT TO PROTECTIVE

ORDER NO. 04-502. YOU MUST HAVE SIGNED

THE PROTECTIVE ORDER IN DOCKET UE 88 (Remand)

TO RECEIVE THIS EXHIBIT.

CASE: UE 88 (Remand)
WITNESS: Thomas Morgan

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 200

Direct Testimony

May 19, 2005

Introduction

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Thomas D. Morgan and my business address is 550 Capitol Street NE, Salem, Oregon 97308-5148.[1]

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed as a Senior Financial Analyst by the Public Utility Commission of Oregon (OPUC or Commission). I have been employed by OPUC since August 2001. I work in the Economic Research and Financial Analysis Division.

Q. HAVE YOU PREPARED ANY EXHIBITS?

A. Yes. My Witness Qualifications Statement is found in Staff/201. Staff/202 includes data responses from Portland General Electric (PGE or Company) that support the results of my analyses.

Scope of Testimony

Q. WHAT IS YOUR ASSIGNMENT IN THIS CASE?

A. My assignment is to respond to PGE's witnesses' testimony regarding the cost of capital issues that may be affected by this Remand docket. The cost of capital is important because it will be included in the analysis completed by staff witnesses Busch and Johnson to determine the rates that the Commission would have approved in UE 88, assuming it had interpreted ORS 757.355 to prohibit a return on PGE's investment in Trojan, as directed by the Court of Appeals.

An important element of this issue is whether there would have been any cost of capital effects due to the Court's interpretation of the law. I have

[1] My telephone number is (503) 378-4629 and my e-mail address is thomas.d.morgan@state.or.us.

reviewed PGE's testimony, PGE Exhibits 6400/Hager, 6500/Makholm; 6600/Blaydon and 6700/Hess.

The Company's testimony indicates that the cost of capital would have been negatively affected by the Court's decision, and this effect will continue into the future. I rebut these claims.

Specifically, I report that, assuming a short amortization period for recovery of Trojan investment, there would be no negative impact on PGE's cost of capital, and no permanent impact on the capital structure that would have affected the cost of capital.

Summary Recommendation

Q. DID YOU AGREE WITH PGE'S ASSERTION THAT ITS INVESTORS WOULD HAVE REQUIRED A HIGHER COST OF DEBT OR EQUITY?

A. No. I further do not believe that the judicial interpretation of the statute would have affected PGE's cost of capital in the past, nor going forward. I believe that these risks are already reflected in the cost of equity that diversified investors require.

This assertion is based on the assumption that the Commission will adopt staff's one-year amortization schedule to return the value of the property to PGE. This is an important consideration, because PGE believes that its financial profile (e.g., impact on financial ratios) would have suffered considerably were the Commission to require an extended, i.e., 17-year return of capital, without providing a return on the investment.

Because of the qualitative aspects associated with debt ratings, it is nearly impossible to clearly estimate the magnitude of the effect on PGE's bond ratings. Staff's recommended approach does not support any specific adjustments to the cost of capital. As I will discuss, the single-year approach proposed by staff (*See* Staff/100 Busch-Johnson/4) is similar to an analysis provided by PGE witness Hager.[2] Because the short-term and marginal impact on PGE, it is highly unlikely that there would be any deterioration in ratings. Credit-rating analysts consider a much longer-term outlook than one year; therefore, short-term, nonrecurring impacts are not consequential.

Q. DO YOU HAVE ANY THOUGHTS ON THE IDEA THAT THE PROHIBITION OF A RETURN "ON" AN INVESTMENT IS LIMITED TO THE EQUITY RETURN?

A. Yes, but not from a legal perspective. From an economics perspective, the cost of debt and the cost of equity both represent the "cost" of acquiring monies from those two sources of funds. The return on equity is not the "profit" of the firm but simply a return of the "cost" of monies from equity holders. From this perspective, I cannot see why it would make sense to specify the return of some sources of money as "profit" or a "return on" and other sources of money as "cost" or a "return of." In PGE's analysis, the Company did not propose to allow a recovery "on" the debt-financed portion of Trojan. This approach seems reasonable. (See Staff/100 Busch-Johnson/25)

Q. COULD YOU PROVIDE SOME BACKGROUND ON THE RELEVANT THEORETICAL UNDERPINNINGS IN THIS DOCKET?

A. Yes, I will expound on the financial theories that support my testimony regarding the impact on the cost of equity, including Modern Portfolio Theory and the dynamics of risk that impact the cost of capital. Initially, I will provide some useful definitions.

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[2] The spreadsheet analysis for each of PGE's approaches is PGE Exhibit 6202.

Rate of Return Defined

Q. HOW DO YOU DEFINE THE ALLOWED RATE OF RETURN?

A. The allowed rate of return is generally defined as the amount of money over and above operating costs, expressed as percentage of the rate base that is necessary to provide bond interest and compensation for common equity investors.

