

WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,

Complainant,

v.

PACIFICORP D/B/A PACIFIC  
POWER & LIGHT COMPANY,

Respondent.

Docket Nos. UE-111190

**January 6, 2012**

1                                   **I.       INTRODUCTION AND SUMMARY**

2   **Q.     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3   **A.**     My name is Michael C. Deen, and my business address is 900 Washington Street, Suite  
4           780, Vancouver, Washington 98660. I am employed by Regulatory and Cogeneration  
5           Services, Inc. (“RCS”), a utility rate and consulting firm.

6   **Q.     PLEASE DESCRIBE YOUR BACKGROUND AND EXPERIENCE.**

7   **A.**     I have been involved in the electric utility industry for over 5 years. During that time, I  
8           have served as an analyst and expert on a variety of power supply, cost, ratemaking, and  
9           policy topics, primarily regarding the Bonneville Power Administration and other utilities  
10          in the Pacific Northwest. I recently provided responsive testimony in the Puget Sound  
11          Energy docket numbers UE-111048/UG-111049 before the Washington Utilities and  
12          Transportation Commission (the “Commission”). A further description of my  
13          educational background and work experience can be found in Exhibit No. \_\_ (MCD-2).

14 **Q.     ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

15 **A.**     I am testifying on behalf of the Industrial Customers of Northwest Utilities (“ICNU”).  
16          ICNU is a non-profit trade association whose members are large industrial customers  
17          served by electric utilities throughout the Pacific Northwest, including PacifiCorp (the  
18          “Company”).

19 **Q.     WHAT TOPICS WILL THIS TESTIMONY ADDRESS?**

20 **A.**     This testimony will address certain power supply issues as well as ICNU’s  
21          recommendations regarding the Company’s rate spread proposal. The power supply  
22          issues are the use of market sales limits in the GRID model, the assumed output of the  
23          Company’s hydro resources, and the level of Open Access Transmission Tariff

1 (“OATT”) sales revenues used as an offset to power supply costs. The testimony of Mr.  
2 Schoenbeck, Exhibit No. \_\_\_\_ (DWS-1CT), addresses other power supply issues on behalf  
3 of ICNU.

4 **Q. PLEASE BRIEFLY SUMMARIZE YOUR RECOMMENDATION IN THIS**  
5 **PROCEEDING.**

6 **A.** As also described by Mr. Schoenbeck, the combined power supply-related adjustments  
7 addressed by ICNU will reduce PacifiCorp’s proposed revenue requirement increase of  
8 \$12.9 million in this proceeding by approximately \$10.1 million, as indicated by the  
9 following table. The conversion of total western control area (“WCA”) power supply  
10 cost shown under the column heading “Power Supply Cost” to Washington revenue  
11 requirement amounts is based on the Washington allocation factor (22.6%), the  
12 Company’s production factor adjustment (98.252%), and the revenue sensitive item  
13 adjustment (4.8%). The only exception is the OATT Revenue adjustment, which is  
14 already allocated on a Washington basis and is only adjusted for the revenue sensitivity.

ICNU Power Supply Related Adjustments (\$ in Millions)				
Number	Issue	WCA Power Supply Cost	WA Revenue Requirement	ICNU Witness
1	PacifiCorp Updates	-12.5	-2.9	Schoenbeck
2	Contract Revenue	-9.4	-2.2	Schoenbeck
3	Coal Costs	-6.9	-1.6	Schoenbeck
4	Forward Market Prices	-4.2	-1	Schoenbeck
5	Power Supply Model	0	0	Schoenbeck
6	Sales Limits or Caps	-4.3	-1	Deen
7	Hydro Capability	-2.9	-0.7	Deen
8	OATT Revenues	-3.5	-0.8	Deen
9	Balancing/Others	0.3	0.1	Deen
10	Total:	-43.4	-10.1	

Below is a brief summary of the issues addressed in this testimony. ICNU recommends that the Commission require the Company to perform a compliance filing to precisely determine the overall impact of all adjustments ordered by the Commission in this proceeding.

