

HARDY MYERS  
Attorney General



PETER D. SHEPHERD  
Deputy Attorney General

DEPARTMENT OF JUSTICE  
GENERAL COUNSEL DIVISION

July 1, 2008

Traci Kirkpatrick  
Administrative Law Judge  
Public Utility Commission of Oregon  
550 Capitol St NE – Suite 215  
PO Box 2148  
Salem OR 97308-2148

Re: UM 1374 – Submission from the Oregon Independent Evaluators  
Boston Pacific Co. – Chehalis Power Generating Plant

Dear Judge Kirkpatrick:

On June 25, 2008, Staff submitted a non-confidential, redacted version of a document entitled “An Analysis of PacifiCorp’s Waiver Request for the Chehalis Power Generating Plant” on behalf of one of the Oregon Independent Evaluators (Boston Pacific). However, Staff later discovered that the header on each page of the report said “Non-Public Information Subject to Special Protective Order No. 08-326. The company sent an updated version without the header which Staff is now submitting as a replacement of the previous version.

Please note that I am serving this document on the other UM 1374 parties via electronic mail only.

Sincerely,

Michael T. Weirich  
Assistant Attorney General  
Regulated Utility & Business Section

MTW:nal/GENY3350

Enclosures

C: All parties by email only w/enc.

AN ANALYSIS OF PACIFICORP'S WAIVER REQUEST FOR THE CHEHALIS  
POWER GENERATING PLANT

Presented to

The Oregon Public Utility Commission

By

Craig R. Roach, Ph.D.

Frank Mossburg

Stuart Rein

Boston Pacific Company, Inc.  
1100 New York Avenue, NW, Suite 490 East  
Washington, DC 20005  
Telephone: (202) 296-5520  
Fax: (202) 296-5531

June 18, 2008

## TABLE OF CONTENTS

I.	BACKGROUND .....	1
II.	ANALYSIS OF KEY COSTS AND BENEFITS.....	1
III.	POLICY POINTS .....	8
IV.	CONCLUSION.....	9
	ATTACHMENT A .....	11
	ATTACHMENT B .....	13

## I. BACKGROUND


PacifiCorp has approached the Commission to seek a waiver of its competitive bidding rules in order to pursue the purchase of the Chehalis Power Generating Plant, a 500-MW gas-fired combined-cycle generating plant located in Chehalis, Washington, which came on-line in 2003.<sup>1</sup> The Commission allows a waiver of its competitive bidding rules if the offer in question is “a time-limited resource opportunity of unique value to customers.”<sup>2</sup> PacifiCorp argues that this transaction meets these criteria citing: (a) a limited exclusivity agreement signed with the facility’s owner Suez Energy North America (Suez) and (b) analyses which show that acquiring the plant this year as compared to the purchase of a new Combined-Cycle Combustion Turbine (CCCT) in 2012 has estimated benefits to ratepayers ranging from \$142 million to \$197 million over a 20-year period.

The Commission, acting upon the request of the Northwest and Intermountain Power Producer’s Coalition (NIPPC),<sup>3</sup> has asked Boston Pacific Company, Inc. to conduct a limited review of the evidence offered for and against the requested waiver. The purpose of this report, then, is to offer our opinion as to whether or not this transaction does indeed represent a “time-limited” opportunity of “unique value”, and therefore, warrants a waiver of the Commission’s competitive bidding guidelines.

## II. ANALYSIS OF KEY COSTS AND BENEFITS

As always, we take as a given that the Commission’s goal is to get the best deal for Oregon ratepayers in terms of price, risk, reliability, and environmental performance. Therefore, we approach this task by asking the following question, “is the offer presented here likely to be a better deal than ratepayers would get in an open procurement, specifically the 2008 All Source RFP?” Put another way, would it be in the ratepayers’ best interest to deny this waiver and wait to see if the results of an open procurement can provide a better offer?

NIPPC is correct when it notes that it is difficult to predict what sort of offers will come through a procurement, especially one so open-ended as the 2008 All Source RFP. Fortunately, the Company conducted an RFP for baseload resources (the 2012 RFP) over just this past year. The bids resulting from the 2012 RFP provide the core evidence for answering the questions of (a) what might be reasonably expected from the next RFP and (b) whether the Chehalis deal has “unique value”. Detailed information on those bid results can be found in Confidential Attachment A.