It is the blended *interest rate*, earned above the cost of operations, which compensate the contributors of the various sources of capital. The cost of capital for a company is calculated by taking the weighted average cost of each integral source of financing, i.e., debt, preferred stock, and equity. *It is not, in concept or in judicial interpretation, a guaranteed return.* However, the regulatory treatment is to set it at a level that is fair, reasonable and not so low as to be confiscatory. This is reflected as the constitutional standard under *FPC v. Hope Natural Gas Company*.[3]

Further in the 1923 *Bluefield* case, the court argued:

> "What annual rate will constitute just compensation depends upon many circumstances, and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which is employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties: but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and

[3] *Federal Power Commission v. Hope Natural Gas Co*., 320 USA 591, 602, 64 S. Ct. 281, 88 L. Ed. 333 (1944).

> enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time, and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally."[4]

Once Trojan was no longer employed for the convenience of the public, or became "worthless", its value would have eroded, because it would be no longer "used and useful". Although *Bluefield* might support a finding that the return on Trojan might not be required, there is no reason to assume that an immediate "release," or return of capital to the company, would not have been appropriate to have been included in rates. This approach effectively assumes expedited depreciation pass-through.

In summary, the standard for setting the rate of return is generally understood to be a rate that:

(1) fairly compensates investors for the capital invested in the utility;
(2) enables the utility to offer a return adequate to attract new capital on reasonable terms; and,
(3) maintains the utility's financial integrity.

Fair and Reasonable Return on Equity

Q. WHAT IS THE "COST OF EQUITY?"

A. A firm's cost of equity (COE) is that rate of return on equity which investors require earning on their equity investment given the risk of the investment. An investor's expected return is equally defined as the return on equity that is expected on other investments of similar risk.[5]

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[4] *Bluefield Water Works & Imp. Co v. Public Service Commission*, 262 U.S. 679, 692-3 (1923)

[5] More precisely, the *marginal* investor determines the firm's cost of capital. The marginal investor will bid the price of the security up to a point that the investor expects to earn the cost of capital and no less. Then, the security is in equilibrium. The definition of expected return based on returns on investments of similar risk (the "comparable earnings" standard) also assumes that the alternate security is in equilibrium

The rate of return on common equity compensates shareholders for the use of their capital to finance the plant and equipment necessary to provide utility service. Investors provide capital only if they expect to earn a return on their investment commensurate with returns available from alternative investments with comparable risks. The appropriate COE is the minimum rate necessary to attract capital on favorable terms. Many concepts are included in this definition.

The appropriate COE is a forward-looking concept. It is the *expected return*, not the *actual return* that may prevail in some future period. To be sure, the actual outcome is anticipated to deviate from what is expected. Investors compensate for this risk by holding a portfolio of investments.

As a measure of opportunity cost, the cost of equity is the return required to attract investors' funds: a firm is expected to provide a return commensurate with the risks of other comparable risk investments. The return must be sufficient to compensate investors for their foregone opportunities.

The Cost of Equity is a market-derived return in that it is established in the capital markets where all investments compete against each other for investors' funds. This is an important tenet. If the price for a company's shares do not allow an investor to earn the return required, the share price is expected to fall until the marginal investor is "properly compensated" for his investment. Conversely, if the return provided by a stock is too high, the share price will increase until an equilibrium position is reached.

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and the investor does not expect to earn excess profits on that alternate security. For example, assume securities A and B are of similar risk and have a 10 percent cost of equity. Now assume that security B developed an invention such that it will realize a 20 percent return to current investors forever. *However, 20 percent is not security B's cost of equity; nor is it security A's*. The marginal investor will bid up the price of security B's stock (the price will double) until the marginal investor only expects to earn the 10 percent cost of equity in equilibrium on security B. The 10 percent equilibrium rate of return is security B's, and security A's, required (internal) rate of return.

The point to consider is that the Cost of Equity is focused on ***shareholder's expected returns, over time.*** *It is the investors' requirements, not the "allowed earnings for each individual company" that need to be considered. To the extent that a company is expected to have uncertainty in its cash flows, unless the impact is "catastrophic", it is discounted by investors if it has minimal short-term consequences. A single event, such as the removal of Trojan from PGE's generating portfolio, may have impacted the Company's share prices in the short run; however, as long as the event is viewed as non-recurring, it would not have created an impact on the Company's cost of equity.*

<u>Risk</u>

Q. WHAT IS MEANT BY "RISK"?

A. The risk component of a company that has traded equity can be measured in various ways, most commonly via measures of volatility or variability. A typical method is by calculating the standard deviation of returns of stock investment. This method is assumed to pick up all company risk components, including those that are diversifiable and non-diversifiable.

