



**Portland General Electric Company**  
Legal Department  
121 SW Salmon Street • Portland, Oregon 97204  
(503) 464-8860 • Facsimile (503) 464-2200

**J. Jeffrey Dudley**  
Associate General Counsel

July 17, 2006

***Via Electronic Filing and U.S. Mail***

Oregon Public Utility Commission  
Attention: Filing Center  
PO Box 2148  
Salem OR 97308-2148

Re: In the Matter of the Application of Portland General Electric Company for an Accounting Order Authorizing Deferral of Excess Power Costs  
OPUC Docket No. UM 1234

Attention Filing Center:

Enclosed for filing in the above-captioned docket are the original and five copies of the Rebuttal Testimony of Pamela G. Lesh and Jay Tinker together with supporting exhibits (Exhibit PGE/400 through PGE/405) on behalf of Portland General Electric.

An extra copy of this cover letter is enclosed. Please date stamp the extra copy and return it to me in the envelope provided.

Thank you in advance for your assistance.

Sincerely,

JJD:mmd  
Enclosures  
cc: UM 1234 Service List



**CERTIFICATE OF SERVICE**

I certify that I have caused to be served the foregoing **REBUTTAL TESTIMONY OF PORTLAND GENERAL ELECTRIC** in OPUC Docket No UM 1234, by U.S. Mail and electronic mail, to the following parties from the official service list:

LOWREY R BROWN  
CITIZENS' UTILITY BOARD  
610 SW BROADWAY - STE 308  
PORTLAND OR 97205  
lowrey@oregoncub.org

JASON EISDORFER  
CITIZENS' UTILITY BOARD  
610 SW BROADWAY STE 308  
PORTLAND OR 97205  
jason@oregoncub.org

MELINDA J DAVISON  
DAVISON VAN CLEVE PC  
333 SW TAYLOR - STE 400  
PORTLAND OR 97204  
mail@dvclaw.com

S. BRADLEY VAN CLEVE  
DAVISON VAN CLEVE PC  
333 SW TAYLOR - STE 400  
PORTLAND OR 97204  
mail@dvclaw.com

STEPHANIE S ANDRUS  
ASSISTANT ATTORNEY GENERAL  
DEPARTMENT OF JUSTICE  
REGULATED UTILITY & BUSINESS  
SECTION  
1162 COURT ST NE  
SALEM OR 97301-4096  
stephanie.andrus@state.or.us

RANDALL J FALKENBERG PMB 362  
RFI CONSULTING INC  
8351 ROSWELL RD  
ATLANTA GA 30350  
consultrfi@aol.com

Dated this 17<sup>th</sup> day of July, 2006.

  
J. Jeffrey Dudley

I. Introduction ..... 1

II. The Treatment of this Deferral Application is Inextricably Related to the Method Used to Determine Boardman’s Availability for Future NVPC Forecasts ..... 5

III. The Boardman Outage is a Scenario Event that Qualifies for Deferral with Material Financial Impact. .... 10

IV. The Commission’s Decision to Grant this Deferral Need Not and Should Not Impose a Sharing Mechanism. .... 16

V. The Commission Must Consider the Effects of SB 408 in Deciding this Application ..... 21

VI. The Commission Should Ignore Claims that PGE Should Have Known this was Coming and Prepared in Advance..... 24

VII. PGE’s Deferral Meets ORS 757.259 Requirements. .... 26

List of Exhibits ..... 28

## I. Introduction

1 **Q. Please state your name and position.**

2 A. My name is Pamela G. Lesh. I am PGE's Vice President, Rates and Regulatory Affairs and  
3 Strategic Planning. My qualifications were previously provided in PGE Exhibit 100.

4 My name is Jay Tinker. I am a project manager in the Regulatory Affairs department.  
5 My qualifications were previously provided in PGE Exhibit 300.

6 **Q. What is the purpose of your rebuttal testimony?**

7 A. Our rebuttal testimony responds to the reply testimony of the OPUC Staff, ICNU, and CUB  
8 in UM 1234. Specifically, we address these parties' issues regarding whether:

9 1) A relationship exists between the Commission's decision in this docket and  
10 projections for Boardman's availability in forecasting PGE's net variable power  
11 costs (NVPC). (Staff Exhibit 100, pgs. 21-22) (ICNU Exhibit 100, pg. 7)

12 2) The Boardman outage is a stochastic or scenario event, for the purpose of  
13 applying the Commission's guidance on approving deferrals as provided in  
14 docket UM 1147. (Staff Exhibit 100, pg. 16) (ICNU Exhibit 100, pg. 14)

15 3) The Commission's decision to approve deferral must or should impose a sharing  
16 formula, in addition to specifying the method for calculating deferred amounts.  
17 (Staff Exhibit 100, pg. 19) (ICNU Exhibit 100, pg. 4) (CUB Exhibit 100, pg. 9)

18 4) The Commission must consider the effects of SB 408 in applying any prior  
19 decisions regarding appropriate sharing of deferred amounts. (CUB Exhibit 100,  
20 pg. 2)

21 5) PGE should have engaged in actions in advance of the Boardman outage to  
22 mitigate its impact on PGE and our customers. (ICNU Exhibit 100, pg. 15)

1           6) PGE’s application meets the requirements of ORS 757.259. (ICNU Exhibit 100,  
2           pg. 4)

3   **Q. In general, what do the parties recommend with respect to Commission action on PGE’s**  
4   **deferral request?**

5   A. Staff and CUB both recommend that the Commission grant the deferral but, because of the  
6   sharing formula they apply to this deferral stage, PGE would have the opportunity to recover  
7   only between .74% and 5.46%<sup>1</sup> of the \$45.7 million we incurred providing power to our  
8   customers, should we demonstrate such amounts were prudent during the amortization phase  
9   of this case (ICNU Exhibit 100, pg. 18) (Staff Exhibit 100, pg. 20) (CUB Exhibit 100, pgs.  
10   9-10). Staff further recommends that, for the days covered by the deferral period, PGE must  
11   forecast Boardman’s availability (using the longstanding four-year weighted rolling average  
12   methodology) as if the outage never occurred and Boardman was 100% available on all days  
13   (Staff Exhibit 100, pgs. 21-22). CUB does not take a position on forecasting. ICNU  
14   recommends that the Commission deny the deferral outright and is non-committal on how  
15   PGE should forecast Boardman’s availability for NVPC (ICNU Exhibit 100, pgs. 4 and 7).

16           In essence, the parties recommend that PGE receive no compensation for meeting our  
17   customers’ power needs during Boardman’s outage, now or in the future.

18   **Q. Please summarize PGE’s application in this case.**

19   A. On November 18, 2005, 23 days after we took Boardman out of service because of serious  
20   vibration issues that had arisen in the low pressure turbine, PGE applied to defer – pursuant

---

<sup>1</sup> Recovery at 5.46% may not represent parties’ latest position. The figure is based on CUB’s testimony which took no position on recovery of Boardman’s full versus de-rated capacity. Subsequent to filing of their testimony, an article on CUB’s website suggested, “a fair amount would fall well under \$1 million.” Using Staff’s suggested recovery (\$905,000) with CUB’s sharing percentage (70%) PGE would recover 1.4% of its replacement power costs.

1 to ORS 757.259 – the costs we were incurring to replace the output of this low variable cost  
2 resource with much higher-priced market power. We believe our deferral application both  
3 minimized the frequency of rate changes (ORS 757.259 (2)(e)) and appropriately matched  
4 costs and benefits (ORS 757.259 (2)(e)). PGE Exhibit 300 estimated these excess costs at  
5 \$45.4 million for the deferral period, based on a specific identification of purchased power  
6 to replace 100% of the base-load energy normally provided by Boardman. We stated that  
7 we would exclude the portion of the outage for which we received recovery under the  
8 deferral from the historical four-year rolling weighted average for determining plant  
9 availability in NVPC forecasts, to prevent any “double recovery” of the excess costs. In  
10 essence, we proposed to treat the plant as 100% available during the deferral period,  
11 matching the 100% plant output we replaced with market purchases.