 We think this focus is appropriate because: (a) PacifiCorp, according to its IRP analysis, will require resources to serve

<sup>1</sup> See PacifiCorp Confidential Testimony of Gregory N. Duvall (April 11, 2008) at page 2.

<sup>2</sup> See Oregon Public Utility Commission Order No. 06-446 (August 10, 2006) at page 4.

<sup>3</sup> See Comments of Northwest and Intermountain Power Producer’s Coalition (May 14, 2008) at page 11.

future needs, (b) the only other viable technology type available to serve baseload needs would be coal-fired units, (c) there is great uncertainty surrounding the viability of new coal facilities, as evidenced by the Company's own termination of its Benchmark proposals in the 2012 RFP, and (d) [REDACTED]

#### A. Discussion of Key Costs and Benefits

One of the most attractive aspects of the proposed transaction is the capacity price that is being offered for the Chehalis plant. [REDACTED]

[REDACTED] Not coincidentally, this is roughly the same range of prices that the Company used in its analysis of the cost savings of the Chehalis offer.

Looking at Attachment A, [REDACTED]

NIPPC legitimately notes that the existing Chehalis plant might have a shorter operating life than a new plant since it came on line five years ago. Typically the way that assets of unequal lives are compared is to compare cost annuities. [REDACTED]

Certainly the seller of the Chehalis plant is aware of market conditions, and PacifiCorp's offer was to some extent the best offer it could get. [REDACTED]

[REDACTED] Therefore, we can conclude that this capital cost advantage must be offset to some extent by some potential cost disadvantages to the plant. The question is, are these drawbacks enough to offset the significant savings in capital costs? In our opinion, there are seven key components that require consideration.

##### 1. Timing of the Purchase

Through its analysis in its IRP planning process, PacifiCorp has concluded that it will need capacity within the next few years. It has used this conclusion as a requirement for offers in the 2012 and 2008 All Source RFPs, which solicit supply beginning June 1, 2012. The Chehalis plant would be acquired almost four years in advance of this date.

As pointed out by NIPPC, PacifiCorp's own analysis shows that this early acquisition increases cost to ratepayers; that is, in these years (i.e. prior to 2012) it would be less expensive to supply ratepayer needs predominately from market purchases. From the acquisition of the plant through 2011 the Chehalis facility would increase costs by about [REDACTED] as compared to waiting to purchase a new CCCT in 2012. While the plant offers some benefits (in the form of reduced long-term contracts and Front Office Transactions and revenue from sales of power) those benefits are, on balance, wiped away by the cost of fuel, capital, and O&M at the plant. Since the methodology for the market price forecasts is consistent with the IRP, we believe that the Company's calculation of these offsetting costs prior to 2012 can be seen as being reasonable.

## 2. Transmission

The plant is interconnected and integrated into the Bonneville Power Administration's (BPA) transmission system. As part of the transaction, the Company would have wheeling agreements for 600 MW which will allow it to utilize the plant by bringing power from the Chehalis facility to the PacifiCorp West (PACW) area. [REDACTED]

As pointed out by NIPPC, [REDACTED]

Because there is so little information on this issue, we cannot yet say whether the Company's assertions are valid. Because this is such an important cost component we think that it would be appropriate for the Company to be required to provide more detailed documentation. This documentation should include; (a) proof of the existing point-to-point arrangement, (b) proof of the new proposed wheeling agreements, (c) a description of the original rationale for extending the existing arrangement, and (d) a detailed description of how the new agreements remove the need for the current agreement.

[REDACTED] The

Chehalis facility would help fulfill this need. If for some reason this new transmission line was delayed or cancelled, this could weigh against cost recovery for Chehalis in a future prudence review.

### 3. Natural Gas Prices

NIPPC points out that natural gas prices at the Chehalis plant may be higher than prices at a facility with a different location which may bid into an upcoming RFP. In order to test whether this assertion was correct we reviewed historical day-ahead prices at the Huntingdon/Sumas (Sumas) hub (the hub from which the plant takes gas delivery) and the Opal hub. We chose the Opal hub for two reasons: first, it is located in the Rocky Mountain Basin, which is not only a source of cheap supply but also in the general area [REDACTED] and second, because it is a liquid market with a lengthy trading record, so longer-term comparisons are possible.

We looked at the average day-ahead price for the two markets from July, 2001 through the end of 2007. The average price for gas at each hub, averaged by year, is shown in the table below.