- **Sales Limits or Caps:** The Company places limits or “caps” on the potential market sales in the GRID model in each individual hour in the rate year, based on the average energy sold over the entire monthly peak or off-peak period for the Company’s most recent 48 months of actual sales. These constraints are an artificial modeling construct that prevents GRID from achieving anywhere close to the average annual sales from the 48 month historical period. There is also no economic or rational justification for the caps and, as such, they should be eliminated. The isolated effect of this adjustment is to lower the Washington revenue requirement by \$1.0 million.
- **Hydro Capability:** The Company is characterizing this proceeding as a simple “make whole” process. In spite of this characterization, the Company has proposed to substantially reduce the expected output of its hydro resources relative to its last case for the effects of forced outages. The Company’s method does not adequately take the storage capability of its hydro projects into account. In light of this flaw, the Company’s proposed changes in this regard should be rejected. The isolated effect of this adjustment is to lower the Washington revenue requirement by \$0.7 million.
- **OATT Revenues:** Revenues that the Company receives for sales of transmission services to third parties are an offset to the Company’s power supply costs. Earlier this year, the Company filed with the Federal Energy Regulatory Commission (“FERC”) to raise its OATT and ancillary service rates. That docket is currently undergoing settlement proceedings. In this case, it would be both conservative and reasonable to assume that the Company will receive at least half of its filed increase. The isolated effect of this adjustment is to lower the Washington revenue requirement by \$0.8 million.
- **Balancing/Others:** This value is simply a placeholder delineating the difference between the isolated effects of ICNU’s power cost adjustments and their total effect when processed through the GRID model simultaneously.
- **Rate Spread:** The Company has proposed no substantial changes to its rate spread and design in this case. The Company is proposing that any increase granted by the Commission be implemented as an equal percentage increase

1 for all rate schedules other than street lighting. ICNU supports the  
2 Company's rate design and rate spread proposals in this proceeding.

3 **SALES LIMITS OR CAPS**

4 **Q. WHAT RESTRICTIONS HAS PACIFICORP PLACED ON MARKET SALES**  
5 **TRANSACTIONS IN THE GRID MODEL?**

6 **A.** PacifiCorp has imposed hourly on-peak and off-peak caps on sales made in the GRID  
7 model for each month (although there is no corresponding cap on purchases). These  
8 hourly limits cap the amount of power that can be sold at each hub. Confidential Exhibit  
9 No. \_\_ (MCD-3C) presents the Company's hourly caps used to constrain GRID sales.

10 **Q. HOW ARE THE CAPS DETERMINED?**

11 **A.** The caps are derived from averaging the historical sales levels actually achieved by the  
12 Company over the 48-month period of January 2007 through December 2010. Given this  
13 method of averaging, there were many hours in the historical period where the actual  
14 sales exceeded the average sales value for a particular time interval. Accordingly, the  
15 caps can act as a constraint on sales transactions simulated in the GRID model.

16 **Q. HAVE YOU ANALYZED THE EFFECT OF THE COMPANY'S CAPS ON THE**  
17 **NET POWER COSTS ("NPC")?**

18 **A.** Yes. Confidential Exhibit No. \_\_ (MCD-4C) presents the GRID spot sales results both  
19 with and without the Company's caps, as well as historical sales levels achieved by the  
20 Company. The exhibit shows that eliminating the caps [REDACTED]

21 [REDACTED] The exhibit also compares the GRID-produced sales  
22 levels both with and without the caps to the historic level for the Mid-Columbia ("Mid-  
23 C") and California-Oregon Border ("COB") trading hubs. [REDACTED]

1 [REDACTED]  
2 [REDACTED]  
3 Further, while the Company argues that its sales ability is limited by the average  
4 energy it has sold over all hours (including hours where no transactions were executed), a  
5 far more meaningful cap value would be based on the actual maximum hourly value it  
6 has transacted at each hub. Diluting these maximum values by averaging in hours where  
7 minimal or no transactions at all may have occurred simply restricts the sales amount  
8 below the levels that the Company has achieved historically. This is because the market  
9 caps ignore the size of actual hourly transactions the Company has executed at each hub.  
10 The Company's method is inappropriate, as it results in cap values that are substantially  
11 lower than the actual transactions it has executed during the historical period and restricts  
12 sales when the Company has marketable capacity available to sell. This type of sales cap  
13 restriction is not employed by other Northwest utilities, including Puget Sound Energy or  
14 Avista. For all the foregoing reasons, ICNU recommends that these caps be removed to  
15 more properly determine the projected NPC for the rate year.