Further, the Bluefield Waterworks decision provided insight into the volatility of earnings and the impact on the perception of risk:

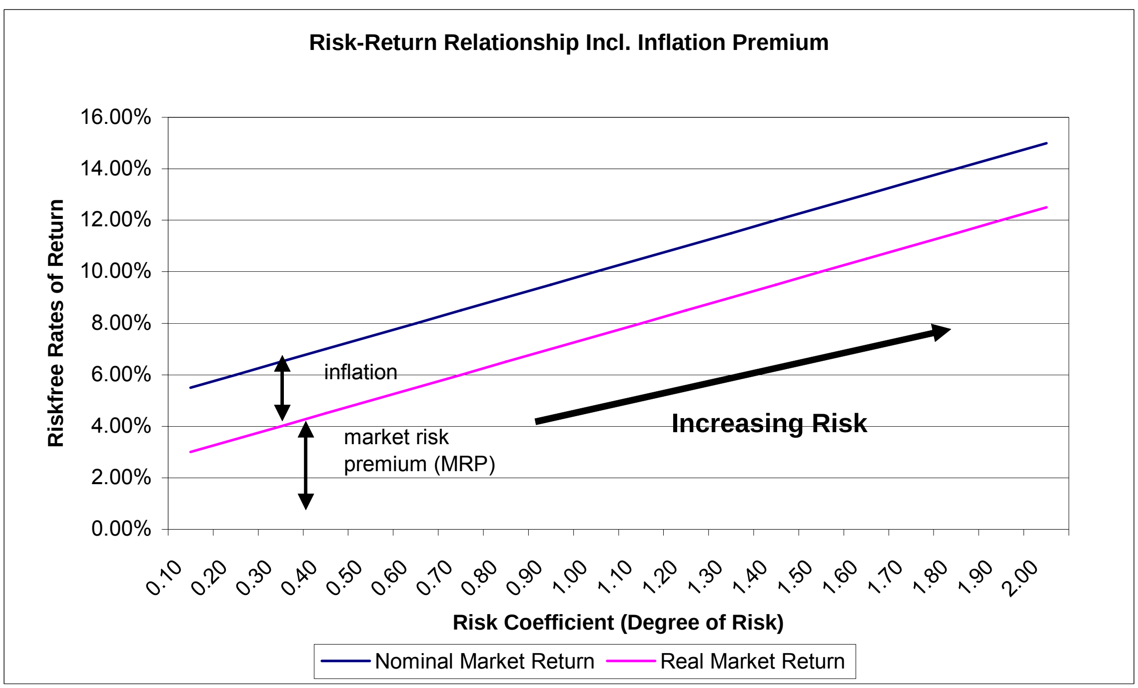
> "Investors take into account the result of past operations, especially in recent years, when determining the terms upon which they will invest in such an undertaking. Low, uncertain, or irregular income makes for low prices for the securities of the utility and higher rates of interest to be demanded by investors."[6]

[6] Bluefield Water Works Co. V. Public Service Commission, 262 U.S. 679 (1923)

When measuring risk in conjunction with the market as a whole, the relationship is called "Beta" which is also discussed further in my testimony.

In general terms, risk means many things to different people. However, a common definition of risk relates to the uncertainty of outcomes. Most investors do not consider "upside" movements as "risk" but are concerned primarily with the probability of a "bad" outcome, or the chance of a loss in their investment. Moreover, a loss should be considered in terms of the originally anticipated or expected outcome and the actual deviation form it. In short, risk should be considered as the possibility of a shortfall.

The following table provides a graphic representation of the dynamics of the risk-return tradeoff that underlies financial analysis. This chart includes two lines, one reflecting the real, or inflation-adjusted capital costs; and the other line reflects nominal returns, which include the impact of expected inflation:



Modern Portfolio Theory

Q. PLEASE DESCRIBE THE MODERN PORTFOLIO THEORY.

A. Modern Portfolio Theory relates to an investment approach whereby investors construct a grouping of investments. The proper portfolio would offer maximum expected returns for a given level of risk tolerance. The theory assumes that investors like investment returns, but dislike the risk, or volatility, associated with those returns. The result is that investors require a greater return for bearing greater risk. Underlying the theory is the assumption that investors purchase assets in portfolios, and in doing so reduce the total variation of their returns. Therefore, they can reduce their overall exposure to each investment or "business-specific" risk that would affect them if they were not well diversified.

The total variation of a portfolio is less than the sum of its individual parts, i.e., variation of the return on the underlying, individual investments. In a diversified portfolio of risky assets, some returns are high while others are low, offsetting each other.