TABLE ONE  
AVERAGE DAY-AHEAD GAS PRICES BY YEAR

Hub	Average Price (\$/MMBtu)*							Period
	2001	2002	2003	2004	2005	2006	2007	
Huntingdon/Sumas	\$2.22	\$2.70	\$4.72	\$5.19	\$7.45	\$6.03	\$6.51	\$5.19
Opal	\$2.12	\$1.95	\$4.36	\$5.25	\$7.28	\$5.42	\$4.06	\$4.51
Difference	\$0.10	\$0.75	\$0.36	-\$0.06	\$0.17	\$0.61	\$2.45	\$0.67

\* 2001 only includes July through December

Source: ICE

Gas at the Sumas hub has, in recent years, been more expensive than gas at the Opal hub. Over the past several years the average difference between the two hubs was about \$0.67 per MMBtu. It is important to note that this difference has hardly been constant over the years. Prior to 2006, the hubs were actually rather similar in price. In 2007, the gap between the two hubs reached over \$2 per MMBtu. A more detailed view of the differences between these hubs can be seen in Attachment B, which shows monthly average prices for the July 2001 to January 2008 time period.

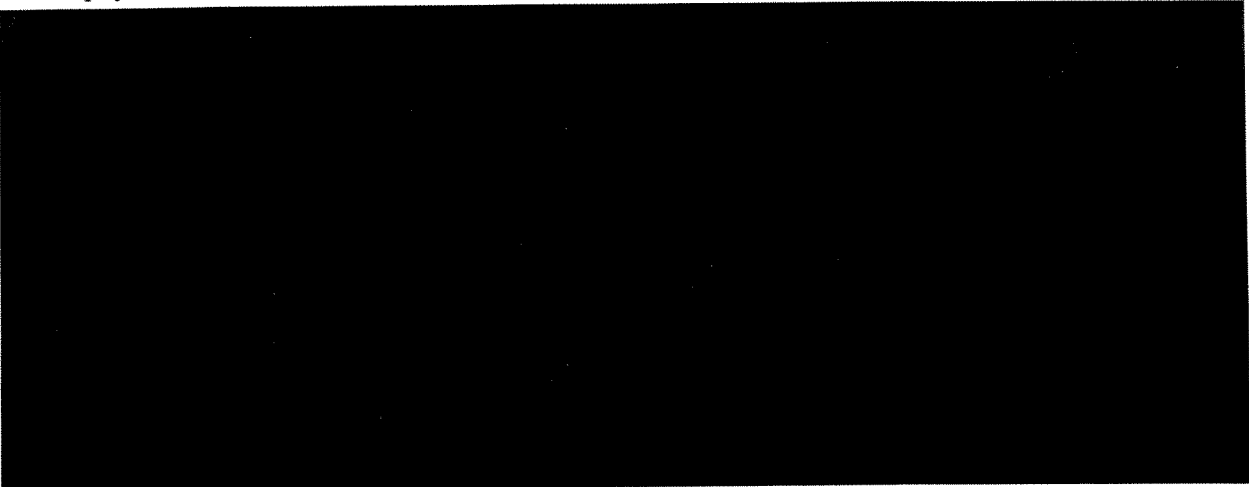
The difference between the cost of gas at Chehalis and at a potential new plant, which likely could draw supply from the Rocky Mountain Basin, could have real impacts for ratepayers. A hypothetical 500 MW plant with a 40% capacity factor (the percentage of actual plant output versus total possible output) and a 7,000 btu/kWh heat rate would spend about \$12.26 million more per year in fuel costs for every one dollar cost increase in the price of gas. Furthermore, the additional cost would result in the plant being run less often.

There is little to document the prices that the Company used for fuel inputs in its analysis. [REDACTED]

Because this component could have measurable impacts on the cost and use of a facility we think that the Commission should require to Company to further document the assumptions used surrounding gas prices. Specifically the Company should: (a) confirm which price points they used to determine fuel costs for the Chehalis plant and for the proxy CCCT and (b) provide the fuel price forecasts that were used in the modeling process for these two facilities, along with explanations for how it derived the forecasts. If the Company used a price point for Chehalis different from the Sumas point it should explain why it did so. The Company should also provide its view on whether the 2007 gap between Sumas and Opal prices was an aberration or a portent for the future.

#### **4. Heat Rates**

Another potential drawback of the Chehalis plant, as compared to a new facility, is that a new facility could be more efficient in its use of fuel. This efficiency would be reflected in a lower heat rate, and would result in lower fuel costs being passed on to ratepayers.