12 **Q. Do you agree with the corrections Staff offered in response testimony regarding PGE’s**  
13 **deferral cost calculation?**

14 A. We agree with all of Staff’s corrections except one. The following changes are appropriate:

- 15 • Removal of line losses for both Boardman and replacement purchases
- 16 • Minimal changes for daily energy allocation in November
- 17 • Removal of a single December daily purchase
- 18 • Update of May market prices for forgone planned outage.

19 Applying these corrections slightly changes our estimate of the replacement costs from  
20 \$45.4 million to \$45.7 million. This again assumes the full output of the Boardman plant,  
21 along with a future forced outage rate calculation assumption that Boardman was 100%  
22 available for all days of the deferral.

1 We do not agree with Staff's proposal to calculate replacement costs based on a  
2 Boardman availability of 93.5% because this does not match Staff's proposal to treat the  
3 plant as 100% available in future forecasts that use this period in the four-year weighted  
4 rolling average. We could support using either 100% or 93.5% for both purposes; what is  
5 important is that the calculations be consistent. If the Commission used 93.5% availability  
6 for both purposes, the deferred replacement costs would be \$42.8 million.

7 **Q. Did PGE know that the 2006 water year would produce "good" hydro-electric production**  
8 **when you filed the deferral application?**

9 A. No. As noted above, we filed this application on November 18, 2005, early in the  
10 August-July water year. Although CUB suggests (CUB Exhibit 100, pg. 6) that we may  
11 have chosen the replacement cost methodology for the deferral, rather than a comprehensive  
12 comparison of forecast to actual NVPC, based on anticipation of good hydro, we had no way  
13 of knowing in November what the 2005-2006 winter, or water year would be.

14 **Q. Do you agree with CUB's suggestion that hydro was above average during the deferral**  
15 **period?**

16 A. No. While PGE is pleased to finally experience near average hydro flows after six years of  
17 below normal hydro, we would not consider the November through February deferral period  
18 one of "good hydro" as CUB contends. Over the entire four-month period, PGE hydro  
19 resources produced approximately 17,000 MWh (about 1%) more than expected in the  
20 relevant RVM filings. This additional output is very small, yielding basically normal hydro.  
21 Interestingly, ICNU claims that 2005 was a bad hydro year (ICNU Exhibit 100, pg. 11).  
22 Ultimately, the type of hydro conditions experienced was not a determinant of our decision  
23 to file this deferral.

**II. The Treatment of this Deferral Application is Inextricably Related to the Method Used to Determine Boardman’s Availability for Future NVPC Forecasts**

1 **Q. Please review how PGE presently determines thermal plant availability for purposes of**  
2 **NVPC forecasting.**

3 A. As we mentioned above, and have covered extensively in testimony in other dockets (see,  
4 e.g., UE 180 PGE Exhibit 400, pgs. 19-21), the Commission has for many years used a  
5 rolling, four-year weighted average of actual forced outage rates to determine thermal plant  
6 availability for purposes of NVPC forecasts. This methodology dates back to the 1980s.  
7 This methodology not only serves as an objective means to forecast what is otherwise an  
8 unknown number, but also acts as a risk allocation mechanism. Thermal plant operations  
9 better than expected benefit customers through future NVPC forecasts that are lower than  
10 they would otherwise have been because of greater expected output from low variable cost  
11 thermal resources. All else being equal, the utility is likely to spend more on NVPC in those  
12 years than the forecast because of the forced outage rate assumption. Likewise, thermal  
13 plant operations worse than expected compensate utilities in future NVPC forecasts that are  
14 higher than they would otherwise have been because of lower expected output from low  
15 variable cost resources. All else being equal, the utility is likely to spend less than the  
16 NVPC forecast in those years.

17 For example, Boardman performed extraordinarily well in both 1998 and 2001 with  
18 Equivalent Forced Outage Rates (EFOR) of 2.58% and 2.89% respectively. Both  
19 performances were included in the rolling average. The 2.89% was included in the 2006  
20 RVM as an input for the current 6.5% Boardman forced outage rate or 93.5% availability  
21 factor. The annual Boardman EFORs comprising the current outage rate are below in  
22 Table 1.



**Table 1 2006 RVM Annual EFOR**

<u>Year</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>
Modified EFOR	11.51%	4.21%	8.12%	2.89%

1 **Q. Based on that explanation, how does a deferral application for a thermal plant outage**  
 2 **affect NVPC forecasting?**

3 A. Because the rolling, four-year average methodology uses historical information, deferral  
 4 recovery for a period of thermal plant forced outage could result in a “double recovery” for  
 5 the utility, as the forced outage days depress the availability factor for the subsequent years.  
 6 Because of timing of data availability, the effect actually occurs during years two through  
 7 six after the outage. Thus, for Boardman, the 2005 outage days would affect NVPC  
 8 forecasts in 2007 through 2010; the 2006 forced outage days would affect NVPC forecasts  
 9 in 2008 through 2011.

10 **Q. Did PGE consider, in November 2005 as this outage unfolded, simply relying on this**  
 11 **methodology to “recover” the replacement costs it was incurring?**

12 A. Yes. For the reasons explained in our opening testimony, we saw that the use of the  
 13 four-year average methodology as less desirable than a deferral (PGE Exhibit 100, pgs. 5-6).  
 14 Foremost of those reasons was the sizable effect of this outage on NVPC forecasts during  
 15 the years that it is part of the four-year average. All else being equal, including an outage of  
 16 this duration in the forecasting methodology increases the chances that customers’ rates do  
 17 not actually reflect cost of service for the period. It also means that customers end up  
 18 paying something more or less than the replacement cost, rather than the actual cost. We  
 19 also noted that relying on the outage forecasting methodology to handle risk allocation of  
 20 these kinds of costs could cause prolonged periods of mismatch between rates and cost of

1 service if the utility involved did not have a regular schedule to forecast NVPC, as PGE does  
2 with the RVM and proposes to continue in UE 180.

3 In addition, at that time, we did not and could not know how the outage would unfold,  
4 particularly its duration. Because of the constraints of the deferred accounting statute, PGE  
5 had to file an application to preserve that regulatory treatment as an option. This decision  
6 should not result in a “head’s we win, tails you lose” or “no recovery” situation that both  
7 alternatives produce.

8 **Q. Given that you now know the duration of the outage, would PGE consider continued use  
9 of the rolling, four-year average methodology of determining plant availability for  
10 Boardman a reasonable alternative to Commission approval of this deferral application?**

11 A. Yes, with a caveat. Because the forced outage spans two calendar years, the effect this  
12 number of days would otherwise have on the forecasted availability is muted from what it  
13 would be had an outage of this length occurred in a single calendar year. Assuming  
14 Boardman availability at 93.5% over the next six years for illustration purposes, Table 2  
15 below shows the availability factors that would result from this treatment.

**Table 2**  
**Boardman Availability Factor**

Year	2007	2008	2009	2010	2011	2012
Availability Factor	90.7	88.4	88.4	88.4	91.3	93.5

16 If the disconnect between our prices and cost of service that this difference will cause is  
17 acceptable, we are willing to use this option. The caveat is the one we explained in our  
18 testimony in docket UE 180 in connection with our proposed Variance Tariff. The risk  
19 allocation feature of the traditional forced outage methodology works only if all years  
20 reflected in a particular forecast are under the same regulatory framework; i.e., all with the  
21 same adjustment for the difference between actual and forecast, whether that be none, all, or

1 some percentage. If the Commission were to deny this deferral in preference for using the  
2 traditional risk allocation for thermal plant forced outages of the four-year average  
3 methodology, and also to adopt our proposed Variance Tariff, we would need to adjust  
4 credits or charges to customers under that tariff to effectuate the Commission's decisions.  
5 As explained in UE 180, we prepared the tariff to accommodate this eventuality.

6 **Q. Is it clear that the parties believe the deferral and inclusion of this forced outage in future  
7 years' NVPC forecasts are equally viable alternatives?**

8 A. No. Staff's position appears to be that PGE should receive virtually no recovery of the  
9 actual replacement power costs incurred to serve customers under the deferral because  
10 losses of this sort are "in the normal course of business" and, then, to effectuate this result,  
11 preclude use of the risk allocation features of the forced outage rate methodology by  
12 assuming Boardman was 100% available during the deferral period. In other words, by  
13 requesting deferral, it appears Staff believes PGE has foregone the opportunity to use the  
14 other risk allocation methodology.

