1	BEFORE THE PUBLIC UTILITY COMMISSION		
2	OF OREGON		
3	UE 245		
4	In the Matter of		
5			
6	PACIFICORP dba PACIFIC POWER 2013 Transition Adjustment Mechanism		
7			
8	I. INTRODUCTION		
9	Consistent with the schedule in this proceeding, the Public Utility Commission of Oregon		
10	Staff (Staff) submits its closing brief. Staff will first respond to PacifiCorp's answers to the		
11	Commission's questions to be included in post-hearing briefs, as well as to the new evidence		
12	offered by PacifiCorp through the submission of an affidavit of Mr. Duvall. Then, Staff will		
13	explain why market caps should be removed from the Company's Generation Regulation		
14	Initiative Decision Tools (GRID) results and why planned outage modeling for all plants should		
15	be changed in the next TAM proceeding.		
16	II. DISCUSSION		
17	1. Summary and Implications of Transition Adjustment Mechanism (TAM) Results to Date.		
18	Table 4 on Page 12 of UE 246 Exhibit PAC/1800 summarizes the differences between		
19	Generation and Initiative Decision Tools (GRID) model forecast and actual net power costs		
20	(NPC) for the 2007 through 2011 period. In each of the five years, GRID underestimated		
21	Oregon-allocated NPC, by amounts ranging between \$8 million and \$34 million. Annual		
22	under-estimations averaged \$27 million. These results need to be put into perspective, as they		
23	are the source of comments by both PacifiCorp and other parties.		
24	First, these results may not be representative of future periods. For the first six months of		
25	2012, GRID slightly overestimated NPC. Second, although \$34 million might seem high in an		
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1 absolute sense, it should be considered in the context of (Oregon) pre-tax authorized earnings, which were approximately \$290 million in 2011.¹ 2 3 PacifiCorp's Opening Brief stated that "Staff specifically acknowledged that eliminating market caps will increase the differential between the Company's actual NPC and the NPC 4 included in rates." Staff's statement referred only to the 2007 through 2011 period. For those 5 particular five years, elimination of market caps in GRID would have decreased the GRID 6 7 forecasts, thereby increasing GRID's underestimation of NPC. However, that may not be true 8 for future periods, particularly given that, for the first half of 2012, GRID slightly overestimated 9 unit NPC. 10 In its Opening Brief, PacifiCorp also discussed the relationship between TAM settlement 11 stipulations and the differences between GRID forecast and actual NPC for the 2007-2011 period. The Company states that "[h]ad the Commission approved GRID's modeled NPC 12 13 without the downward adjustments required to achieve settlements, the Company's NPC under-recovery since 2007 would have been reduced by 45 percent." The Company appears to 14 take the position that, during this period, GRID was under-estimating NPC and therefore 15 16 adjustments simply increased the under-estimation problem. 17 There are three problems with this point of view. First, the adjustments were due to 18 significant issues raised by other parties in the relevant TAM proceedings. It was appropriate 19 that these issues were considered on their merits, not as factors that increased a GRID under-20 estimation problem. Second, PacifiCorp agreed to the settlements. Had the Company believed 21 that it could achieve more favorable results through further litigation, it logically would have 22 continued litigating, rather than signing the relevant stipulations. However, the Company signed 23 the stipulations. Third, if the Company believed that there was a systematic NPC 24 The Company provides a figure of \$43.2 million for 150 basis points of pre-tax earnings in UE 246 Exhibit 25 PAC/2200, Duvall/4, line 10. Then, given an authorized return on equity of approximately 10 percent, authorized earnings were \$43.2 million x 1000/150, or approximately \$290 million. 26 PacifiCorp Opening Brief at Page 21, lines 15-16. PacifiCorp Opening Brief at Page 12, lines 1-3.