Combining multiple stocks into a portfolio allows all business-specific risk to be diversified[7] away, even though each of the companies' individual returns is still quite risky.[8] The risk that can be diversified away becomes irrelevant and investors do not require a return on this *diversifiable risk*.

[7] In other words, when one speaks of diversification, it refers to owning a complement of investments. Dividing investment funds among a variety of securities with different risk and reward relationships is presumed to be the major concern of any sophisticated investor. The primary reason is that the investor can reduce or completely "diversify away" unsystematic, or "company-specific" risk and only have exposure to systematic, or "market" risk.

[8] An example of these dynamics follows: Two Oregon Companies, Stock A (a suntan lotion company,) and Stock B (an umbrella company) are both expected to earn 10 percent and have equivalent risk. However, it seems that returns on the two stocks move in exactly opposite directions. When it is sunny, stock A makes unusually good returns but stock B makes unusually poor returns. When it is rainy, stock B makes unusually good returns and stock A makes unusually poor returns.

More precisely, assuming that the variance of returns of companies A and B are the same, the portfolio of them together has the variance: $\sigma^2(A) + \sigma^2(B) + 2\rho(A,B)\sigma(A)\sigma(B)$. If $\rho(A,B) = -1$(the securities' returns are perfectly negatively correlated), and $\sigma(A) = \sigma(B)$,then the portfolio variance equals 0.

Modern finance theory indicates that most well diversified investors are concerned with the risk related to their exposure to the market as they consider their required return, i.e., the marginal cost of equity. These market-oriented risks include such things as interest rate changes, threat of war, and recession. They differ from diversifiable risks in that the diversifiable risks are company-specific. These relate, for instance, to the factors that impact only a company or perhaps its market segment. The impact of PGE not recovering a portion of an “obsolete” investment is, by definition, a company-specific, or diversifiable risk. There has been no indication that significant spill-over effects may have pointed the company towards default on its debt obligations, i.e., bankruptcy. (*See* Staff/202 Morgan/9) Staff’s proposed position would have maintained PGE’s ability to attract additional equity capital.

Q. HOW IS RISK CONSIDERED IN THE MODERN PORTFOLIO THEORY?

A. As I have stated above, since diversification allows investors to reduce their level of risk exposure for any given level of expected return, the risk that remains, and requires compensation, is called the *systematic or market risk*. Systematic risk measures the extent to which a security's returns are correlated with returns in the general market of risky assets.

This market risk can be measured by Beta[9], which reflects the percentage of volatility that a specific company's equity contributes to the

[9] Beta is used within the framework of the Capital Asset Pricing Model (CAPM). We have not used the CAPM framework to provide an estimate of the cost of equity in this docket. The formula for the beta coefficient relates the covariance of an individual investment’s return with the market return, to the squared standard deviation of the market return; in mathematical terms: $\mathrm{Cov}(r, Km)] / [\mathrm{StdDev}(Km)]^2$ Where r is the return rate of the investment; Km is the return rate of the asset class.

Beta is used in modern portfolio theory as a measure of risk; it's specifically used in the Capital Asset Pricing Model. The Beta of the market, by definition, equals 1.0. Therefore, if a company has a beta greater than one, it is thought to be greater risk, and conversely, a Beta less than one generally belongs to companies that contribute less market risk to a portfolio. Beta is a correlation statistic that is calculated over a historic period of time and therefore assumes that the period analyzed will be representative of the future forecast. For stocks, the asset class is often taken to be the S&P 500 index, because data are readily available and it represents a broad cross-section of available investments.

overall market return. Stated in other words, Beta is a measure of an investment's volatility, relative to an appropriate asset class. Investors are compensated for their exposure to market-risks, but not business-specific risk, since they are “diversified away”.

Staff does not concur that there would be an impact to the Beta coefficient used in the CAPM model in UE 88. The theoretical foundation of the model does not have a device for arbitrarily assigning subjective “risk premiums” to individual risk components. The Company promotes a significant adaptation to the application of the CAPM model, by indicating that there is an increased cost that should be added to the results indicated by the model’s “Security Market Line”. This adjustment is presented as a required component to compensate investors for “an abrupt end to the business.” (*See* PGE/6700 Hess/3, line 8)

It is not clear if the Company proposes that, given almost two hundred basis points (2.0%) variation in the cost of equity indications that were part of the UE 88 docket, that any single risk component may require arbitrary and subjective leaps of faith. Discrete adjustments from the indications provided by cohort companies is not a reasonable framework upon which to gauge the cost of equity.