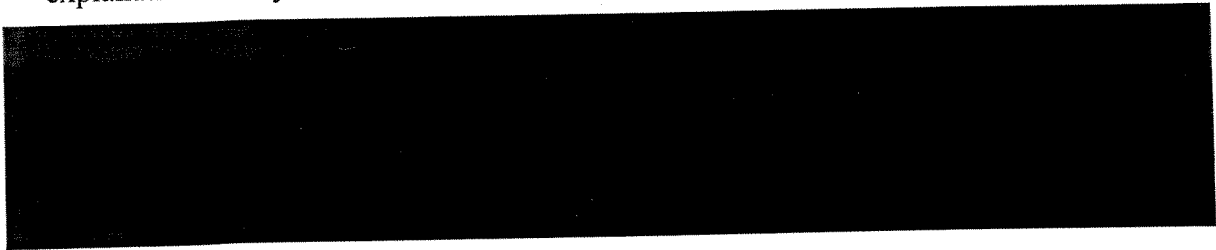
#### **5. Operating and Maintenance Costs**

A fifth potential drawback to the facility is that its fixed and variable operations and maintenance (O&M) costs might be higher than those of prospective bidders. [REDACTED]

[REDACTED] This appears to be a reasonable assumption, since that facility is roughly similar in age to Chehalis and Chehalis will be operated and maintained by the Company in, we assume, a similar manner. We would request however, for the sake of completeness, that the Company



also produce the actual historical O&M costs for the Chehalis facility along with an explanation of any difference between these costs and the Company's assumptions.



## 6. Age of the Plant

NIPPC notes correctly that the plant has already been in operation for five years. With this purchase, PacifiCorp would be buying a facility with roughly 30 years of useful life left, versus about 35 years for a new CCCT. PacifiCorp does take this into account in its analysis. The annual fixed costs of each facility are calculated on a *real-levelized* basis, a variation of our annuity method above. Each cost is converted into a *levelized* payment, adjusted for inflation, and spread out over the life of the asset. This has the effect of allowing comparisons of assets of different ages and assures that short-term assets are not overvalued relative to long-term assets.

We do note, as NIPPC pointed out, that the plant did have a major outage in 2006. However, in other years the facility had an availability of 92% or higher. We have no way of knowing, with the information at hand, whether the plant's problems will reoccur. Certainly, if the Company failed to perform proper mechanical due diligence on this asset they can be held accountable in a future prudence review.

## 7. Dispatch Patterns & Location



Therefore, any drawbacks to the location of the plant are included in the analysis.

---

<sup>4</sup> Note that the O&M costs in Attachment A are for the start of the contract, typically June 2012. Our estimated ranges include a rough discounting of these costs, using a 3% discount rate (a rough proxy for the CPI), to make them comparable to the 2008 costs used for Chehalis.

## **B. Comparison of Cost Versus Benefits**

As noted above, the question remains whether these possible cost disadvantages that have been noted outweigh the clear capital cost advantage from the Chehalis purchase. The only real way to assess these costs and benefits is with sophisticated modeling that can weigh all of the competing impacts. PacifiCorp has done that and it is important to see that it has done so with models used for the 2007 IRP.

With its modeling, PacifiCorp found that there are net benefits – net cost savings - for its acquisition of the Chehalis plant as compared to a hypothetical combined-cycle plant.

It is important to note that the Planning and Risk (PaR) and Capacity Expansion (CEM) models used by the Company (a) account for all of the seven possible disadvantages noted above through projecting optimal dispatch on PacifiCorp's system over time and (b) assess changes in future market conditions. The PaR model assesses changes in gas prices, wholesale market prices, loads, thermal outages and hydroelectric generation levels.

Assuming that the Company used reasonable inputs to its models, it seems fair to say that the Chehalis plant appears to provide a net benefit to ratepayers over a new facility in 2012. Note that, as mentioned above, we would still recommend that the Commission obtain and examine more details concerning Company assumptions about gas prices, O&M costs and transmission contracts before granting the Company's waiver request.

Additionally, we note that the Industrial Customers of Northwest Utilities (ICNU) has inquired as to whether PacifiCorp has analyzed this transaction using a different model (the GRID model, used for ratemaking purposes). We think it would be useful to examine the output of this model to see how it compares with the analyses here. We note that because of the short-term nature of the GRID model and the longer-term estimated benefits to this transaction, the analysis may not show a benefit.