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1	underestimation problem with its GRID forecasts, it should have worked to improve GRID's		
2	forecasting ability, rather than simply disagreeing with other parties' adjustments because the		
3	adjustments exacerbated what the Company believed to be a more fundamental problem.		
4	In the context of pointing to the 2007-2011 under-forecast results in support of a power		
5	cost adjustment mechanism (PCAM, one of the subjects still being litigated in Docket UE 246)		
6	PacifiCorp states in its Opening Brief that "[a]s explained by Mr. Stefan A. Bird in his testimon		
7	in Docket UE 246, the introduction of a new fleet of wind resources has exponentially increased		
8	the difficulty of forecasting PacifiCorp's NPC." ⁴ This statement implies that the under-forecast		
9	results are likely to get worse in the future.		
10	However, there are two significant problems with the Company's reasoning. First, GRID		
11	actually over-forecast NPC for the first half of 2012. This implies that 2007-2011 results may		
12	not be as relevant to future periods as the Company believes. Second, the Company's claims		
13	about the difficulty of forecasting wind integration costs are much exaggerated. In Docket UE		
14	246, Staff explained at length why wind integration costs are a small component of NPC		
15	variances. ⁵ A summary of that explanation is the following. Wind integration costs can be		
16	accurately modeled on an annual basis, 6 and, as modeled in GRID, are only approximately \$26		
17	million on a system basis. This is less than two percent of the 2013 system NPC forecast of		
18	approximately \$1.5 billion. The Oregon share of those costs, approximately \$6.5 million, is less		
19	than one half of one percent of the Company's Oregon revenue requirement.		
20	With Supplemental Exhibit PAC/500, the Company provides new testimony not		
21	previously in the record for its statement that "PacifiCorp's basic cost of power is lower today		
22	than at the beginning of the TAM." While Exhibit PAC/500 is arguably responsive to the		
23	second discussion request contained in the Administrative Law Judge's Memorandum dated		
24	August 31, 2012, it is not argument based upon the record, but new evidence that the parties have		
25	PacifiCorp Opening Brief at Page 11, lines 13-16.		
26 Page	⁵ See UE 246 Exhibits Staff/500 (particularly Pages 5-11) and Staff/1400 (particularly Pages 17-20).		

1	not been able to analyze or conduct discovery upon. ⁸ Nonetheless, even if the Commission			
2	allowed the new evidence into the record it should give it little weight. As stated in Staff's post-			
3	hearing opening brief, the data have not been audited and there are many reasons why actual			
4	power costs could deviate from a model that forecasts optimized power cost results. ⁹			
5 6	2. Market Caps should be removed from the Company GRID model results, resulting in a decrease in system-wide net power cots of \$15.5 million, or approximately \$3.9 million on an Oregon allocated basis.			
7	In Order No. 01-787, the Commission explained the standard that a company must meet			
8	for approval of new rate elements. Specifically, the Commission stated that "[u]nder ORS			
9	757.210, a 'utility shall bear the burden of showing that the rate or schedule of rates proposed to			
10	be established or increased or changed is just and reasonable.' This burden is borne by the utility			
11	throughout the proceeding and does not shift to any other party." The Commission went on to			
12	state that "[i]f it [PacifiCorp in that proceeding, UE 116] fails to meet that burden, either because			
13	the opposing party presented compelling evidence in opposition to the proposal, or because			
14	PacifiCorp initially failed to present compelling information, then PacifiCorp does not prevail."			
15	In this proceeding, it was incumbent on PacifiCorp to meet the above standard			
16	concerning its market cap methodology, which was new in Docket UE 227, and accepted by the			
17	Commission only on a non-precedential basis for the 2012 NPC forecast. In that Docket, the			
18	Commission further ordered that if parties could not agree on an acceptable methodology,			
19	PacifiCorp was to "provide clear and robust evidence justifying its modeling of market caps in			
20	the Company's next TAM proceeding." Therefore, PacifiCorp had the burden of presenting			
21	compelling evidence that its imposition of market caps in its GRID modeling was reasonable. It			
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24	⁸ See ORS 756.558(1) in relevant part: "no other evidence shall be received except on order of the commission and a reasonable opportunity of the parties to examine any witnesses with reference to the additional evidence and otherwise rebut and meet such additional evidence.			
25	⁹ See Staff Post-Hearing Opening Brief at 4, lines 1-6.			
26	¹⁰ See Order No. 01-787 (UE 116) at Page 6. ¹¹ Id.			
Page	¹² See Order No. 10-435 at 23. 24 - STAFF CLOSING BRIEF – UE 245			

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1 also had the burden of refuting compelling evidence from other parties that the Company's 2 market caps were unreasonable. However, the Company failed to meet these burdens. 3 First, as summarized in Staff's Post Hearing Brief, "[t]he Company applies caps based on four-year average historical data, the same average historical sales level being applied as a cap to 4 5 market sales in every hour (for each trading hub, each month, and differentiated by on- and off-peak hours) in GRID. This is inconsistent with both actual historical and uncapped GRID 6 7 sales figures, both of which show great variation across hours. The Company's construct thereby 8 cuts off some potential sales with positive margins. These positive margins then do not get credited to customers in GRID." PacifiCorp's methodology does not make sense because it 9 10 confuses averages with sales which vary greatly across hours. The Company has not refuted this 11 basic structural problem with its methodology, thereby failing to meet its burden of persuasion. 12 Instead, the Company has claimed that elimination of market caps results in GRID 13 modeled sales which are significantly higher than actual sales in recent years. For example, in its Opening Brief, the Company stated that "it is undisputed that GRID overestimates actual 14 physical sales and that market caps moderate this overestimation." This argument is incorrect. 15 If GRID sales were the same in each hour, and equal to the market caps for each of the on- and 16 17 off-peak monthly periods at each of the six trading hubs, overall annual sales would be approximately 20,000 GWh. 15 In the Company's initial filing, uncapped GRID sales are 18 approximately 13,200 GWh, whereas capped GRID sales are approximately 10,700 GWh. ¹⁶ The 19 20 20,000 GWh figure comes directly from the data that the Company itself used to construct the 21 market caps, and has not been refuted in this proceeding. It is the best possible measure of 22 average annual sales in recent years, being based on actual data for the four-year period ending 23 June 2011. Capped sales are 47 percent below recent actuals; uncapped sales are 34 percent 24 below recent actuals. Therefore, the Company's claim that elimination of market caps would 25 ¹³ See Staff Opening Brief at Page 6, lines 3-8. ¹⁴ See PacifiCorp Opening Brief at Page 22, lines 17-18. 26 ¹⁵ See Exhibit Staff/100 at Page 7, line 7.