15 During deposition, Staff essentially revised its historical position on applying the  
16 four-year forced outage calculation. It appears Staff would now limit inclusion of events to  
17 those that are expected to occur once every four years.

18 ...the four-year average calculation implicitly assumes that, that the type  
19 of event would occur once in every four years. (PGE Exhibit 404, pg. 14)

20 I mean, the purpose of normalizing forced outages in setting base rates  
21 is to reflect a normal level of forced outages on a going-forward basis.  
22 What I'm suggesting is that the four-year average calculation may not be  
23 the best way of doing it. It's the way that we've traditionally done it and it's  
24 the way that PGE has done it in recent cases.

25 What I'm suggesting is that this deferral application illustrates the  
26 weaknesses in that approach. The weakness in that approach is that you  
27 can't include -- that it -- one, it doesn't include -- it includes an assumption  
28 that whatever goes into that four-year average calculation is going to occur  
29 on a going-forward basis at a probability of one in every four years. And

1           what I'm suggesting is that that may not be appropriate. (PGE Exhibit  
2           404, pg. 15)

3           CUB classifies this outage as abnormal and extraordinary and, accordingly, takes the  
4           position that the forced outage rate methodology should exclude it, but also recommends  
5           virtually no recovery because the loss is within the range of what CUB believes utilities  
6           should normally bear. As noted above, ICNU questions whether it would be appropriate to  
7           include this outage in the traditional forecasting methodology.

8           **Q. Were the alternatives of deferral or use of the forced outage rate methodology available**  
9           **for PacifiCorp's Hunter plant outage that is the basis of the parties' recovery**  
10           **recommendations in this proceeding?**

11          A. Not easily. At the time of the Hunter outage, PacifiCorp had already requested a  
12          comprehensive deferral of the difference between actual and forecasted NVPC because of  
13          the Western power market crisis and drought conditions. Handling Hunter under the  
14          traditional risk allocation of the forced outage rate methodology would have required  
15          making outboard adjustments to the comparison of actual and forecast NVPC.

### III. The Boardman Outage is a Scenario Event that Qualifies for Deferral with Material Financial Impact.

1 **Q. Why is classification of Boardman’s outage as a scenario or stochastic event important?**

2 A. The Commission’s guidance on deferred accounting in Docket UM 1147 uses this  
3 distinction to identify the size of financial effect required for approval of deferred  
4 accounting. The chart below from Staff’s testimony (Staff Exhibit 100, pg. 15) shows the  
5 relationships between classification and deferral approval outcome.

Financial Effect	Type of Event		
	Stochastic Risk	Scenario Risk	Commission Approved
	(1)(2)	(3)(4)	(5)(6)
Substantial	Deferral Considered (7)	Deferral Considered	Deferral Considered
Material	Deferral Not Considered	Deferral Considered	Deferral Considered
Immaterial	Deferral Not Considered	Deferral Not Considered	Deferral Considered

6 (1) Stochastic risk is defined as a risk that can be predicted as part of the normal course of events; it is quantifiable  
7 and can be represented by a known statistical distribution (Order 04-108).

8 (2) Examples of stochastic risk are hydro variability, normal plant outages, employee compensation, and weather.

9 (3) Scenario risk is defined as a risk that is not susceptible to prediction and quantification; it is often represented  
10 by abrupt changes in business factors or practices (Order 04-108).

11 (4) Examples of scenario risk are catastrophic plant outages (Trojan), environmental costs, and material unexpected  
12 changes to costs.

13 (5) These events are either mandated, pursuant to Commission approval, or emerging from a rate case settlement.

14 (6) Examples of these events are DSM costs, a PGA, and intervenor funding.

15 (7) Event should be extraordinary.

16 **Q. Why do you consider the Boardman outage to be properly classified as a scenario risk?**

17 A. PGE considers this outage, which Staff determined to have a likelihood of occurring  
18 approximately once every hundred years (Staff Exhibit 100, pg. 16), much closer in nature  
19 to the Trojan outages of the early 1990s than to the variation in water years. It is a scenario  
20 event that should qualify for deferral upon a showing of material financial effect.

21 **Q. What positions do the parties take?**

22 A. Staff and ICNU assert that the outage is a stochastic risk.

1 CUB does not characterize the outage (CUB Exhibit 100, pg. 3). CUB's testimony  
2 does, however, state that the outage is "extraordinary" (CUB Exhibit 100, pg. 1) and refers  
3 to it as a "catastrophic outage" (CUB Exhibit 100, pg. 4). Similar to Staff and ICNU, CUB  
4 believes it inappropriate to include the outage in the four-year forced outage rate, "as an  
5 outage of this magnitude is unlikely to repeat itself" (CUB Exhibit 100, pg. 4). This implies  
6 that CUB might consider the outage a scenario event.

7 **Q. Are the Staff and ICNU positions that this outage is stochastic well supported?**

8 A. No. During deposition, Staff characterized the outage as "Rare. Not normal." (PGE Exhibit  
9 404, pg. 3) and "it is not normal in the sense that it was an extreme -- it had an extreme  
10 duration associated with it" (PGE Exhibit 404, pg. 2). Staff concludes that "an outage with  
11 duration greater than 104 days occurs roughly once every 100 years" (Staff Exhibit 100, pg.  
12 16). Using Staff's Table 3, these terms seem closer to the Trojan category than the "normal"  
13 plant outages indicated as "stochastic."

14 The ICNU witness does not disagree that the outage was a rare occurrence and uses this  
15 characteristic to question the appropriateness of including such a long outage in the  
16 four-year average forced outage rate noting "there is also the question of whether it was an  
17 event that is likely to re-occur in the future" (ICNU Exhibit 100, pg. 7). This position  
18 appears inconsistent with ICNU's position that the outage was a stochastic event.

19 **Q. Does Staff offer concrete guidance on the difference between outages which are stochastic**  
20 **versus those that are scenario risks?**

21 A. No, the following exchange is illustrative of Staff's guidance:

22 Q. Page 16 of your Testimony. I'm sorry, I don't have a line. 4. It says,  
23 "Staff considers generating plant forced outages to be a stochastic risk."

24 Right?

25 Is that all generating plant outages?

1 A. Staff considers generating plant outages that occur during the normal  
2 course of business to be a stochastic risk.

3 Q. Okay. So the question was whether that means all plant outages are a  
4 stochastic risk.

5 A. No, not all plant outages are a stochastic risk.

6 Q. Okay. Which ones aren't?

7 A. Those that do not occur during the normal course of business. (PGE  
8 Exhibit 404, pgs. 12-13)

9 **Q. Did Staff define “normal course of business”?**

10 A. Yes. Under questioning it was defined as an event that occurs “On the order of once every  
11 hundred years.” (PGE Exhibit 404, pg. 4)

12 **Q. What is troubling about this definition?**

13 A. Utilities do not plan for events that occur once every one hundred years. IRPs are not based  
14 on 1-in 100-peak demands, hydro availability is not based on 1-in-100 water years. Staff’s  
15 definition seems designed specifically to classify the Boardman outage as a stochastic risk,  
16 not a scenario risk. One can see the fallacy in the definition by simply examining the  
17 lifetime of an asset such as Boardman. When built, Boardman’s assumed useful life was 40  
18 years. It is unclear how an event occurring once in every 2 ½ lifetimes is “normal”.

19 **Q. Does Staff’s conclusion that the Boardman outage is a stochastic risk fail on other criteria  
20 that Staff has used to distinguish the categories of scenario and stochastic risk?**

21 A. Yes. Staff has explained that variations from stochastic risks should balance over time while  
22 variations from scenario risks will not (Order 04-108, pg. 9).

23 Let me try and answer that by stating the question. I think the question  
24 here is should there be a high likelihood that the swings of a stochastic risk  
25 will balance out over time through rate making. Should there be a high --  
26 should there be a – should we do rate making, should we design our rates  
27 in such a way, that there is a high likelihood that for stochastic risks the  
28 swings will balance out over time.