## **C. Additional Risks to Ratepayers**

Something noted by the Company is that the Chehalis purchase lowers risk to ratepayers relative to the purchase of a new-build facility, specifically the risks inherent in new construction. The current construction market is characterized by steep increases in the prices of commodities and labor. Prices are rising to such a degree that it is hard for developers to obtain fixed quotes on key pieces of equipment. PacifiCorp's 2012 and 2008 All Source RFPs attempt to account for this risk by allowing bidders to index up to 40% of their capital cost to public cost indices. If a utility plant is building the plant on a cost-plus basis, the risk for cost overruns is even higher.

Even under less extreme market conditions the construction of a new facility is a major undertaking that can be prone to delays. The fact that the Chehalis unit is existing,

operational, and integrated into the transmission system is, in our opinion, a major positive consideration when evaluating this waiver request.

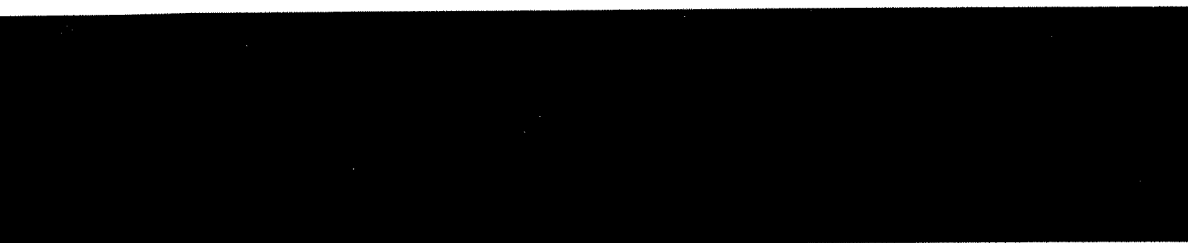
### III. POLICY POINTS

There are three broader policy points which should be drawn out as the waiver request is considered. These points have to do with the nature of this waiver request and the policy impact of this transaction on future RFPs.

First, we agree with PacifiCorp this waiver request is not, and should not be, a substitute for a full prudence review.<sup>5</sup> If PacifiCorp was found later in a prudence review to have been fundamentally wrong in its assessment of the offsetting costs we discussed above, that would weigh against prudence and cost recovery. Indeed, for purposes of cost recovery we suggest that PacifiCorp be held, within some reasonable bounds, to its assumptions made here as if it was offering a pay-for-performance PPA. This would serve to further reduce risks to ratepayers.

Second, this waiver request may have something to tell us about PacifiCorp's RFP design for future procurements. We cannot say for sure why Suez decided to offer Chehalis in a transaction outside of the 2012 RFP. One possible explanation is that Suez wished to sell the plant sooner than the June 1, 2012 start date that PacifiCorp was requiring in that RFP.

We understand why PacifiCorp would want to limit resources to a 2012 start date; indeed, as noted above, its own analysis shows increases in costs to ratepayers from 2008 through 2011 with the Chehalis acquisition. However, its analysis also shows that there are net savings to ratepayers from this transaction over the longer term. If PacifiCorp had been more accommodating in its RFP design, then this offer may have come through the RFP process instead. Therefore, we would recommend that, for future RFPs, PacifiCorp make sure to include a process by which existing resources can be offered immediately, even if the actual required start date is for a later year.



Third, it is important to see that this waiver will have an effect on future RFPs and the effect is likely to be negative. This will be another major resource owned by PacifiCorp rather than by a competitor, as well as a resource chosen outside the bounds of competitive procurement. Resource owners see that, if they wish to sell their asset, they can simply approach PacifiCorp directly without going through the rigors of competitive

---

<sup>5</sup> See PacifiCorp's Reply Comments (May 21, 2008) at pages 2-5.

procurement. Through this they avoid being matched directly against competitors, can avoid many of the requirements inherent in an RFP (including requirements designed to protect ratepayers), and can obtain special privileges (e.g. selling off an asset four years before they otherwise could).