16 **Q. CAN YOU PROVIDE AN EXAMPLE TO FURTHER ILLUSTRATE THESE**  
17 **POINTS?**

18 **A.** Yes. A simplified example can be useful to illustrate the flaws in the Company's  
19 proposed cap methodology. Suppose over a historical period, the Company was able to  
20 sell 50 MW of surplus power in half of the possible hours. In this case, the Company  
21 would have average sales of 25 MW of energy in each hour of the historical period, and  
22 25 MW would be the resulting hourly cap in the GRID model. This would prohibit the  
23 model from making 50 MW sales in a manner consistent with the Company's historical

1 operations. Even if GRID happened to perfectly replicate the historical sales  
2 opportunities, the market caps would result in the GRID model assuming PacifiCorp  
3 makes sales of 25 MW in half the hours and 0 MW in half the hours. This type of  
4 restriction is unrealistic and not economically supportable. The goal of power supply  
5 modeling should be to represent the operations of the Company as accurately as possible  
6 to achieve an appropriate projection of rate year costs. The Company's proposed market  
7 caps interfere with this goal.

8 **Q. ARE YOU AWARE OF ANY CONCERNS THAT THE COMPANY MIGHT**  
9 **RAISE WITH REMOVING THE SALES CAPS FROM THE GRID**  
10 **SIMULATION?**

11 **A.** In addition to the PacifiCorp arguments I just addressed, based on PacifiCorp's testimony  
12 in the Company's recent docket UE 227 before the Oregon Public Utility Commission, it  
13 appears that the Company may have concerns regarding the market liquidity at the hubs,  
14 potential for resulting increases in simulated coal generation, and double counting of  
15 transactions that are accounted for under the Company's trading margin adjustment.

16 **Q. PLEASE RESPOND TO THE POTENTIAL MARKET LIQUIDITY CONCERN.**

17 **A.** ICNU has compiled Confidential Exhibit No. \_\_ (MCD-5C) to address potential market  
18 liquidity concerns at the Mid-C and COB trading hubs. The exhibit shows the  
19 Company's transactions by quarter for the years 2008, 2009, and 2010. This exhibit was  
20 compiled from a Platts Megawatt Daily report that used FERC Electric Quarterly Reports  
21 ("EQRs") which must be submitted to FERC indicating all sales activity. This exhibit  
22 demonstrates that, for the Mid-C and COB hubs, PacifiCorp's trading activity represents  
23 a small percentage of the total market activity.

1 PacifiCorp may also argue that without the caps, GRID allows for unlimited sales.  
2 As discussed previously, if this is really the concern, then a much more appropriate cap  
3 would be maximum hourly sales levels from the historical period and not the Company's  
4 average energy method. However, in any case, although the GRID model may  
5 theoretically allow "unlimited" sales without the cap, this is not the case from a practical  
6 perspective. Without the artificial caps, the sales levels are still constrained by the  
7 amount of energy that the Company's resources are able to economically produce, as well  
8 as the Company's wheeling limitations. To the extent that GRID is able to more  
9 efficiently balance the system on an hourly basis through the use of balancing sales, this  
10 should not be cut off artificially. As I have demonstrated, the unconstrained sales level is  
11 reasonable because it is both below the Company's historical levels of sales activity and  
12 also represents a small portion of the overall activity at the markets in question.