29 I would answer yes, we should. (PGE Exhibit 404, pg. 10)

1           Assuming continued use in Oregon of the traditional forced outage rate forecasting  
2 methodology (and exclusion of this outage from the methodology as parties have suggested),  
3 there is little to no possibility the loss from the Boardman outage will balance out over time.  
4 There are no 'negative' forced outage rates. The four-year forced outage rate incorporates  
5 superior performance from any single year. Any company benefits from this superior  
6 performance are short lived, accruing during the year, and passed to customers in the four  
7 following years. Superior plant performance is included in the four year average through the  
8 EFOR. As we indicated earlier, EFORs of less than 3% for Boardman have been reflected  
9 in rates through the four-year average.

10           Even if Oregon adopted an entirely different methodology for determining availability  
11 of thermal plants to forecast NVPC, it is still unlikely that a forced outage of this duration  
12 would “balance out over time,” simply because a thermal plant cannot be more than 100%  
13 available. Thermal plants differ significantly from hydro generation in this regard: thermal  
14 plants cannot produce more than 100% of “average,” which hydro can, depending on water  
15 conditions.

16 **Q. Does Staff suggest how such swings could balance over time?**

17 A. Staff states there are many methods that the Commission could use to achieve balance over  
18 the years:

19           But there's many methods available to the Commission to achieve that  
20 balance over time. I just wanted to state that. They could use deferred  
21 accounting, they could use normalized rate making. There's many  
22 methods that the Commission could use to achieve that balance over time.

23           Using Staff's recommendations, however, PGE will recover less than 1% through  
24 deferral, and may never include this outage period in the rolling four-year average. Staff  
25 makes no mention of other options.



1 **Q. Has Staff analyzed the balancing of these swings over time?**

2 A. No. The Staff witness stated that he had not analyzed how an outage of this duration might  
3 balance out over time such that it fit within the definition of a stochastic risk:

4 I haven't, in this testimony, done any analysis of the balance over time.  
5 (PGE Exhibit 404, pg. 11)

6 **Q. Staff suggests events such as this outage could be modeled in forecasting NVPC for  
7 purposes of setting rates. Would this be appropriate?**

8 A. First, it should be clear that neither PGE's current prices nor those in effect in 2005 include  
9 the potential of this outage. There is no "forced outage adder to account for outages that are  
10 more extreme than those reflected in a normal four-year rolling average" (Staff Exhibit 100,  
11 pg. 23). As to the appropriateness of including extreme events in rates, no party has  
12 demonstrated how such an event could be reasonably modeled in rates. Such a mechanism  
13 would be problematic at best; extreme events cannot be modeled. An adder would need to  
14 include all potential disruptive events, such as an earthquake, or a terrorist attack to name  
15 two extreme events.

16 Such an adder would also violate a basic regulatory tenant - matching costs customers  
17 pay with the benefits they receive. Staff suggests an outage of this duration occurs once  
18 every one hundred years. If rates include costs related to such an extreme event, customers  
19 in year one pay for something that may not happen until year 100. The converse is true as  
20 well: customers in the future (one hundred years) would pay for current outages. While  
21 there is no requirement that costs and benefits be matched perfectly in time, Staff's construct  
22 would result in a great temporal mismatch of costs and benefits.

23 **Q. Has Staff demonstrated that the Boardman outage is "stochastic?"**

1 A. No. Staff defines a stochastic risk as a risk that can be predicted as part of the normal course  
2 of events; it is quantifiable and can be represented by a known statistical distribution (Order  
3 04-108). However, Staff has not performed the necessary analysis to prove that the risk of  
4 all possible Boardman outages is quantifiable and can be represented by a known statistical  
5 distribution.

6 **Q. Why do you contend that Staff has not done this analysis?**

7 A. In deposition Staff witness admits that such an analysis would involve a histogram that  
8 reflects the number of occurrences of a type of an event (PGE Exhibit 404, pg. 5). Staff  
9 further admits that, “I have not created such a histogram...” (PGE Exhibit 404, pg. 5).  
10 While Staff believes it is “likely possible” to create such a histogram, they are unsure of  
11 even the data to use to construct it (PGE Exhibit 404, pg. 5). “I mean, you have to - - you  
12 have to actually do the analysis and start down the path before you’re gonna know whether  
13 or not at the end of the day it’s a reasonable data set to use. You’d have to actually do the  
14 analysis.” (PGE Exhibit 404, pg. 6) Further, Staff agrees that statistical testing may be  
15 required to validate the model (PGE Exhibit 404, pg. 7). Staff has done no such analysis  
16 and has run no statistical tests.

17 **Q. Does the classification of this outage as stochastic or scenario matter, ultimately, to the**  
18 **parties’ recommendations whether the Commission should approve deferral?**

19 A. No, not really. Staff finds the financial effect substantial and thus eligible for deferral. CUB  
20 also recommends approving the deferral, albeit without characterization.

**IV. The Commission’s Decision to Grant this Deferral Need Not and Should Not Impose a Sharing Mechanism.**

1 **Q. Did PGE’s application for the deferral propose a sharing mechanism in addition to the**  
2 **method of calculating the amount to defer?**

3 A. No.

4 **Q. Why not?**

5 A. Based on our experience with deferrals and our understanding of the deferral statute, we  
6 believe that there is no requirement that authorizing a deferral include a sharing  
7 methodology and that, in this instance, the earnings test is the best means to ensure that any  
8 amount authorized for amortization is reasonable.

9 We conclude that the statute does not require sharing because many deferrals the  
10 Commission authorizes include no sharing and good policy reasons support no sharing. For  
11 example, the deferral of PGE’s anticipated 2005 Oregon State income tax kicker, the ISFSI  
12 pollution control tax credits, Information Technology costs, Intervenor Funding, and  
13 Advertising costs all required no sharing. Certainly, the statute does not say anything about  
14 limiting the deferral of costs or revenues to some amount produced by sharing. We can  
15 recollect no instances in which the deferral of a revenue increase or cost reduction included  
16 any sharing. The only instances, in our recollection, of the deferral of a cost increase or  
17 revenue decrease that included sharing are those that relate to power costs. Proper  
18 regulatory policy would treat all deferrals the same.

19 We conclude that the earnings test is the best means to assure that the amount of  
20 replacement costs PGE recovers from customers is reasonable for several reasons. This tool,  
21 provided for in the deferred accounting statute, has historically served to:

1 (a) ensure that cost savings or revenue increases outside of the deferred items did  
2 not offset their effect such that recovery or refund of the deferral produced an  
3 unreasonable return for the utility;

4 (b) express the Commission's discretion regarding how to share discrete cost or  
5 revenue changes between customers and the utility.

6 The most complete Commission discussion on its use of the earnings test was in Order  
7 No. 93-257.

8 In the future, the Commission intends to tailor earnings tests to fit the  
9 type of deferral. For example, if the Commission authorized deferral of an  
10 emergency increase in cost, the earnings test applied might allow a utility  
11 to amortize the deferral to the extent that it brings the utility's earnings for  
12 the period up to the bottom of a reasonable range. This type of earnings  
13 test could also apply to gas tracking cases. In this way, the Commission  
14 could encourage the utility to control its costs. (pgs. 11-12)

15 In PGE's experience, inclusion of a sharing component in the calculation of the deferral  
16 itself has occurred when one or both of the following circumstances are present:

- 17 1) a need exists to align the short-term interest of the utility with that of customers  
18 because utility decisions yet to be made will affect the size of the deferral. For  
19 example, when the Commission granted PGE 90% recovery of the costs it  
20 projected to incur to replace Trojan when it went off-line in 1991, the  
21 Commission approved the deferral early in the replacement period using a  
22 formula that compared actual to forecasted NVPC. Under this calculation  
23 methodology, PGE's purchasing decisions yet to come would affect the amount  
24 of the deferral and sharing the total aligned interests.
- 25 2) an expectation exists that the earnings test will limit the amount deferred. This  
26 situation occurred during the Trojan deferrals that followed its permanent closure

1 (UM 594 and UM 692). The replacement power cost percentages chosen  
2 reflected the expected reduction in O&M costs that accompanied plant closure.