#### IV. CONCLUSION

Boston Pacific strongly prefers choosing resources through competitive procurement and having more competitors in the market. However, our top priority is getting the best deal for ratepayers in terms of price, risk, reliability and environmental performance. Given Chehalis' obvious benefits in capacity cost, risk mitigation and given the fact that those benefits are not clearly wiped away by its disadvantages, we think that it is reasonable to grant the Company's waiver request, subject to our review of the information below. More specifically, based on what we saw in the 2012 RFP, we cannot conclude that denying the waiver, in the hope of being able to select a better offer in the upcoming RFP, is in the best interest of ratepayers.

Prior to granting the waiver request we would recommend that the Commission request the following documentation. We will then review the documentation and provide a brief supplementary report.

- PacifiCorp should provide more detailed documentation concerning the transmission component of its analysis. This documentation should include; (a) proof of the existing point-to-point arrangement, (b) proof of the new proposed wheeling agreements, (c) a description of the original rationale for extending the existing arrangement, and (d) a detailed description of how the new agreements remove the need for the current agreement.
- PacifiCorp should confirm the gas prices that it used to determine fuel costs for the Chehalis plant and for the proxy CCCT and provide the fuel price forecasts that were used in the modeling process for these two facilities, along with explanations for how it developed the forecasts. If the Company used a price point for Chehalis different from the Sumas point it should explain why it did so. The Company should also provide its view on whether the 2007 gap between Sumas and Opal prices was an aberration or a portent for the future.
- The Company should produce the actual historical O&M costs for the facility along with an explanation of any difference between these costs and the Company's assumptions.
- The Company should provide an analysis of the transaction using the GRID model.

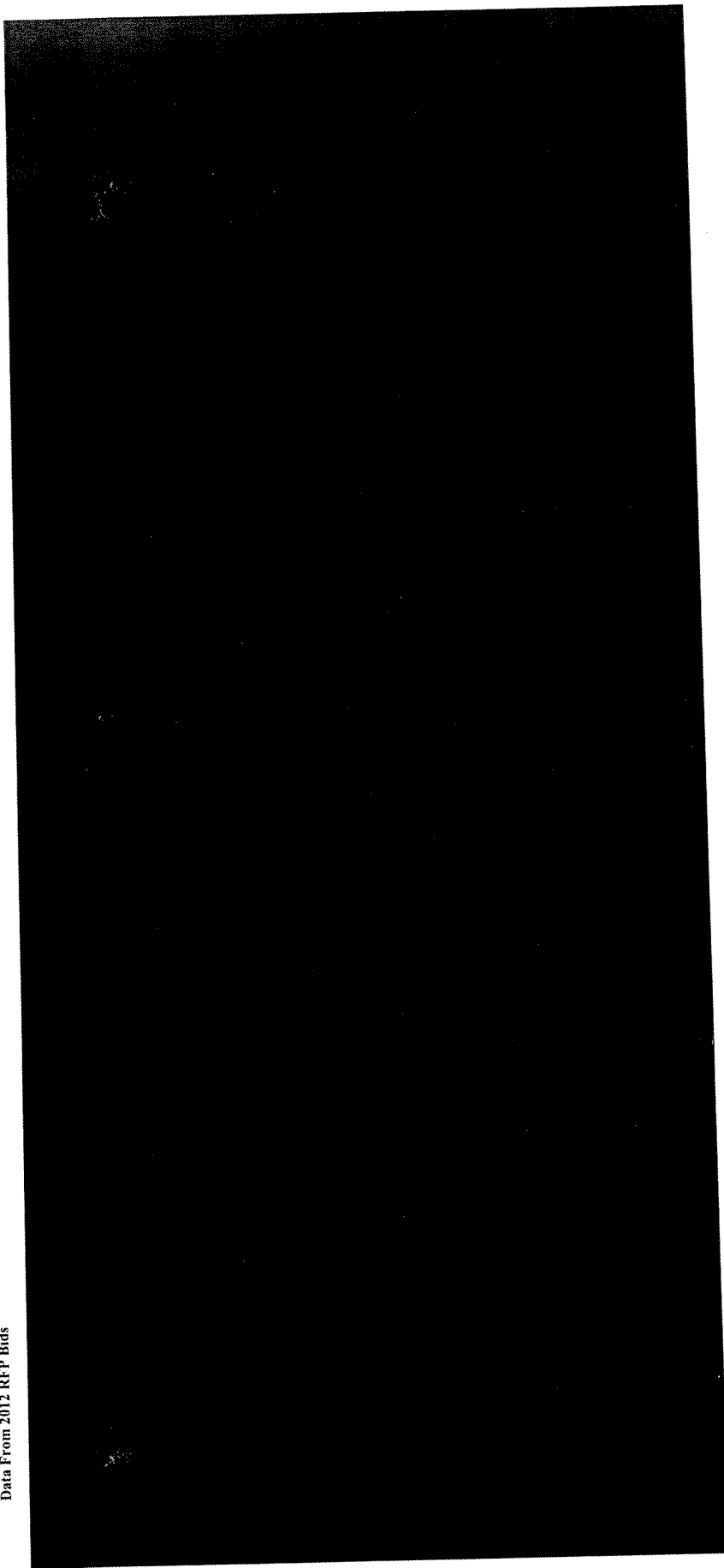
Additionally, we would make the following recommendations going forward.

