

BEFORE THE WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant,

v.

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

DOCKET NO. UE-061546

DIRECT TESTIMONY OF STEVEN G. JOHNSON (SGJ-1T)

ON BEHALF OF

PUBLIC COUNSEL

FEBRUARY 16, 2007

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STEVEN G. JOHNSON EXHIBIT LIST

Exhibit No. ____ (SGJ-2)	Comparison of the proportion of load met with hydro between PacifiCorp (West Control Area), PacifiCorp (Company-wide), Puget Sound Energy and Avista.
Exhibit No. ____ (SGJ -3)	Comparison of the cost of purchased replacement power and fuel supply for an 18% variation in hydro production between PacifiCorp, Puget Sound Energy, and Avista.

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I. INTRODUCTION

Q. Please state your name, employer, and business address.

A. My name is Steven G. Johnson. I am employed as a Regulatory Analyst for the Public Counsel Section, Washington State Attorney General’s Office. My business address is 800 5th Avenue, Suite 2000, Seattle, Washington 98104-3188.

Q. Please briefly describe your educational background and professional experience.

A. I have a Bachelor of Science Degree from The Evergreen State College and a Master of Public Administration from The Evans School at the University of Washington. I have been employed as a Regulatory Analyst with the Public Counsel Section of the Washington State Attorney General’s Office for 2 years. Prior to my employment with Public Counsel, I was employed at Puget Sound Energy as a Transmission Resource Analyst (merchant transmission planning) for approximately two and a half years including an internship. I have appeared before the Commission for Public Counsel in several Open Meetings and as a witness in the settlement panel for the PacifiCorp/MidAmerican merger. *In the Matter of the Joint Application of MidAmerican Energy Holdings Company and PacifiCorp, d/b/a Pacific Power & Light Company For an Order Authorizing Proposed Transaction*, Docket No. UE-051090. I have also provided written testimony on behalf of Public Counsel in the Avista ERM case, *In the Matter of Avista Corporation, d/b/a Avista Utilities, for Continuation of the Company’s Energy Recovery Mechanism*, Docket No. UE-060181. I have provided written and oral testimony on behalf of Public Counsel in the Avista Decoupling case, *In the Matter of the Petition of Avista Corporation, D/B/A Avista utilities for an order*

1 *authorizing implementation of natural gas decoupling mechanism and to record*
2 *accounting entries associated with the mechanism, Docket No. UG-060518.*

3 **Q. For whom are you testifying?**

4 A. I am testifying on behalf of the Public Counsel Section of the Office of the Attorney
5 General of the State of Washington (Public Counsel).

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

7 A. My testimony responds to the Company testimony requesting approval of a Power Cost
8 Adjustment Mechanism (PCAM).

9 **Q. Can you summarize your recommendations and provide an overview of your**
10 **testimony?**

11 A. The Commission should reject the requested PCAM. The Company has not
12 demonstrated that the weather related variability of power costs is sufficient to require a
13 PCAM over the current regulatory means for managing hydroelectric production
14 variation. The Company's use of the GRID model for the determination of *actual* net
15 power costs is a fundamental departure from Commission practice. The Company has
16 failed to demonstrate and to provide sufficient specifications for how GRID will be
17 used to determine "actual net power costs" to enable the Commission to find the wholly
18 untried PCA methodology is in the public interest. Also, the inter-jurisdictional cost
19 allocation methodology is contested and yet unresolved in this case. This makes a
20 proper design and evaluation of a PCAM difficult since the assignment to Washington
21 of the company's power costs-- the fundamental input in any power cost adjustment--
22 has not yet been agreed upon by any of the parties in this instant case. Even if the cost

1 allocation method is resolved by Commission order, the specification of that method
2 will need to be reflected in the PCAM’s design. Therefore, even if the Commission
3 believes a PCAM may be appropriate, I recommend deferring a decision on the
4 adoption of a PCAM to allow for a better designed PCAM to reflect any cost allocation
5 method the Commission may use for setting rates in this general rate case. The
6 Commission provided for PacifiCorp to file a PCAM separately from a general rate
7 case stating, “Following discussions with staff and intervenors, the Company may
8 submit a revised PCAM proposal either as a standalone tariff filing or as part of a
9 general rate case.”¹