3 **Q. How does your experience reconcile with the Commission's decision in UM 995, which**  
4 **the parties cite extensively as the basis for recommending that the Commission impose a**  
5 **sharing formula at the deferral stage?**

6 A. We can only speculate regarding the circumstances that produced the UM 995 decision  
7 because it was not a generic docket and PGE did not participate in the decision. The  
8 decision concerned a specific set of circumstances for one utility and one time period. We  
9 do know that a number of circumstances are different here:

10 1) The UM 995 deferral period was for almost 12 months; our deferral request is  
11 not quite three months.

12 2) The UM 995 deferral tracked the variance between forecast NVPC and actual  
13 NVPC; ours tracks only specifically incurred Boardman replacement power  
14 costs.

15 3) The Commission had not determined a forecast of NVPC for purposes of  
16 PacifiCorp's rates at the time of UM 995. The Commission last set PacifiCorp's  
17 NVPC forecast for rate setting purposes in UE 111 (filed in 1999). The UE 111  
18 test period did not align with the UM 995 deferral period. By contrast, the  
19 Commission set the PGE NVPC forecast for purposes of the period covered by  
20 this deferral application in late 2004 and late 2005, respectively, for the portions  
21 of the deferral in 2005 and 2006.

22 We do know that for the PGE deferral frequently cited as establishing a requirement of  
23 a 250 basis point deadband – the 2001 power cost adjustment – PGE agreed to the deadband

1 only a month into the deferral period when it was still equally probable that the mechanism  
2 would produce a credit to customers as a charge. Of course, this application of a deadband  
3 was in a settlement that specifically states that the parties agreed not to cite it as precedent.  
4 We do not know if a positive outcome was possible for PacifiCorp at the time the  
5 Commission imposed the deadband in UM 995. In the instance of this Boardman deferral  
6 application, no range of outcomes is possible. A 250 basis point deadband would operate  
7 simply as a 250 basis point reduction in the amount of cost PGE incurred to serve customers  
8 that it could recover. As we explained in the previous section, little or no possibility exists  
9 that PGE would ever have an opportunity to “balance out” this loss through better-than-  
10 expected availability at Boardman.

11 **Q. Does the nature of the risk addressed by a deferral as stochastic or scenario matter in**  
12 **terms of applying a sharing formula to the authorization of the deferral?**

13 A. We do not know. The Commission’s guidance in UM 1147 focused on the circumstances in  
14 which it would authorize a utility to defer amounts; it did not address the formulas –  
15 identification or sharing – by which utilities would calculate authorized deferrals. On  
16 deposition, Staff explained its understanding of the effect of classification on sharing  
17 requirements. For scenario risks, Staff suggested that no sharing may apply to the deferral  
18 authorization:

19 Well, you know, in theory, if the -- if the type of event was a scenario  
20 event, one that was not expected to occur in the normal course of business,  
21 and it resulted in one extra dollar, then, you know, I think an argument can  
22 be made that that would be a material effect.

23 Now whether or not we're going to go through the regulatory burden of,  
24 you know, trying to recover that one extra dollar, I mean, there's some  
25 lower threshold that just, in the normal course of regulation, doesn't rise to  
26 the level of needing to be accounted for. But what I'm saying is that the  
27 threshold for material is quite low. (PGE Exhibit 404, pgs. 8-9)

1 **Q. Is a deadband necessary to account for cost offsets that may mitigate the excess costs**  
2 **incurred under the deferral?**

3 A. No, this is a concern CUB expresses (CUB Exhibit 100, pg. 7). As noted above, however,  
4 the statutory earnings test serves this purpose quite well. In 1995, Order No. 95-1216,  
5 application of the earnings test to PGE's deferral of Trojan replacement power from July, 1  
6 1993, to March 31, 1994, resulted in PGE receiving approximately 20% of the authorized  
7 deferral because O&M reductions at the plant offset the majority of the additional variable  
8 power costs. The use of a deadband to capture such effects assumes cost offsets that may  
9 not exist.

**V. The Commission Must Consider the Effects of SB 408 in Deciding this Application**

1 **Q. Has the Commission indicated it will consider the impact of SB 408 when evaluating**  
2 **issues?**

3 A. Yes. In Order No. 06-400 the Commission indicated they would consider tax effects in  
4 evaluating issues:

5 In response, we will consider the tax effects when evaluating issues in  
6 other dockets, such as power cost adjustment mechanism. (pg. 9)

7 **Q. Will SB 408 affect the financial impact of the Boardman outage?**

8 A. Yes. The replacement costs that PGE incurred during the 2006 portion of the requested  
9 deferral period will affect PGE's taxes paid for 2006, which is the first year of the income  
10 tax true-up required by SB 408. All else being equal, this would trigger a credit to  
11 customers, and thus a loss to PGE, of an additional 40% of the 2006 replacement cost PGE  
12 incurred.

13 **Q. Please elaborate.**

14 A. Given the approach to deriving "taxes collected in rates" currently supported by the  
15 Commission in the AR 499 proceeding, actual variations in the stand-alone financial  
16 performance of the utility will lead to refunds/surcharges. Thus, a requirement in a deferral  
17 docket (such as UM 1234) that a utility absorb power costs will effectively require the utility  
18 to refund to customers the tax benefit of the excess costs that the utility absorbed. As a  
19 result, a 250 basis point deadband effectively imposes additional harm onto the utility,  
20 which increases the effective size of the deadband.

21 **Q. Can you provide an example?**

22 A. Yes. For simplicity, assume that a utility has no parent, no subsidiaries, and no non-utility  
23 operations. Effectively, the utility is a stand-alone utility. During a ratecase, the



1 Commission authorizes rates with an expected ROE that translates into an expected tax  
2 liability of \$50 million. During the year, the utility experiences financial results that  
3 perfectly mirror the rate case, except for an outage at a major plant that results in additional  
4 costs of \$10 million, for which the utility has sought deferral. If the application of a  
5 deadband in the deferral proceeding required the utility to absorb the entire excess costs,  
6 then earnings will be lower by \$10 million (pre-tax) relative to the rate case assumptions.  
7 Since the utility costs were higher than in the test year it will have a lower tax liability by \$4  
8 million (40% of \$10 million). Under Staff's proposed rules in AR 499, the utility would  
9 refund this \$4 million to customers. Thus, the application of a deadband in this example  
10 deferral docket not only required the utility to absorb \$10 million of higher power costs, but  
11 effectively resulted in an additional \$4 million refund through SB 408.

12 **Q. Was SB 408 in effect at the time of UM 995 or the deferral in which PGE stipulated to a**  
13 **250 basis point deadband?**

14 A. No.

15 **Q. What is the effect of a 250 basis point deadband given SB 408?**

16 A. Staff has characterized this amount as "normal variability between rate cases that would not  
17 trigger a rate filing by the company or a show cause request by other parties." (Staff Exhibit  
18 100, pg. 20) Assuming the deadband applies to an instance in which the actual result could  
19 be either costs or savings of up to 250 basis points, applying SB 408 will produce credits or  
20 charges to customers, depending whether the utility is in the positive or negative side of the  
21 deadband. Thus, a positive 250 basis points would cause a charge to customers. Using

1 Staff's numbers as an example, customers would pay \$16.5 million<sup>2</sup> for this "normal  
2 variability." A negative 250 basis points would cause a credit to customers. Again, using  
3 Staff's numbers as an example, the utility would bear \$16.5 million for this "normal  
4 variability." Even if UM 995 represents an inflexible Commission policy, rather than a fact-  
5 specific decision, that 250 basis points is variability that warrants no adjustment to rates  
6 (unless it is for specific Commission-approved items such as the tax kicker), the  
7 Commission must revisit that decision in light of the effects of SB 408.

8 **Q. Did Staff or ICNU take SB 408 into account?**

9 A. No. (PGE Exhibit 404, pgs. 16-17) (PGE Exhibit 405, pg. 1)

---

<sup>2</sup> Staff presents \$41.9 million as a 250 basis point deadband (Staff Exhibit 100, pg. 20). Applying a 39.3% composite tax rate to this figure yields \$16.5 million.