- In future RFPs the Company should explicitly accommodate potential offers from existing assets with start dates prior to the identified need.
- PacifiCorp should be held, within some reasonable degree, to the assumptions it has made concerning the plant in a future prudence review as if it was offering a pay-for-performance PPA.

We should note, too, that going forward with the Chehalis acquisition does not preclude taking a good offer from the upcoming RFP because substantial need for capacity still exists even if the Chehalis offer is accepted. In the 2008 All Source RFP, Staff computed the Company's need for the 2012 to 2016 time frame as being between about 1,100 to 2,000 MW. We also note that the 2012 RFP process is ongoing, and resources may be acquired through that process as well.

**ATTACHMENT A  
BID RESULTS FROM 2012 RFP**

Data From 2012 RFP Bids

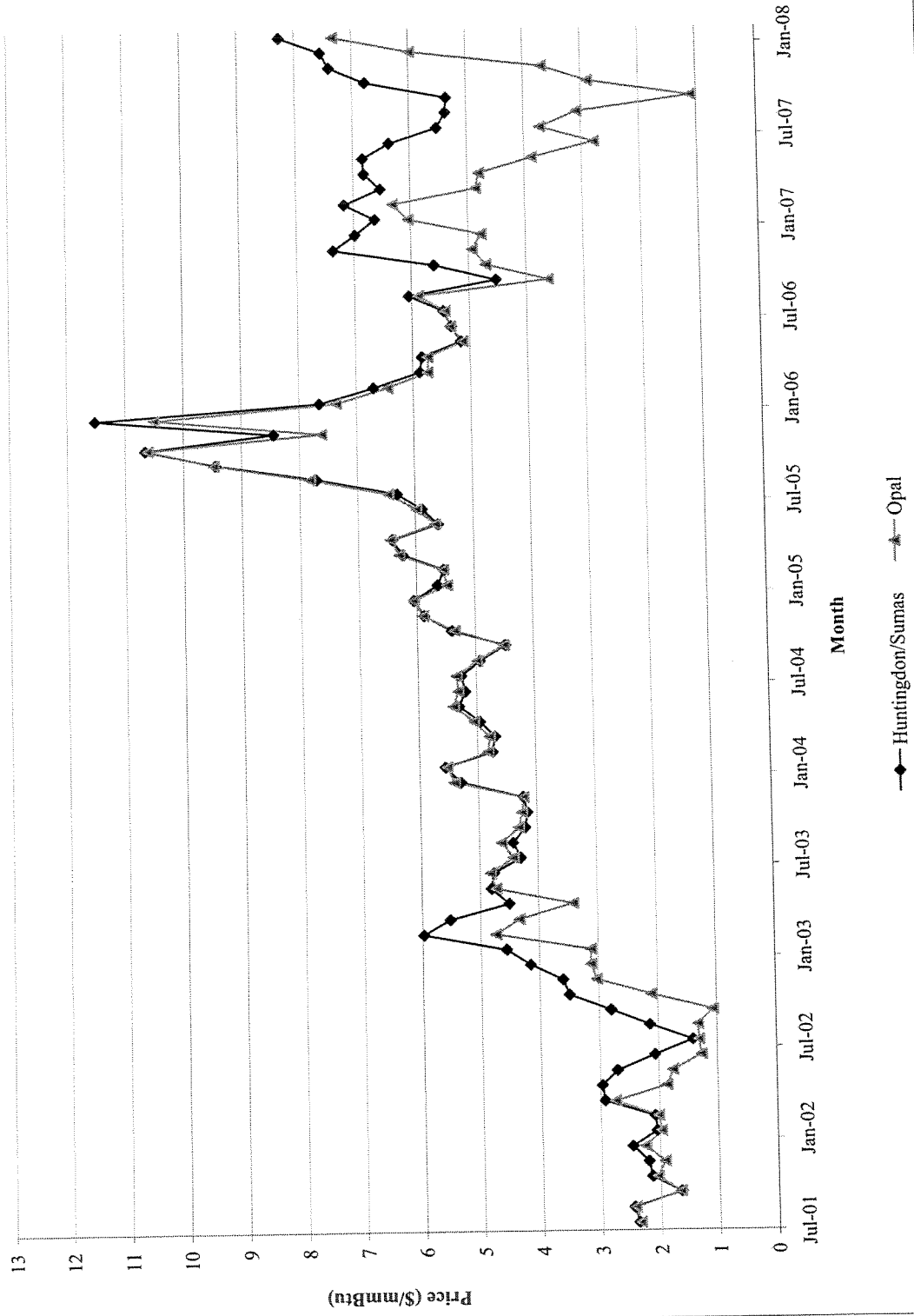


BOSTON PACIFIC COMPANY, INC.

**ATTACHMENT B  
MONTHLY AVERAGE GAS PRICES FOR  
HUNTINGDON/SUMAS AND OPAL HUBS**



Average Monthly Price Comparison by Hub from July 2001 to January 2008



1 **CERTIFICATE OF SERVICE**

2  
3 I certify that on July 1, 2008, I served the foregoing upon all parties of record in this  
4 proceeding by delivering a copy by electronic mail to the following:

5 **W**  
6 SUSAN K ACKERMAN – **HIGHLY CONFIDENTIAL**  
7 ATTORNEY  
8 9883 NW NOTTAGE DR  
9 PORTLAND OR 97229  
10 susan.k.ackerman@comcast.net

11 **W**  
12 **CITIZENS' UTILITY BOARD OF OREGON**  
13 LOWREY R BROWN – **HIGHLY CONFIDENTIAL**  