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¹⁶ See Id at Page 6, lines 21-22.

1 result in GRID modeled sales significantly above actuals is simply incorrect. The Company's 2 own figures, used to construct the market caps, indicate that GRID uncapped sales are 34 percent 3 below recent actuals. 4 PacifiCorp's Opening Brief states that "[t]he Company's testimony demonstrates that, even with market caps in place, GRID overestimates actual wholesale sales volumes."¹⁷ The 5 Company cites Figures 1 and 2 on Page 18 of Exhibit PAC/300 to support its claim. However, 6 Staff has already explained twice why Figures 1 and 2 do not support the Company's claim.¹⁹ 7 8 Again, these graphs are based on actual data for only a 12-month period ending June 2011, rather 9 than the 48-month period ending June 2011, which is the basis for the market caps. In the 10 examples presented, average sales in the 12-month sub-periods were substantially lower than 11 average sales in the relevant 48-month periods – 32 percent lower at the Four Corners trading 12 hub, and 40 percent lower at the California-Oregon Border (COB). The graphs then incorrectly 13 show GRID capped sales being greater than actuals, which would be impossible if the relevant 14 48-month actual data were used. GRID capped sales can never, in any hour, be greater than the cap, which is the 48-month average of actuals. Because GRID capped sales will sometimes be 15 16 less than the cap, overall GRID capped sales should be shown as less than actuals. The 17 Company has not refuted this argument, again failing to meet its burden of persuasion. 18 In addition to incorporating a mismatch between 12-mount and 48-month data, Figures 1 19 and 2 on Page 18 of Exhibit PAC/300 present an incomplete picture of the relationship between 20 capped and uncapped GRID sales. At these particular trading hubs, uncapped sales are 21 substantially greater than capped sales. However, on an overall system basis, capped sales are 22 approximately 10,700 GWh and uncapped sales are approximately 13,200 GWh. This difference 23 of 2,500 GWh is 23 percent of overall GRID capped sales and four percent of the Company's 24 system-wide load. 25 ¹⁷ See PacifiCorp Opening Brief at Page 22, line 18 and at Page 23, line 1.

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¹⁸ Table 6 on Page 21 of Exhibit PAC/100 is essentially a subset of Figure 1 and 2 in Exhibit PAC/300.

¹⁹ See Staff's Prehearing Brief at Page 2, lines 9-24 and Staff's Post Hearing Brief at Page 6, line 21 through 7, line

1	The Industrial Customers of Northwest Utilities (ICNU) also stated that actual sales have		
2	been approximately 20,000 GWh in recent years. PacifiCorp disputed ICNU's calculations,		
3	much of the dispute centering on how to handle "book-out" transactions. The disagreement		
4	between the Company and ICNU is summarized in what the Company designated as "Correct		
5	ICNU Table 2 Comparison of MWh Sales" in its Reply Testimony. 20 ICNU's figures for GRI		
6	capped and uncapped sales, and for average recent actual sales, are essentially the same as		
7	Staff's, differing only by approximately 200 GWh of what the Company designates as short-term		
8	firm sales in its GRID modeling. ²¹		
9	The Company's claim that sales in recent years have averaged only approximately 7,000		
10	GWh is i) strongly disputed by ICNU, and ii) not consistent with its own actual data which it		
11	used to construct the market caps. Therefore, given that Staff, ICNU, and the Company's own		
12	data argue strongly against the 7,000 GWh figure, it is a very weak basis for the Company's		
13	assertion that GRID uncapped sales are substantially higher than recent actuals. Once again, the		
14	Company has not met its burden of persuasiveness.		
15	Given the weakness of its assertion that GRID uncapped sales are substantially higher		
16	than recent actuals, PacifiCorp tries to justify market caps by various liquidity arguments. The		
17	Company cites Staff Testimony in Docket UE 250 (Portland General Electric Company's (PGE)		
18	2013 Annual Update Tariff proceeding), which can be construed to be at least somewhat		
19	supportive of a three percent market liquidity test for PGE's natural gas hedging transactions in		
20	the gas futures market. ²² The Company then tries to use this UE 250 testimony to support its		
21	side of contested (with ICNU) issues about liquidity at various real-time electric trading hubs in		
22	this docket. Staff's testimony in UE 250 is not relevant to this docket. It concern gas, rather		
23	than electricity, and forward, rather than real-time, markets.		
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26	 See Exhibit PAC/300, Duvall/16, lines 5-6. ICNU includes short-term firm sales, whereas Staff does not. Hence, ICNU's figures are slightly higher. See PacifiCorp Opening Brief at Page 17, lines 3-7. 		