10 **II. THE COMPANY’S PROPOSED PCAM**

11 **Q. What does the Company request the Commission approve with regard to a**
12 **PCAM?**

13 A. The Company proposes a symmetrical deadband of plus or minus \$3 million inside of
14 which the Company will absorb all cost variation. The Company proposes a sharing
15 band from \$3 million to \$7.4 million (plus and minus) in which the Company will
16 absorb 40 percent of the cost variation and ratepayers will absorb 60 percent of the cost
17 variation. Above \$7.4 million, 90 percent of the cost variation will be shifted to the
18 ratepayers. The net power costs will be the Washington-allocated sum of purchased
19 power cost, fuel expense, wheeling expense and brokerage fees paid to third party
20 brokers, less wholesale sales of electricity and natural gas and transmission revenues

¹ *Washington Utilities and Transportation Commission v. PacifiCorp d/b/a/ Pacific Power & Light Company*, Docket UE-050684, Order 04, (PacifiCorp Order), ¶ 100.

1 included in FERC Account 456. Rather than using actual costs, the Company proposes
2 to use their GRID to develop adjusted actual costs. The proposed PCAM also allows
3 the inclusion of new contracts and resources of more than two years duration if those
4 new contracts and resources are under 50 aMW of capacity.

5 **III. THE COMPANY HAS NOT MET ITS BURDEN OF PROOF**

6 **Q. Has the Company met its threshold burden to show that it needs a PCAM?**

7 A. No. In the *PacifiCorp Order*, ¶ 91, the Commission states that power cost adjustment
8 mechanisms are “*Short-run accounting procedures to address short-term cost changes*
9 *resulting from unusual weather.*” The Company has not shown changes in net variable
10 power costs are frequent and severe enough due to *unusual weather* to warrant a
11 PCAM. A power cost adjustment is not necessary for the recovery of authorized total
12 power costs in rates. Power costs should be accurately measured and put into
13 authorized rates to provide sufficient revenues to provide an opportunity to achieve a
14 reasonable rate of return. After total power costs are set accurately, a PCAM, if
15 necessary, can be used to modify the financial impact of the *variability* of power costs.

16 The need for modifying the financial impact of power cost variability is a
17 threshold question which the Company failed to answer and which I discuss below.

18 **Q. What are the Company’s justifications for a PCAM?**

19 A. Company Witness Mr. Widmer makes several assertions to justify a PCAM. First, Mr.
20 Widmer states the WCA load is met with 17.9 percent hydro on a normalized MWh

1 basis.² Several pages later he cites the creation of the Puget Sound Energy (PSE) PCA
2 and the Avista ERM as reasons the Commission should also recognize the need for
3 PacifiCorp to have a PCAM. Finally, Mr. Widmer states net variable power costs
4 justify a PCAM. I will address the creation of the PSE PCA and the Avista ERM and
5 then compare the hydro dependence between PSE, Avista and PacifiCorp before
6 turning to the question of net variable power cost.

7 **Q. How is the request for a PCAM in this instant case different from the creation and**
8 **review of the PSE PCA and the Avista ERM?**

9 A. The PSE and Avista cases were both presented originally to the Commission as all-
10 party settlements. The Avista ERM then went through a subsequent review for renewal
11 in which modifications were again presented as an all-party settlement. In those cases
12 parties had time and sufficient record to fashion a functional mechanism. The
13 Commission has given weight to all-party settlements when reviewing them. However,
14 in this case there is no agreement and I believe that the disagreement stems from
15 fundamental threshold questions that have not been answered by the Company and
16 other aspects of this case that remain in dispute. I discuss some of these below.