Apparently, the Company proposes to add a framework to the cost of equity argument that includes discretely identified “risks”. The Commission should disregard the assertion that investors would require an increase to the results of the CAPM model. These ad hoc adjustments are not founded in the theoretical foundations of the CAPM. The underlying basis of the model is designed to compensate investors for non-diversifiable risks only. It is not clear how the Company determined how to assign their "decommissioning risk premium" as being a non-diversifiable risk. The cost of capital is not based on individual risk components somehow being "aggregated" together. The underlying data from the chart at PGE/6700 Hess/6 is illustrative of his argument, but is not based on an actual quantitative analysis. (See Staff/202 Morgan/10 through Morgan/20)

Risk Versus Return

Q. CAN YOU EXPLAIN HOW INVESTORS ARE PROPERLY COMPENSATED BY THEIR INVESTMENT FOR PERCEIVED LEVELS OF RISK?

A. Yes. An appropriate financial return is predicated on the perceived risk of the investment. This concept applies to all classes of investors, including common shareholders and debt holders. The precept of financial theory is that investors expect a higher return as compensation for taking on higher risk on financial assets. Conversely, the lower the risk, the lower the return that would be expected. This guiding principle for determining the appropriate cost of equity for a regulated firm should also be placed in the context of broader cost of capital concepts. Two such concepts are (1) the relationship between operating position, capital structure and bond ratings; and, (2) the relationship between capital structure and the cost of equity itself.

It is generally understood that rate-regulated public utility companies are among the least risky investments. Their debt-service payments and common equity dividends are more secure, since they enjoy a territorial monopoly and provide a basic and required service, their revenue and earnings streams are more assured. They are more stable than many companies both in good times and in bad times. PGE is no different even given the probable effects from staff's proposed resolution to this issue.

Diversified Portfolios

Q. WHAT IS MEANT BY A "DIVERSIFIED PORTFOLIO"?

A. The term "diversified portfolio" is based on the underlying and ubiquitous financial tenet that rational investors who are risk averse will be better off if they invest in a large sampling of stocks with differing effects from market forces. This diversification allows the investor the ability to reduce overall risks in their portfolio by spreading their investments over a series of financial assets. Portfolio design, or asset allocation, in practice, provides for a lower underlying volatility of investment returns than an investor would experience by holding only one stock or several stocks that are highly correlated.

For rate-making purposes, we are considering the return that rational investors may require to properly compensate them for the purchase of a particular stock. In this regard, the market can be expected to do a fairly efficient job of incorporating new information into stock prices. It is important that one considers the arguments in this docket from the reference point of PGE's rational equity investors.

If an investor were to hold a portfolio of individual investments, one of them being PGE, assuming the probable outcomes and the total capital at risk, there is no evidence that PGE investors would have suffered from significant financial effects. Its investor would have "diversified away" the individual, business-specific risk.

Q. WOULD INVESTORS HOLDING ONLY STOCK IN PGE REQUIRE A GREATER RETURN TO COMPENSATE THEM FOR PGE'S NON-DIVERSIFIABLE RISK?

A. No. The market prices for equity are set by the marginal investor, who is assumed to be diversified. Even if individuals did not hold broad portfolios, they would not influence the marginal cost of capital, because the market aggregates all information. Therefore, the holdings of an individual investor would not meaningfully influence the pricing of a company's securities.

Review of PGE Testimony

Q. WHAT ARE THE PRIMARY ARGUMENTS MADE BY PGE PERTAINING TO THE COST OF CAPITAL IMPACTS?

A. The primary arguments that pervade PGE's testimony indicate that the Company believes that the court's decision may provide additional regulatory uncertainty. Additionally, because of the hypothetical impact on cash flows, PGE argues that its financial integrity would be at stake, potentially increasing both its cost of equity and its cost of debt. It also argues that its credit rating would have been impacted.

Financial Integrity

The Company's Opening Brief, at page 9, states, "There are two statutory bases for revisiting this issue. First, ORS 756.040(1)(a) provides that a utility's return on investment (both debt and equity) must be commensurate with the return on investments in other enterprises having comparable risks. With respect to equity, the Commission should consider whether exclusion of any return on the Trojan balance changes PGE's risk profile and, therefore, the enterprises with which PGE's allowed return on investment should be comparable. With respect to debt, the Commission should consider how the

Court of Appeals' interpretation has affected the regulatory environment in which PGE operates which, in turn, may affect its credit ratings and debt costs.

PGE also points out that ORS 756.040(1)(b) provides that fair and reasonable utility rates must allow a return on investment that is "[s]ufficient to ensure confidence in the financial integrity of the utility, allowing the utility to maintain its credit and attract capital." With the elimination of the Trojan balance from rate base, the Commission should consider whether it must increase the approved rate of return on investment in UE 88 or revise PGE's capital structure for setting rates in order to comply with ORS 756.040(1)(b).