**VI. The Commission Should Ignore Claims that PGE Should Have Known this was Coming and Prepared in Advance.**

1 **Q. ICNU claims that the Boardman outage was a foreseeable event and that PGE should**  
2 **have taken action in advance of the outage (ICNU Exhibit 100, pg. 14). Do you agree?**

3 A. No. Despite the rhetoric in this docket, these types of major outages cannot be predicted.  
4 Staff has indicated that these types of events are “1 in 100.” We do not believe one can put  
5 an exact frequency on the event. However, clearly it is a very infrequent event. If PGE was  
6 to purchase power in advance of such outages, how much should we purchase? When? And  
7 who should pay for that power? It would not make sense to purchase today for an infrequent  
8 event that may not happen for years (or decades). ICNU seems to be concerned about  
9 matching costs and benefits, yet their suggested scheme, in addition to being completely  
10 unrealistic, would force costs to be incurred today for events that may not happen for  
11 significant periods of time in the future.

12 **Q. Are there other options aside from purchasing in advance?**

13 A. ICNU seems to suggest that other options exist, but proposes nothing specific. Such options  
14 do not exist. For example, there are currently no counterparties providing replacement  
15 power cost insurance.

16 **Q. Is there a common element between ICNU’s claims that advance actions should have**  
17 **been taken and Staff’s claim that rates can be set in such a way as to balance these events**  
18 **out over time?**

19 A. Yes. We believe parties have a fundamentally mistaken notion that regulatory constructs  
20 can be established that effectively remove any need for the Commission to take action when  
21 significant unexpected events occur. Cost of service rates set on periodic forecasts cannot  
22 handle all contingencies as utilities deliver upon their obligation to serve. Regulation’s

1 strength is its flexibility to address events as they occur. The deferred accounting statute is  
2 one tool the Commission has to do just that. The Commission's statutory task of assuring  
3 safe and adequate service at fair and reasonable rates is not limited to doing so only  
4 periodically in rate cases.

**VII. PGE's Deferral Meets ORS 757.259 Requirements.**

1 **Q. ICNU's witness states that PGE's deferral does not minimize the frequency of rate**  
2 **changes because PGE would have been unlikely to obtain interim rate relief (ICNU**  
3 **Exhibit 100, pg. 10). Do you agree?**

4 A. No. However, we believe this is a position regarding the legal standards for interim rate  
5 relief and is inappropriate for inclusion in expert policy testimony. PGE will address  
6 ICNU's argument regarding interim rates in legal briefs.

7 **Q. ICNU testimony also asserts that PGE's deferral application fails to meet the standard of**  
8 **appropriate matching costs and benefits (ICNU Exhibit 100, pg. 12). Do you agree?**

9 A. No. ICNU has made this claim in other deferral proceedings as well, most recently in legal  
10 comments in UM 1265/1257 (Grid West deferral). The requirement of matching costs and  
11 benefits does not require exact temporal matching of costs and benefits. In fact, such a strict  
12 standard would effectively be impossible to meet since the Commission must go through a  
13 process of considering a deferral application before it approves amortization. The  
14 requirement of matching costs and benefits requires that customers pay the costs for services  
15 for which they benefit. Customers have benefited from the power provided by PGE to  
16 replace Boardman's expected output. This deferral provides a mechanism for customers to  
17 cover the costs of such power. The exchange below from the deposition of Staff witnesses  
18 Galbraith and Owings illustrate that customers have received this benefit (PGE Exhibit 404,  
19 pg. 1):

20 Q. So whatever demand customers put on it, PGE has to go find the power  
21 and deliver it, right?

22 A. That's correct; yes.

23 Q. So that customers benefitted from this power that was used?

24 A. Yes.  
25

- 1 **Q. Does this conclude your testimony?**
- 2 A. Yes.

g:\ratecase\opuc\dockets\um-1234\testimony-pge\rebuttal\exhibitoodraft\_071006.doc

**List of Exhibits**

<b><u>PGE Exhibit</u></b>	<b><u>Description</u></b>
401	Revised Boardman Excess Cost Calculations
402	Hydro Generation in Deferral Months
403	Intervenor Suggested Recovery
404	Referenced Staff Deposition Pages
405	Referenced ICNU Deposition Page

**Boardman Excess Power Costs**

<u>Excess Costs</u>	<u>Start Date</u>	<u>End Date</u>	<b>Initial Filing</b>		<b>Revised Figures</b>	
			Full Capacity <u>Dollars</u>	Full Capacity <u>Dollars</u>	Full Capacity <u>Dollars</u>	De-rated Capacity <u>Dollars</u>
Nov 17 - Nov 30	11/18/2005	11/30/2005	\$ 7,115,190	\$ 6,987,053	\$ 6,531,173	
December	12/1/2005	12/31/2005	\$ 19,768,532	\$ 19,367,268	\$ 17,988,091	
January	1/1/2006	1/31/2006	\$ 20,743,313	\$ 20,355,062	\$ 19,151,409	
Feb 1 - Feb 5	2/1/2006	2/5/2006	\$ 2,520,441	\$ 2,473,242	\$ 2,372,888	
Total Excess Power Costs - Deferral Period			\$ 50,147,477	\$ 49,182,626	\$ 46,043,561	

**Avoided Maintenance Savings**

Apr 29 - May 27	4/29/2006	5/27/2006	\$ 4,763,722	\$ 3,468,019	\$ 3,253,550	
Net Excess Power Costs - Deferral Period			\$ 45,383,755	\$ <b>45,714,606</b>	\$ 42,790,012	



**Comparison of Hydro Generation (MWH) During the Boardman Deferral Period**

	November	December	January	February	Total
Forecast	368,790	448,110	511,345	435,065	1,763,310
Actual	382,660	408,625	549,642	439,612	1,780,539
Actual - Forecast	13,870	(39,485)	38,297	4,547	17,229
% Increase (Decrease)	3.76	(8.81)	7.49	1.05	0.98

### Calculation of Suggested Recovery by Intervenors

PGE Actual Replacement Costs  
**\$ 45,700,000**

<u>Party</u>	<u>Replacement Costs</u>	<u>Basis Points</u>	<u>\$/Basis Point</u>	<u>Shared Costs</u>	<u>Sharing Percent</u>	<u>Recovery</u>	<u>Percent of Replacement Costs</u>
ICNU	\$ 42,600,000	254	\$ 167,717	\$ 670,866	50%	\$ 335,433	<b>0.73%</b>
Staff				\$ 905,000	50%	\$ 452,500	<b>0.99%</b>
CUB	\$ 45,700,000	271	\$ 168,635	\$ 3,541,328	70%	\$ 2,478,930	<b>5.42%</b>

1 Q So whatever demand customers put on it, PGE  
2 has to go find the power and deliver it, right?

3 A That's correct; yes.

4 Q So that customers benefitted from this power  
5 that was used?

6 A Yes.

7 Q And what's your estimate of the incremental  
8 cost of the power due to the Boardman outage?

9 A The incremental cost of power. I'm not sure  
10 where you're going with that there.

11 Q You came up with a number in your testimony  
12 for what the deferral should be, right? What the cost  
13 was. Didn't you?

14 A Yes.

15 Q What was that number?

16 A For the deferral period, Staff estimated the  
17 replacement power cost to be \$54.2 million.

18 Q And then you made some adjustments to that?

19 A That's correct. The amount that would be  
20 eligible for deferral would be that \$54.2 million  
21 number minus the baseline costs that are included in  
22 PGE's rates.

23 Q Which are?

24 A \$8.2 million. That results in what I've  
25 called an excess power cost of \$46.1 million. And

1 the Boardman outages is a stochastic event or a  
2 stochastic risk, so it's in the first column. And to  
3 be eligible for deferred accounting, for the  
4 Commission to exercise its discretion to authorize  
5 deferred accounting, the Commission has said that the  
6 financial effect must be substantial.

7 Q So it is -- the box with footnote 7 in it, is  
8 that the right box?

9 A That's correct.

10 Q Okay. So was the Boardman outage a normal  
11 plant outage?

12 A I don't know what you mean by normal, so  
13 you'll have to --

14 Q Well, that's -- okay.

15 Footnote 2. "Examples of stochastic risk are  
16 hydro variability, normal plant outages, employee  
17 compensation, and weather."