13 **Q. PLEASE RESPOND TO THE POTENTIAL CONCERN OF INCREASED COAL**  
14 **GENERATION.**

15 **A.** Confidential Exhibit No. \_\_ (MCD-6C) compares the level of dispatched coal generation  
16 in the GRID simulation both with and without the market caps, as well as historical  
17 generation reported in FERC Form 1 data. The increase in coal generation from the  
18 elimination of the caps is only [REDACTED] Further, the uncapped level is fully within  
19 historical norms.

20 **Q. PLEASE EXPLAIN YOUR UNDERSTANDING OF THE POTENTIAL DOUBLE**  
21 **COUNTING CONCERN.**

22 **A.** As ordered by the Commission in the 2010 GRC, the Company has included a margin  
23 trading adjustment to account for the Company's historical levels of arbitrage trading  
24 activity. This value is the average total margin for the Company's short term firm



1       arbitrage transactions over the past 4 years. The Company may potentially raise a  
2       concern that increased GRID market sales would double count these trading transactions.

3       **Q. DOES ICNU AGREE WITH THIS CONCERN?**

4       **A.** No. First, the point of the arbitrage adjustment is to deal with types of short term firm  
5       transactions that are inherently not modeled in the GRID simulation. Given the relatively  
6       remote nature of the rate year, short term firm transactions that are executed by the  
7       Company for arbitrage purposes as late as the day or even the hour before the delivery of  
8       power are not included in the GRID simulation. The purpose of the arbitrage adjustment  
9       is to include value for types of transactions that GRID will inherently not simulate  
10      regardless of the type or level of cap on overall sales levels. Removing the sales caps  
11      from GRID allows the model to more efficiently balance the system on an hourly basis  
12      and is not intended to somehow include arbitrage trading opportunities that were absent  
13      in the presence of the cap.

14             Further, removal of the inappropriate sales caps increases the sales transactions by  
15      a relatively modest amount that is far less than the historical sales transactions. The  
16      average of the four year historical sales for deriving the caps average is approximately  
17      ██████ MWhs. The Company's arbitrage trading adjustment is based on average  
18      sales of ██████ MWhs. While ICNU recognizes the fact that the bilateral  
19      transactions are occurring over multiple months, the discrepancy between the historical  
20      sales result (██████ MWhs) and the GRID sales and trading adjustment (██████  
21      ██████ MWhs) is very large. Given this gap and the inherent differences in  
22      transaction types explained above, ICNU does not believe there would be a double  
23      counting of sales activity with the elimination of the market sales caps.

1 **Q. PLEASE SUMMARIZE AND STATE THE IMPACT OF ICNU’S PROPOSED**  
2 **ELIMINATION OF THE GRID SALES CAPS.**

3 **A.** The Commission should order the removal of the sales caps from the GRID model based  
4 on the analysis presented in this testimony. Based on ICNU’s GRID sensitivity analysis,  
5 the removal of the caps would lower the WCA NPC by approximately \$4.3 million and  
6 lower the Washington revenue requirement by \$1.0 million.

7 **HYDRO CAPABILITY**

8 **Q. HAS THE COMPANY MADE CHANGES TO THE EXPECTED OUTPUT OF**  
9 **ITS HYDRO RESOURCES IN THIS PROCEEDING?**

10 **A.** Yes. The Company has substantially reduced the amount of expected generation from its  
11 hydro facilities. This reduction is a result of the Company’s new method in this  
12 proceeding for dealing with the effects of forced outages on generation.

13 **Q. PLEASE DESCRIBE THE COMPANY’S PROPOSED METHOD TO ACCOUNT**  
14 **FOR THE EFFECTS OF FORCED OUTAGES ON HYDRO GENERATION.**

15 **A.** The Company provided a description of its methodology in its 1st Supplemental  
16 Response to ICNU Data Request (“DR”) 6.10. This response is attached as Exhibit No.  
17 \_\_\_\_(MCD-7). The Company uses “Vista,” a third-party model, to optimize its projected  
18 hydro generation for projects on river systems with storage capabilities. For forced  
19 outages, the Company looked at actual forced outages from 2007-2010 and then averaged  
20 their lengths in days for each month. Forced outage cases were then assigned a random  
21 starting day within the month and applied as a post-hoc reduction to the output modeled  
22 in Vista.