Q. SHOULD THE COMMISSION CONSIDER THE IMPACT ON THE FINANCIAL RESULTS OF A COMPANY WHEN SETTING RATES?

A. Oregon law allows rates to be set, based on utility property that is considered used and useful for the purposes of servicing customers. If a single asset becomes obsolete, or if there were catastrophic failures, it would be reasonable for the Commission to consider whether there would likely be dramatic ramifications, considering the “capital attraction standard.”

As I will discuss, the risk of such events, “on average” should be anticipated by all investors. Considering staff’s proposal for a short amortization period to recover the capital based on the Trojan investment, no changes to any of the historic cost of capital decisions are recommended.

Write-offs at PGE

A review of staff’s testimony in UE 88 provides useful information about the impact on PGE from having to write-off non-utility assets. Staff Witness Thornton indicated that PGE had two “write-offs”, one for $73 million, related to the Bonneville Power Administration and independent power, and one for about

$74 million that related to failed real estate ventures. More recently, PGE reflected a $73 million loss in 2001, based on its exposure to Enron. This, too, did not have a deleterious effect on PGE's credit rating or its financial profile.

It is not uncommon for negative outcomes in any industry. The quintessential element relates to the magnitude of those outcomes. PGE did not suffer significant consequences from writing off almost $150 million dollars during the UE 88 period, and PGE provided no evidence that its cost of capital was impacted because of these events.

I have provided, in Staff/202 Morgan/36, a chart that illustrates present value calculations, providing a conceptual framework for determining the impact of an "asset impairment charge". I have provided time periods of one, five, ten and 17 years and an assumed $100 "remaining net asset value" to simplify the model. This chart calculates the influence from returning capital to PGE, on a straight-line basis over each amortization period. The figures also reflect income-tax impacts.

The proposed amount that would have reflected the loss from the Company, based on the "break-even" point in UM 989, as of September 30, 2000 would be roughly five million dollars. (*See* Staff/100 Busch-Johnson/26) Pragmatically, this amount would not have created undue financial hardship on PGE's financial profile. The exposure would have simply been too minor.

Impact on Credit Ratings

Q. WHAT DID THE COMPANY STATE REGARDING CREDIT RATING IMPACTS?

A. The Company contends that it would have been most likely downgraded if the decision were made not to allow a rate of return on Trojan. (*See* PGE/6400.)

Q. DO YOU AGREE?

A. No. I have reviewed credit rating reports and staff's initial testimony to form the basis for my conclusions.

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[redacted]

[redacted]

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Staff's original cost of capital testimony (*See* UE 88, Staff/48) addressed this concern and stated that a large impact could have affected the marginal cost of debt. The magnitude could only be considered in light of the ultimate Commission position.

PGE Witness Hager provided calculations for a single year's impact on the important credit ratings metrics used by Standard and Poor's. Credit rating combines both quantitative measures, such as financial ratios, coupled with qualitative judgments. Rating analysts use a multi-year forward-looking analysis. PGE's analysis is too short-sighted to draw far-reaching conclusions. (*See* Staff/202, Morgan/2)

While there could have been a short-term impact on PGE's financial profile, staff's recommended rate treatment and the fact that credit ratings are reasonably far-sighted, indicate that the Company's credit profile (e.g., financial metrics, such as debt-to capital ratio) would likely have been marginally affected, if at all. There would have been no identifiable risk of default on the Company's debt obligations. Therefore, the Company would continue to have access to the capital markets.

It would be expected that, depending on the level of "exposure" based on Trojan, the Company's management would have reacted strategically to rebalance the capital structure, over an intermediate period.

Staff's proposal would have impacted PGE by about $17.66 million, a *de minimus* amount that would not have negatively impacted PGE's access to capital. (*See* Staff/100 Busch-Johnson/19, at 14) Staff's recommendation, were it applied in the original docket, would have been regarded as supportive of the Company, compared to other potential outcomes.

Impact on Cost of Equity

Q. WHAT CONCERNS DID PGE RAISE REGARDING THE IMPACT ON THE COST OF EQUITY?

A. PGE discusses the potential for adverse financial effects and makes specific adjustments to the ROE to offset these risks.

Q. DO YOU AGREE?

A. No. PGE did not rigorously apply any known cost of capital techniques to determine its proposed 25 basis point (assuming a one-year amortization) and 150 basis point (17-year amortization) "risk premium" adjustments to the cost of equity. As already indicated, Modern Portfolio Theory specifies that rational investors diversify their investments to reduce exposure to business-specific risks. This minimizes the impact of adverse decisions.

The probability of adverse outcomes exists and the expected market costs should have been reflected in the companies' market prices. Utility investors, in general, consider that there is the risk that a regulated company may, on occasion, not recover either all of its operating or capital costs, due to uncertainties relating to business risk and regulatory risk.