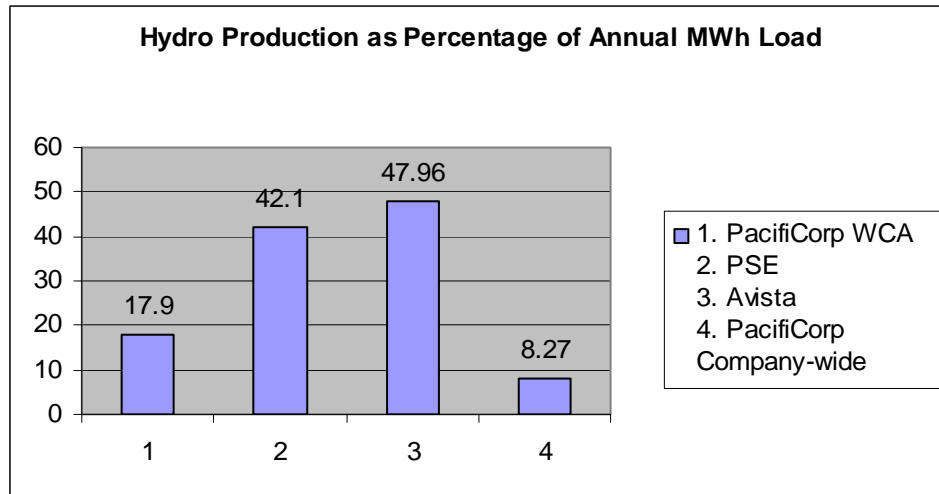
17 **Q. How does PacifiCorp's Western Control Area (WCA) portfolio of hydro resources**
18 **compare to the Avista and Puget Sound Energy portfolios?**

19 A. As mentioned above, Company Witness Mr. Widmer states the WCA load is met with
20 17.9 percent hydro on a normalized MWh basis. This is less than half of the level of

² Exhibit No. ____ (MTW-1T), p. 27, ll. 2-3.

1 hydro exposure of PSE and Avista, as illustrated by Graph One³ below.

2 **Graph One – Hydro Production as Percentage of Annual MWh Load**



3

4 **Q. Has the Company witness addressed this difference?**

5 A. No. In citing the PSE PCA and the Avista ERM, Mr. Widmer suggests PacifiCorp's
6 WCA is similar to PSE and Avista, notwithstanding the fact that the companies have
7 different dependence on hydroelectric resources. The Commission recognized in the
8 *PacifiCorp Order* that PacifiCorp was less reliant on hydroelectric power than PSE and
9 Avista.⁴ The Company does not present sufficient data and analysis to show that their
10 lower dependency on hydroelectric resources passes a threshold for needing a PCAM.

11 **Q. Doesn't Mr. Widmer present data on the cost of hydro variation?**

12 A. In Exhibit No. ____ (MTW-4T), Mr. Widmer presents historical data on hydroelectric
13 resource production in MWh. He then simply multiplies the variation in MWh of

³ This is an excerpt from Exhibit No. ____ (SGJ-2).

⁴ *PacifiCorp Order*, ¶ 93.

1 production by the PacifiCorp's forward market price. While this is a means by which a
2 company-to-company comparison could be made, it is not a sufficiently rigorous
3 representation of PacifiCorp's power costs to justify the need for a PCAM.

4 Also, the hydroelectric production data is historical and is not the basis on which
5 Mr. Widmer proposes to set net power costs in the PCAM he proposes.⁵ He does not
6 compare the effect of PacifiCorp's WCA hydroelectric production to either PSE or
7 Avista's to show that PacifiCorp's dependency crosses a threshold found in the
8 establishment of those two PCAs.

9 **Q. On a Company-wide basis how does the hydro exposure compare?**

10 A. PacifiCorp's Company-wide exposure to hydroelectric production is even lower--
11 approximately 8 percent. This level of hydro exposure is not significant enough to
12 warrant a PCAM. A 20 percent variation in hydro production amounts to a 1.6 percent
13 decline in Company-wide energy production. Of this 1.6 percent, only 12 percent at
14 most-- or approximately .2 percent-- is jurisdictional to the proposed Washington
15 PCAM. This is well within the level of energy management the company performs
16 when it decides whether to buy gas to use in its own plant, to purchase electricity from
17 the market, or to buy off-peak power to "trickle feed" the hydro system that is then used
18 to produce more power on peak. It is also within the variation of expected annual load
19 variation. In other words, this level of variation appears to be well within what
20 PacifiCorp should be expected to manage as the single entity with authority and means

⁵ Exhibit Nos. ____ (MTW-4T) and (MTW-1T), p. 31.

1 of managing power costs for ratepayers. The Company has not demonstrated otherwise
2 on the record.

3 The Company has failed to show that the financial harm it faces from variable
4 hydroelectric power costs require a shifting of the volatility onto ratepayers who have
5 no means to mitigate the cost of *variation* of hydro production.