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PacifiCorp notes that prices for the 2,500 GWh of incremental sales due to eliminating 1 market caps in GRID are somewhat higher than those for the first 10,700 GWh.²³ Staff 2 3 calculated a somewhat lower figure for this moderate price increase, but, more importantly, it is logical that GRID would try to make more sales in higher priced hours. However, caps block 4 5 some of these higher priced sales. Then, when caps are removed, the cap-blocked higher price (as measured by the Company's summary figure)²⁴ sales are allowed. The most important 6 conclusion that can be drawn from the Company's summary price increase figure is that it is not 7 8 large. Elimination of market caps does not result in radical changes in GRID results. The average sales price increases very moderately, ²⁵ and the sales quantity increases by 2,500 GWh, 9 10 which is only four percent of the Company's system load. 11 In summary, PacifiCorp has not met its burden of persuasiveness on market caps. The 12 Company has neither presented compelling evidence that its proposed market caps are 13 reasonable nor refuted compelling evidence from other parties that market caps are unreasonable. 14 Therefore, market caps should be eliminated from the Company's GRID NPC modeling. 15 3. Planned test year outages for all plants should be included in the next TAM filing. In its Opening Brief, PacifiCorp stated that "[w]ith respect to hydro planned outages, 16 17 Staff recommends that the Commission reconsider the Company's use of a four-year average to 18 model planned outages. Staff's planned outage recommendation is tied to implementation of a 19 [Power Cost Adjustment Mechanism] PCAM in Docket UE 246. The Company therefore recommends that the Commission defer Staff's recommendation on planned outage modeling to 20 21 the implementation phase of any PCAM adopted in Docket UE 246."²⁶ Staff's recommendation, 22 that "the Commission direct the Company, beginning with its 2014 TAM filing, to begin using planned test year outages for all plants in its GRID modeling", ²⁷ includes both hydro and non-23 24 ²³ See PacifiCorp Opening Brief at Page 20, line 11. 25 ²⁵ See Exhibit Staff/100, Schue/16, lines 17-18. 26 ²⁶ See PacifiCorp Opening Brief at Page 24 at line 17 through at Page 25 at line 4. ²⁷ See Staff's Post Hearing Brief at Page 9 at lines 4-5. STAFF CLOSING BRIEF - UE 245 Page 8 -

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1	hydro resources. However, Staff agrees with the Company's position that this issue should be			
2	considered in the context of the Commission's decisions concerning a possible PCAM			
3	mechanism in Docket UE 246.			
4	4. Replacement of the GRID Model.			
5	With respect to GRID, ICNU and the Citizens' Utility Board of Oregon (CUB) state that			
6	"the Commission should reject PacifiCorp's request to allow it to keep using this model in the			
7	future and instead require PacifiCorp to use a new power supply model developed by an			
8	independent third-party vendor in all future proceedings." ²⁸ ICNU and CUB raise significant			
9	issues about GRID's ability to make accurate NPC forecasts. However, replacement of GRID			
10	with a third-party model would also result in a new set of modeling issues.			
11	ICNU, CUB, and the Company all point to GRID's NPC under-estimations for each of			
12	the years from 2007 through 2011. However, for the first half of 2012, GRID produced an			
13	accurate forecast. ²⁹ Therefore, it is unclear what GRID's forecasting accuracy would be going			
14	forward, both absolutely and relative to models developed by third parties.			
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26	²⁸ See ICNU/CUB Joint Posthearing Brief at Pages 28-29.			
²⁹ See Staff's Post Hearing Brief at Page 2 at lines 9-10. Page 9 - STAFF CLOSING BRIEF – UE 245 JWJ/nal:#3653561				

1	III. CONCLUSION		
2	For the foregoing reasons, Staff requests that the Commission order the Company to		
3	remove the effect of market caps from its GRID results for 2013 and future test years and include		
4	planned outages for all plants in future TAM filings.		
5	DATED this 21 st day of September 2012.		
6		Respectfully submitted,	
7		-	
8		ELLEN F. ROSENBLUM Attorney General	
9			
10		s/Jason W. Jones	
11		Jason W. Jones, #00059 Assistant Attorney General	
12		Of Attorneys for Staff of the Public Utility Commission of Oregon	
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