Since PGE initially developed Trojan and placed it into the Company's rate base, the required return for investors would have included the risk profile of a utility investing in a nuclear generating plant. The Company's argument for a "decommissioning risk premium" is misdirected. Such discrete adjustments, as made to the CAPM "framework" are not theoretically based. As staff witness Thornton indicated in the UE 88 docket, the impact of the expected outcome of

Trojan was already factored into the cost of capital. No adjustments were recommended then, and none are recommended now. Indeed, given the removal of Trojan, it is just as likely that PGE's credit profile actually would have strengthened due to the Company no longer facing on-going risks associated with exposure to nuclear plants in its generation portfolio.

Brief Discussion of Relevant UE 88 Testimony

Q. WHAT WAS STAFF'S POSITION IN UE 88 REGARDING THE COST OF CAPITAL IMPACTS?

A. In summary, staff's position today is similar to the testimony provided by former staff witness, Mr. Thornton. He provided a discussion of anticipated effect on PGE's bond-rating and recovery of Trojan. He also indicated that a highly adverse outcome could have affected the marginal cost of debt. There were several analyst reports available that indicated that the "risk" of Trojan was being considered, and indicated that an "impairment" may have occurred, depending on the overall impact on PGE's revenue requirement.

The cost of equity would not have been directly affected, due to non-systematic risk, (i.e., not related to the market, which is the only relevant risk to the cost of equity.) He did hypothesize that there could be an impact on the cost of equity due to a change in capitalization, over time, were the Commission to determine a long-amortization period without a return on the associated capital. Because a large, one-time write-off would decrease, the balance sheet would reflect a higher proportion of debt, thereby having a "spill-over" effect on the financial risk. As I indicated above, the final outcome would have to be materially-large adverse for PGE's marginal cost of capital to have been affected. It is not clear if the revenue impact was expected to be large and persistent. It does appear that investors were aware of the potential outcomes, and as such, these risks were factored into their expectations.

Excerpts from Analyst and Credit Rating Agency Reports

Q. HOW DID THE FINANCIAL MARKET REFLECT ON THIS ISSUE?

A. The following are some excerpts from analyst reports from the UE 88 period, prior to the Commission decision, that reflected available public information concerning the market conditions facing PGE. (*See* UE 88, Staff/48 Thornton/61)

- Value Line and Bear Stearns estimated a 30 percent disallowance of Trojan's non--depreciated balance, versus the Commission staff's recommendation of 20 percent.
- Kidder Peabody released an equity research report that indicated that "the rate proceeding has a significant potential for disappointment regarding Trojan regulatory treatment." The firm recommended a "neutral" rating.
- Standard & Poor's Creditweek report gave Trojan a "negative outlook" and indicated that credit pressures exist regarding the recovery of "the utility's $329 million Trojan investment as well as the estimated $324 million of unfunded Trojan decommissioning costs." It should be noted that the maximum disallowance discussed in staff's testimony was about $280 million, reflecting the unamortized balance in the Trojan investment at the beginning of 1995.
- Salomon Brothers report estimated growth based on the assumption of some risk of disallowance associated with PGE's investment in Trojan and risk of recovery for decommissioning costs. The precise level of risk that was embedded in their analysis is uncertain. It should be noted that staff's position did not recommend disallowance of the decommissioning costs.

Clearly the investment community was anticipating some financial impact regarding Trojan and the ultimate outcome ordered by the Commission. PGE was neither downgraded from a credit-rating perspective, nor did it lose access to capital markets in spite of the uncertainty. The final outcome of this case continues to be identified in PGE's SEC statements, reflecting that uncertainty has been consistently with PGE due to the litigation that has persisted for over a decade. PGE reports the potential for a negative outcome in its SEC reports, although it has not valued the "contingent liability" due to continuing uncertainty. The information has been available to the financial community for quite some time and the on-going risk has not severely impacted PGE's access to capital.

The financial markets and rating agencies would likely consider staff's position in this remand docket as being supportive from a regulatory framework because there is minimal impact on PGE, compared to other potential scenarios that may limit the timing of the return of capital.

At most, PGE's witnesses profess a chance for a downgrade in PGE's credit ratings. This hypothetical downgrade is not quantified. There is no indication that PGE would have defaulted on its bonds. The quantitative models do not reflect accepted financial models and are speculative. A reasonably immediate return of capital would simply have no impact on the cost of equity, and the Company would not experience any significant threat of financial distress.

Conclusions

Q. WHAT DO YOU CONCLUDE?

A. Given a timely recovery of the capital that supported the Trojan investment, no adjustments to PGE's cost of equity or cost of debt are warranted by the remand proceedings covered in this docket. PGE was asked via a staff data request Number 11 for the expected change in PGE's Beta, i.e., non-diversifiable risk exposure. (*See* Staff/202 Morgan/5) The result is that there is not an identifiable impact on Beta, therefore, the Capital Asset Pricing Model[10] (CAPM) results do not warrant an increase in the cost of equity. The Company did not provide quantitative evidence supporting a change in Beta; it only argued that the Commission could have adopted a range of returns relating to the cost of equity, from the distribution of indications in a "cohort" sample or comparable company grouping. Any ad hoc adjustments do not correspond to either theoretical or pragmatic bases using the CAPM framework.[11] No change in the cost of equity due to changing exposure to market risk is necessary.

