

Exhibit No. ____ (MCD-1T)
Docket Nos. UE-111190
Witness: Michael C. Deen

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND)
TRANSPORTATION COMMISSION,)
)
Complainant,)
)
v.)
)
PACIFICORP D/B/A PACIFIC)
POWER & LIGHT COMPANY,)
)
Respondent.)
_____)

Docket Nos. UE-111190

RESPONSIVE TESTIMONY OF MICHAEL C. DEEN
ON BEHALF OF
THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES

REDACTED VERSION

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 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
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

[REDACTED]

[REDACTED]

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

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

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