18 Was this a normal plant outage?

19 A It's normal in the sense that it occurs in  
20 the normal course of business. So it is not normal in  
21 the sense that it was an extreme -- it had an extreme  
22 duration associated with it.

23 Q Okay, so was it normal or not normal?

24 MS. ANDRUS: Objection; asked and  
25 answered.

1 occurs in the normal course of events. I would  
2 consider it to be a normal plant outage.

3 Q But we just established that it was not  
4 normal in duration, right?

5 A It is a -- it's a very long plant outage  
6 (nods head). It's a hundred-and-five-day plant  
7 outage, which is a rare plant outage duration.

8 Q Not -- not normal.

9 A Rare. Not normal. (Nods head.)

10 Q Okay. So if it's not normal, the other  
11 option on your chart is catastrophic, right?

12 A I'm not sure that there's only two categories  
13 of plant outages, normal and catastrophic. There  
14 might be -- you know, one way of looking at this is,  
15 is that it could be a normal outage that occurs in the  
16 normal course of events, but it happens to be on the  
17 long end of the duration scale.

18 I'm -- you know, I'm not sure that the only  
19 two categories that -- I'm not sure that every single  
20 plant outage can be put into a normal category and/or  
21 a catastrophic category, if that's what you're trying  
22 to get me to do.

23 Q And you don't think that can be done.

24 A I think it requires judgment. And, again,  
25 I've said that I believe that this Boardman plant

1 outage is the type of plant outage that occurs in the  
2 normal course of events. It happens to be a long  
3 plant outage, and so it -- it's a rare event. But  
4 it's still an event that occurs in the normal course  
5 of business.

6 Q What do you mean by occurs in the normal  
7 course of business?

8 A It's one that can be expected to occur.

9 Q How often?

10 A Not, not very frequently.

11 Q Do you know how frequently?

12 A On the order of once every hundred years.

13 Q And that's the normal course of events? Once  
14 in a hundred years?

15 A Yes.

16 Q What gets included in the four-year rolling  
17 average? For plant outages.

18 MS. ANDRUS: Did you say "what gets"?

19 MR. TINGEY: Yes.

20 THE WITNESS: Outages that occurred in  
21 the four-year period.

22 BY MR. TINGEY:

23 Q Like this one?

24 A Not necessarily.

25 Q Okay, why not?

1 question?

2 THE WITNESS: No.

3 BY MR. TINGEY:

4 Q Okay. You used the phrase "frequency  
5 distribution." What does that mean?

6 A I'm thinking in terms of -- I'm thinking in  
7 terms of a histogram that reflects the number of  
8 occurrences of a type of event.

9 Q Do you know that? (Indiscernible) Boardman?

10 (Reporter inquires.)

11 BY MR. TINGEY:

12 Q Do you know of such -- could you create such  
13 a histogram? Do you have the information to do that?

14 A I have not created such a histogram; however,  
15 I believe that it is likely possible that one could  
16 create such a histogram using the type of data that --  
17 that PGE got from the North American Reliability  
18 Council: the NERC GADS data. It might be possible to  
19 create such a histogram from that data center.

20 Q This requires some modeling of this data? Is  
21 that how you --

22 How do you do it?

23 A Well, you would get the NERC data, the NERC  
24 GADS data, and you would do analysis similar to the  
25 analysis that PGE has done in this case to look at the

1 frequency of these types of events. And you'd want to  
2 look for units of similar fuel type and similar  
3 capacity and simply look for the number of outages of  
4 this duration over the period of time that's covered  
5 by that data set.

6 Q Is that a proper data set to use for this  
7 analysis?

8 A As I stated, you know, I believe that one  
9 could use the NERC data for this purpose. But that's  
10 my belief at this time. I mean, you have to -- you  
11 have to actually do the analysis and start down the  
12 path before you're gonna know whether or not at the  
13 end of the day it's a reasonable data set to use.  
14 You'd have to actually do the analysis.

15 Q Okay. So how do you know at the end of the  
16 day whether it was a reasonable data set?

17 A You'd want to look at how many -- how robust  
18 that data set was. You'd want to look and see how  
19 many units of similar fuel type and similar capacity  
20 are in that data set, whether or not there's  
21 differences between the units that are included in  
22 that data set and the unit that you're trying to look  
23 at, namely, Boardman. You'd want to see if there was  
24 differences in there that matter.

25 If there's differences that make a



1 difference, then it may not be an appropriate data set  
2 to use.

3 But if those -- but if there are no  
4 differences, if the similarities are significant  
5 enough, then it's probably a data set that could be  
6 used for that purpose.

7 Q Are there statistical tests you could run or  
8 that such a model should meet?

9 A There may be.

10 Q Do you know of any?

11 A Not sitting here today, no.

12 Q And all you're talking about is the duration  
13 of such an outage, not -- that wouldn't have anything  
14 to do with the financial impact; is that correct?

15 A The likelihood of that type of outage; that's  
16 correct.

17 Q Okay. So for the analysis we've just been  
18 discussing, the financial impact didn't enter into it.

19 A That's correct.

20 Q If you wanted to model the financial impact,  
21 what would you have to do?

22 MS. ANDRUS: Do you mean model it in  
23 conjunction with the analysis that he just discussed?

24 MR. TINGEY: Yeah, yeah. Same kind of  
25 deal.

1 Q Okay. What's the threshold for material?

2 A The threshold for material is pretty low. In  
3 other words, to qualify for -- let's go back to the  
4 chart for one second.

5 MR. TINGEY: Page 15.

6 THE WITNESS: So the question was is  
7 what's the threshold for material.

8 BY MR. TINGEY:

9 Q Yes.

10 A And so again I'm going to put it back in the  
11 context of the Commission exercising its discretion,  
12 and back in the context of this two-step, two-stage  
13 test.

14 If the type of event is -- is a scenario  
15 event, one that is not expected to occur in the normal  
16 course of business, and actually one of those types of  
17 events occurs, then the financial impact need not be  
18 substantial; it simply needs to be material. And so I  
19 expect the threshold for material is quite a bit less  
20 than substantial.

21 Q Do you know how much?

22 A Well, you know, in theory, if the -- if the  
23 type of event was a scenario event, one that was not  
24 expected to occur in the normal course of business,  
25 and it resulted in one extra dollar, then, you know, I

1 think an argument can be made that that would be a  
2 material effect.

3 Now whether or not we're going to go through  
4 the regulatory burden of, you know, trying to recover  
5 that one extra dollar, I mean, there's some lower  
6 threshold that just, in the normal course of  
7 regulation, doesn't rise to the level of needing to be  
8 accounted for. But what I'm saying is that the  
9 threshold for material is quite low.

10 Q Okay. There's no benchmark out there like  
11 you found for substantial.

12 A That's correct.

13 Q Okay.

14 A Not that I'm aware of.

15 Q Okay. And with respect to "substantial," you  
16 used this 250-basis-points as the test to decide  
17 whether it was substantial and then used it for the  
18 deadband as well, correct?

19 A I used the 250 basis points of PGE ROE to --  
20 as the standard for whether or not the financial  
21 impact of the Boardman outage was substantial or not,  
22 and concluded that the financial impact was  
23 substantial.

24 Q Then you imposed that 250 basis points as a  
25 deadband as well, right?

1 reading of that, do you agree with it.

2 A Let me try and answer that by stating the  
3 question. I think the question here is should there  
4 be a high likelihood that the swings of a stochastic  
5 risk will balance out over time through rate making.  
6 Should there be a high -- should there be a -- should  
7 we do rate making, should we design our rates in such  
8 a way, that there is a high likelihood that for  
9 stochastic risks the swings will balance out over  
10 time.

11 I would answer yes, we should.

12 Q Thanks.

13 A But there's many methods available to the  
14 Commission to achieve that balance over time. I just  
15 wanted to state that. They could use deferred  
16 accounting, they could use normalized rate making.  
17 There's many methods that the Commission could use to  
18 achieve that balance over time. Okay?

19 Q Good.

20 A Thank you.

21 Q I don't want to cut you off.

22 A No, I know.

23 Q Okay. Will a major plant outage, like the  
24 one in this docket, balance out over time?

25 A It depends on how you -- again, it's a rate-

1           A     It might. Again, I'd have to consider it. I  
2 haven't, in this testimony, done any analysis of the  
3 balance over time.