Primarily because of the assumptions proposed in Staff/100, the cost of capital issue is not a key element of this case. Staff recommends a prompt return of investors' capital, attributable to Trojan. None of the scenarios supported by PGE or staff include completely eliminating the return *of* capital to PGE and its investors. Staff's recommended proposal includes an adjustment to the Company's revenue requirement, reflecting a loss of return on investment. However, the proposal would limit the financial exposure to PGE. The staff recommendation would not have affected the Company's credit rating,

[10] The CAPM model was used to estimate the cost of equity in UE 88.
[11] The Discounted Cash Flow (DCF) Model would also not indicate any adjustments. The DCF typically relies on a sampling of companies with the final indication reflecting diversification among "similar companies." The impact of any company-specific risk exposure would be diluted, during reconciliation.

since a single-year's event is only considered by credit rating agencies in light of a more extended outlook.

A reasoned analysis indicates that, on a relative basis, PGE would have remained financially sound, had the Commission adopted the recommendations outlined in Staff/100. Staff asserts that PGE's investors would not have required additional compensation. If the Commission had found, in UE 88, that the financial impact would have been great, the Commission could have provided additional compensation relating to the cost of capital. It would not particularly have been unreasonable under the circumstances of providing no return of capital, for example. A complete loss of capital could be considered to potentially create a large impact on any utility's financial position. However, barring the chance for a long period for the recovery of capital, such an adjustment might compensate investors for capital investment risks already subsumed in rates.

Assuming the Commission adopts staff's recommendation of a one-year return of capital to PGE, it should not consider adjusting the allowed cost of equity, cost of debt, or adjustments to the Company's capital structure to compensate it for what it perceives as "increased risks." The Commission should reject the Company's arguments. In summary, PGE's authorized rate of return already compensated its investors for the constituent risks. That rate of return in UE 88 would have:

1. fairly compensated investors for the capital invested in PGE;
2. enabled PGE to offer a return adequate to attract new capital on reasonable terms; and,
3. maintained PGE's financial integrity.

Q. IF THE COMMISSION ORDERED A REFUND BASED ON STAFF'S RECOMMENDATION IN THIS PROCEEDING, WOULD PGE'S FINANCIAL HEALTH BE AT RISK?

A. No. The impact calculated in staff's recommended approach would not be material, given the impact from other write-offs in PGE's history.

Q. DOES THIS COMPLETE YOUR PREPARED DIRECT TESTIMONY?

A. Yes.

CASE: UE 88 (Remand)
WITNESS: Thomas Morgan

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 201

Witness Qualifications Statement

May 19, 2005

WITNESS QUALIFICATIONS STATEMENT

NAME:	Thomas D. Morgan
EMPLOYER:	Public Utility Commission of Oregon
TITLE:	Senior Financial Economist, Economic & Policy Analysis
ADDRESS:	550 Capitol St NE Suite 215, Salem, Oregon 97301-2551.
EDUCATION:	Bachelor of Science in Business Administration, Finance; 1993, University of Oregon, Eugene, Oregon *summa cum laude*. I am currently completing the Master of Science in Finance program through the University of Leicester (UK).

RELEVANT WORK EXPERIENCE:

Since August 2001, I have been employed by the Public Utility Commission of Oregon as a financial analyst in the Economic Research & Financial/Policy Analysis Division. Current responsibilities include conducting research and providing technical support for cost of equity issues for electric, telecommunications, and gas utilities.

From October 1997 to August 2001, I worked for the Oregon Department of Revenue as a Senior Appraiser Analyst in the Utility Program, Valuation Section of the Property Tax Division. Duties included appraising a variety of public utility and transportation properties. The valuation process included developing cost of capital studies for use in the discounting of cash flows in the Income Capitalization Approach to value. Duties included valuation of the property owned by gas, electric, telecommunication and airline companies.

I am a certified general property appraiser and have been involved in the valuation of commercial properties since 1993.

CERTIFICATE OF SERVICE

DR 10, UE 88, UM 989
(UE 88 Remand)

I certify that I have this day served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-13-0070, to all parties or attorneys of parties.

Dated at Salem, Oregon, this 19th day of May, 2005.

/s/ Judy Ogilvie

____

Judy Ogilvie
Public Utility Commission
Regulatory Operations
PO Box 2148
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UE 88
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