14 UTILITY ANALYST  
15 610 SW BROADWAY - STE 308  
16 PORTLAND OR 97205  
17 lowrey@oregoncub.org

18 JASON EISDORFER – **HIGHLY CONFIDENTIAL**  
19 ENERGY PROGRAM DIRECTOR  
20 610 SW BROADWAY STE 308  
21 PORTLAND OR 97205  
22 jason@oregoncub.org

23 ROBERT JENKS – **HIGHLY CONFIDENTIAL**  
24 610 SW BROADWAY STE 308  
25 PORTLAND OR 97205  
26 bob@oregoncub.org

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

**DEPARTMENT OF JUSTICE**  
DAVID HATTON - **HIGHLY CONFIDENTIAL**  
ASSISTANT ATTORNEY GENERAL  
REGULATED UTILITY & BUSINESS SECTION  
1162 COURT ST NE  
SALEM OR 97301-4096  
david.hatton@state.or.us

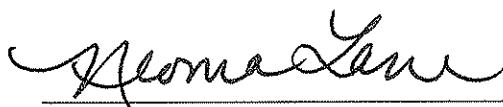
**W**  
**NW INDEPENDENT POWER PRODUCERS**  
ROBERT D KAHN  
EXECUTIVE DIRECTOR  
1117 MINOR AVENUE – STE 300  
SEATTLE WA 98101  
rkahn@nippc.org

**PACIFICORP**  
NATALIE HOCKEN - **CONFIDENTIAL**  
VICE PRESIDENT & GENERAL COUNSEL  
825 NE MULTNOMAH - SUITE 2000  
PORTLAND OR 97232  
natalie.hocken@pacificcorp.com

**PACIFICORP OREGON DOCKETS**  
OREGON DOCKETS  
825 NE MULTNOMAH ST - STE 2000  
PORTLAND OR 97232  
oregondockets@pacificcorp.com

**PUBLIC UTILITY COMMISSION OF OREGON**  
LISA C SCHWARTZ – **HIGHLY CONFIDENTIAL**  
PO BOX 2148  
SALEM OR 97308-2148  
lisa.c.schwartz@state.or.us

**RFI CONSULTING INC**  
RANDALL J FALKENBERG – **HIGHLY CONFIDENTIAL**  
PMB 362  
8343 ROSWELL RD  
SANDY SPRINGS GA 30350  
consultrfi@aol.com

23 

24 Neoma Lane  
25 Legal Secretary  
26 Department of Justice  
Regulated Utility & Business Section