1 **Q. DOES THIS METHOD APPROPRIATELY CAPTURE THE EFFECTS OF**  
2 **FORCED OUTAGES ON HYDRO GENERATION?**

3 **A.** No. By simply making a post-hoc reduction to the Vista modeled generation, the  
4 Company's method does not take into account the opportunity to re-optimize the system  
5 to avoid lost generation after a forced outage has occurred at a unit. Given this  
6 shortcoming, the Company's method will overstate the true expected impact of forced  
7 outages on net hydro generation during the rate year.

8 **Q. HOW MUCH CAPABILITY DOES THE COMPANY HAVE TO RESHAPE**  
9 **HYDRO GENERATION IN RESPONSE TO A FORCED OUTAGE?**

10 **A.** The specific capability will be unique to each circumstance, depending on factors such as  
11 seasonal operating requirements at a project or river system, river flows, and storage  
12 capacity already being utilized. However, in general terms, the Company has a great deal  
13 of flexibility in its hydro operations. In response to ICNU DRs 12.1 and 12.2, the  
14 Company provided some information regarding the storage capacity of its projects and  
15 also daily flow data for some projects from 2001-2010. These responses are attached as  
16 Exhibit No. \_\_ (MCD-8).

17       These responses contained the most complete data for the Lewis River projects. I  
18 have prepared Confidential Exhibit No. \_\_ (MCD-9C) as an illustration of the potential  
19 flexibility of the Company's hydro resources. As shown in this exhibit, the minimum  
20 storage for any of these projects is equivalent to almost [REDACTED] of average flow volume.  
21 The maximum storage capability on the river, at the Swift project, which is also the head  
22 of the system, is over [REDACTED] of average flow volume. Given this volume of storage  
23 potential, the Company clearly has significant flexibility to re-optimize its system in the  
24 circumstance of a forced outage of substantial length.

1 **Q. WHAT DOES ICNU RECOMMEND IN LIGHT OF THIS FLAW IN THE**  
2 **COMPANY'S FORCED OUTAGE ANALYSIS?**

3 **A.** ICNU recommends that the Commission reject the Company's proposed change to its  
4 hydro generation in this case. The Company's method systematically overstates the  
5 potential impact of forced outages on its net level of hydro output at the cost of  
6 consumers in this proceeding. Any change in hydro modeling for forced outages should  
7 reflect this storage capability. Given that PacifiCorp had ample opportunity to justify this  
8 change in its direct testimony and discovery, the Commission should not allow the  
9 Company to submit new evidence justifying this change in its rebuttal testimony.

10 Based on ICNU's sensitivity analysis, the impact of rejecting the changes in the  
11 Company's hydro generation is a reduction of \$2.9 million to the WCA NPC and a  
12 reduction of \$0.7 million to the Washington revenue requirement.

13 **OATT REVENUES**

14 **Q. HOW DOES THE COMPANY TREAT REVENUES IT RECEIVES FOR**  
15 **WHEELING OR TRANSMISSION SERVICES?**

16 **A.** Wheeling or transmission revenues are an offset to the Company's costs of providing  
17 service. The Company's workpapers show normalized wheeling revenues of  
18 approximately \$69.6 million for the test year on a system basis.

19 **Q. DOES ICNU AGREE WITH THE LEVEL OF WHEELING REVENUES THAT**  
20 **THE COMPANY HAS INCLUDED IN THIS PROCEEDING?**

21 **A.** No. The Company is currently in the process at FERC of raising rates for transmission  
22 service taken under its OATT. The Company filed for increase on May 26, 2011, in what  
23 became FERC Docket ER11-3643-000. On December 16, 2011, the settlement judge in  
24 that proceeding ordered settlement conferences to take place in early January and  
25 February 2012. Based on the Company's filing at FERC, the Company is seeking to

1 increase its Annual Transmission Revenue Requirement by approximately 52%.