4           Q     Okay. But is it fair to say that if it's not  
5 included in the four-year average then it can't  
6 balance out over time?

7           A     Not necessarily. Again, I'm not convinced.

8                     As we stated in our testimony, Staff is  
9 currently looking at the way forced outages are  
10 included in base rates. There's other ways of doing  
11 it other than simply using a historic four-year  
12 rolling average that may be better than using  
13 four-year rolling averages; there's alternative ways  
14 of doing it. And one of the considerations that you'd  
15 want to look at in weighing those alternative ways of  
16 doing it is is it likely to achieve some sort of  
17 balance over time?

18                     It's an issue for a normalized rate making.  
19 It's a rate-case issue; it's not a deferred-accounting  
20 issue.

21           Q     And do you think there is some method out  
22 there that would make it so that this particular  
23 outage would balance out over time?

24           A     Again, I'm not sure that this particular  
25 outage -- again, you'd have to look back and look at

1 likelihood that these types of events will balance out  
2 over that period, yes, you would need to know -- you  
3 would need to incorporate knowledge about those types  
4 of variables that you listed into the modeling on a  
5 going-forward basis.

6 BY MR. TINGEY:

7 Q Okay. And that wasn't all of the variables,  
8 that was just some, right?

9 A There's, there's -- numerous variables that  
10 impact that balancing over time, yeah. And you'd want  
11 to pay attention to the ones that likely had the  
12 strongest influence or the -- you wouldn't need to  
13 account for every little one.

14 Q That's not how PGE's current rates were set,  
15 correct?

16 A That's correct.

17 Q Page 16 of your Testimony. I'm sorry, I  
18 don't have a line. 4. It says, "Staff considers  
19 generating plant forced outages to be a stochastic  
20 risk." Right?

21 Is that all generating plant outages?

22 A Staff considers generating plant outages that  
23 occur during the normal course of business to be a  
24 stochastic risk.

25 Q Okay. So the question was whether that means

1 all plant outages are a stochastic risk.

2 A No, not all plant outages are a stochastic  
3 risk.

4 Q Okay. Which ones aren't?

5 A Those that do not occur during the normal  
6 course of business.

7 Q Which is where we started the discussion this  
8 morning.

9 A Which is where we started the discussion this  
10 morning.

11 Q Okay. Was there any discussion of a deadband  
12 in the UM 1147 Order?

13 A I don't know.

14 Q Why do we need a deadband? Why should there  
15 be a deadband?

16 A Staff discusses the purpose of a deadband in  
17 its testimony. That's at page 20, lines 24 through, I  
18 guess, the end of the page. 24 through 28. And the  
19 purpose of a deadband is to capture the normal  
20 business risk that a company is generally exposed to  
21 between rate cases.

22 Q Okay. Any other reasons?

23 A Not that are coming to mind right here.

24 Q The deferral statute doesn't require a  
25 deadband, does it?

1 issued in UM 1234.

2 Q Okay. Good. Then we're back to where we  
3 were. If there's no deferral filed, would it be  
4 appropriate to include all of those days in the  
5 four-year average?

6 A And I, and I said no, it would not be  
7 appropriate to include those in the four-year average  
8 calculation, because the four-year average calculation  
9 implicitly assumes that, that the type of event would  
10 occur once in every four years. What I'm saying is  
11 that you'd want to adjust that outage to reflect its  
12 extreme nature.

13 Q What if plant was out for one week each month  
14 for a year?

15 MS. ANDRUS: Objection; it's too vague.

16 MR. TINGEY: I don't think so.

17 MS. ANDRUS: What are you asking? What  
18 if --

19 MR. TINGEY: Let me finish.

20 BY MR. TINGEY:

21 Q What if it's out for one week each month?  
22 Would it be appropriate to include those outages in  
23 the four-year rolling average?

24 A It would depend on the circumstances  
25 underlying the fact that the plant was out a week



1 every month for a year. I mean, the purpose of  
2 normalizing forced outages in setting base rates is to  
3 reflect a normal level of forced outages on a  
4 going-forward basis. What I'm suggesting is that the  
5 four-year average calculation may not be the best way  
6 of doing it. It's the way that we've traditionally  
7 done it and it's the way that PGE has done it in  
8 recent cases.

9           What I'm suggesting is is that this deferral  
10 application illustrates the weaknesses in that  
11 approach. The weakness in that approach is that you  
12 can't include -- that it -- one, it doesn't include --  
13 it includes an assumption that whatever goes into that  
14 four-year average calculation is going to occur on a  
15 going-forward basis at a probability of one in every  
16 four years. And what I'm suggesting is that that may  
17 not be appropriate.

18           I think it's pretty clear the last couple of  
19 pages of the Testimony here indicates that Staff is  
20 willing to consider alternative methods of normalizing  
21 outages in base rates. Part of the reason we're  
22 willing to consider alternative methods is because of  
23 the weaknesses that have been illustrated with using  
24 the four-year average calculation.

25           Q     That's not the way current rates were set

1           A     I did, as I discussed earlier, which was  
2     speak with Ed Busch, who's an expert on SB 408, and  
3     ask him if he felt that our recommendation was  
4     appropriate considering how the adjustment will work  
5     for SB 408.

6           Q     So how specifically did you include SB 408 in  
7     your recommendation?

8                     MS. ANDRUS:   Asked and answered.  
9     Objection.

10                    MR. TINGEY:   I don't think it was  
11     answered, so go ahead.

12                    MR. PERKINS:   I'd just like to object on  
13     the basis of relevance. I don't see how the Senate  
14     Bill 408 questions are relevant and I'd just like that  
15     noted for the record.

16                    MR. TINGEY:   Okay.

17     BY MR. TINGEY:

18           Q     Go ahead.

19           A     Well, again, I feel like I was pretty clear.  
20     I discussed it with Ed. Ed is overseeing the  
21     implementation of the SB 408 docket. He went over  
22     what our testimony is and what our position is, and I  
23     would bow to his expertise in that area, so.

24           Q     Okay. And how would your recommendation have  
25     changed if SB 408 didn't exist?

1           A     For this portion of the docket as far as the  
2     deferral mechanism itself I don't think that our  
3     recommendation would have changed. In the  
4     amortization phase of the docket our recommendation  
5     for how this issue is handled may be different, I  
6     don't know. Again, I would bow to Ed's expertise in  
7     that and we would consult with him on it.

8           Q     But the recommendations in your Testimony as  
9     filed would not have changed?

10          A     I don't think -- no, I don't think they would  
11     have.

12          Q     I was discussing with Mr. Galbraith earlier  
13     your Testimony, and he went into a portion about this  
14     deadband. Page 20, if you want to look at it. That  
15     the purpose of it was to capture the normal business  
16     risk exposed -- the Company's exposed to during rate  
17     cases, right?

18          A     That's correct.

19          Q     And the effect of that deadband is now  
20     significantly different in 2006 than it was in 2005,  
21     right?

22          A     On the hypothetical assumptions that you gave  
23     me, they would be. Specifically to this docket and  
24     how SB 408 gets implemented, it would just be a guess  
25     on my part.

1 years customers got higher rates and some years they  
2 got lower rates.

3 In Oregon, at least, there isn't that sort of  
4 a history. The history is that power cost adjustment  
5 mechanisms haven't been in place typically in the  
6 past, and when they have been used, whatever type they  
7 are, they tended not to be in effect for very long, or  
8 they tended to be done away with whenever any cost  
9 that was concerning the Commission at the time went  
10 away.

11 Q You heard of SB 408?

12 A I've heard of it.

13 Q Do you know what it is?

14 A I understand it has to do with tax treatment  
15 of utilities.

16 Q Okay. Do you know what the proposals on the  
17 table are? That it would cause to happen?

18 A I don't.

19 Q So I can guess the answer to this question,  
20 but we'll ask it anyway. Did you consider the impact  
21 of SB 408 in your recommendations in this docket?

22 A No.

23 Q Let's take a one-minute break and see if we  
24 can get to the end of this real quick; is that okay?

25 THE WITNESS: That's fine.