2 Although there is uncertainty regarding the precise timing and magnitude of the rate  
3 change, the process is far advanced, and not to reflect increased revenues as an offset to  
4 power costs would be unfair to consumers in this proceeding. This is particularly true  
5 given the lack of any true-up mechanism for the Company's power costs in Washington.

6 **Q. WHAT RECOMMENDATION DOES ICNU MAKE FOR THE COMPANY'S**  
7 **ASSUMED WHEELING REVENUES IN THIS CASE?**

8 **A.** Again, ICNU acknowledges that there is uncertainty regarding the precise timing and  
9 magnitude of the transmission rate increase. With this uncertainty in mind, ICNU  
10 recommends that the Company assume half of its proposed increase in ER11-3643-000 to  
11 be effective in the rate year. This recommendation strikes a reasonable compromise  
12 between the Company's risk if FERC does not grant the full requested increase and the  
13 need for consumers to pay fair and reasonable rates based on the Company's cost of  
14 providing service. If FERC issues a ruling before the evidentiary hearing in this case, I  
15 recommend that the Commission's final order reflect the actual transmission and  
16 wheeling amounts allowed by FERC.

17 **Q. HAS ICNU QUANTIFIED THE IMPACT OF THIS RECOMMENDATION?**

18 **A.** Yes. ICNU's recommendation would lower Washington jurisdictional costs by  
19 approximately \$0.8 million. This impact is based on the assumption of a 26% increase in  
20 normalized wheeling revenues for non-legacy contracts and the Company's Washington  
21 jurisdictional allocation factor of approximately 6% for general wheeling revenues.

**RATE SPREAD**

**Q. WHAT HAS THE COMPANY PROPOSED REGARDING RATE SPREAD AND RATE DESIGN?**

**A.** The Company is generally proposing an equal percentage increase to all classes with the exception of public street lighting customers. This proposal is guided by both the results of the Company's cost of service study and the Commission's order in the 2010 rate case. Regarding rate design, the Company is proposing an equal percentage increase to customer, energy and demand charges when applicable.

**Q. DOES ICNU SUPPORT THE COMPANY'S RATE SPREAD AND DESIGN PROPOSALS IN THIS PROCEEDING?**

**A.** Yes. ICNU supports an equal percentage allocation of any Commission authorized increase to all classes, with the exception of street lighting. In the event of a Commission ordered rate decrease, ICNU would propose an equal percentage decrease for all classes except street lighting, which would receive a greater than average decrease. ICNU also supports the Company's rate design proposal of equal percentage changes to all charges (for either a rate increase or decrease).

The best measure of the level of customer class rate levels relative to cost of service is the "parity ratio" statistic. The parity ratio takes the normalized revenues from a customer class divided by the class cost of service. A customer class with a parity ratio greater than 1 would be contributing revenue over its cost of service, while a ratio below 1 indicates under recovery of costs. The table below presents parity ratios for each customer class based on the Company's proposed cost of service study. The ratios are based on the class cost of service at the Company's uniform current rate of return. This is

more appropriate than the proposed rate of return, as utilities rarely achieve their fully authorized rate.

Schedule No.	Description	Parity Ratio
16	Residential	0.96
24	Small General Service	1.08
36	Large General Service <1,000 kW	1.04
48T	Large General Service >1,000 kW	0.99
48T	Dedicated Facilities	0.95
40	Agricultural Pumping Service	1.10
15,52,54,57	Street Lighting	1.18
Overall	Total	1.00

The Commission has traditionally supported equal percentage increases for classes within 10% of parity. As the table demonstrates, all classes except street lighting are within that band. This indicates that the Company's rate spread proposal is equitable based on the results of the proposed cost of service study.

ICNU is not proposing any changes to the Company's cost of service model at this time, because most reasonable changes would maintain parity rates for major classes (except street lighting) within 10% of parity. In the event of alternative rate spread or design proposals from other parties, ICNU may present further analysis of the cost basis of the Company's proposal in cross answering testimony.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

**A.** Yes.