6 If there is a question of revenues failing to meet power costs, the Commission
7 should focus on setting the correct power costs in ratemaking. The record in this
8 instant case is insufficient to demonstrate the necessity of a PCAM to rectify such a
9 deficiency.

10 **Q. Even though the contribution by Washington ratepayers to overall Company risk**
11 **is relatively small, shouldn't Washington ratepayers be responsible for their**
12 **portion of the risk they contribute to the Company?**

13 A. Yes, they should, but the Company has not shown that resources serving Washington
14 ratepayers are contributing more risk to the Company than the resources other states are
15 served with. Fitch Ratings listed “a major, extended generating plant outage” as one of
16 two events that could lead to a negative rating action.⁶ Such outages have been
17 witnessed, for example, with the Portland General Electric Boardman coal plant outage
18 in Oregon. Adding hydroelectric production to a resource portfolio heavy in a single
19 resource type can add diversity and thus lower the risk to the overall portfolio.⁷

⁶ FitchRatings, PacifiCorp, August 31, 2006

⁷ The idea of the over all group of resources meeting the lowest reasonable cost is recognized repeatedly in the Commission's IRP rules (WAC 480-100-238). See section (1) “...meet its system demand with a least cost mix of energy supply resources and conservation. “ or (2)(a) “...the mix of energy supply resources

1 Company-wide, PacifiCorp is 83 percent coal which is a very heavily reliance on a
2 single resource type.⁸ The Company has not presented evidence showing how adding
3 WCA hydroelectric resources has added to Company-wide risk in a manner or
4 magnitude that requires mitigation with a PCAM. Nor has it shown that by Washington
5 ratepayers paying for the cost of WCA hydroelectric resources other jurisdictions are
6 assuming the costs the risks of hydroelectric resources.

7 **IV. THE COMPANY HAS FAILED TO SHOW THE VARIABILITY OF**
8 **PACIFICORP'S HYDRO RESOURCES JUSTIFIES A PCAM**
9

10 **Q. What information does the Company present on hydroelectric variability?**

11 A. On page 27 of his testimony, Mr. Widmer cites actual MWh of West Control Area
12 hydro production back to 1990. This historical data is neither based on current
13 operational constraints nor on the basis of how Mr. Widmer proposes hydroelectric
14 production be modeled in his PCAM. Utilizing the GRID model supplied by the
15 Company, Randy Falkenberg produced projected hydro production using each of the
16 last 40 years of hydro data supplied by the Company.⁹ The GRID model is intended to
17 give a realistic *forward* look at hydro production under the currently known constraints
18 rather than hydro production based on constraints that may or may not have been
19 present as far back as 1990.

and conservation that will meet current and future needs at the lowest reasonable cost to the utility and its ratepayers. And see section (f).

⁸ Oregon Fuel Mix Report.

⁹ I obtained this grid model data from Mr. Falkenberg. It is part of his joint Public Counsel and ICNU Testimony Exhibit No. ____ (RJF-8T).

1 **Q. What does your comparison of risk exposure due to low hydro production show?**

2 A. PacifiCorp's WCA has the least exposure of the three jurisdictional electric utilities
3 (Exhibit No.__(SGJ-2). PacifiCorp most closely compares its proposed PCAM to the
4 Avista ERM, but PacifiCorp's exposure is half that of Avista's exposure.

5 **Q. How do the Company's gas generation resources alter the comparison of exposure
6 to risk?**

7 A. Both Avista and PSE have considerably more gas generation risk than PacifiCorp's
8 WCA. In addition, the WCA's only gas resource is under long term contract, virtually
9 eliminating its contribution to volatility.

10 **Q. How does this compare to an outage of major coal plant?**

11 A. A 50 day forced outage of a 500 MW coal plant is equivalent in MWh to an 18 percent
12 variation in hydro production. An 18 percent variation represents the average of the
13 worst 4 years of hydro in the last 40 water years—a once in a decade event (Exhibit
14 No.__(SGJ-2T). There is no reason to provide an on going special regulatory
15 mechanism for either of these contingencies. Managing outages is a task the Company
16 faces now with no special regulatory mechanism in place in advance of the outage. If
17 and when such an outage or extreme low hydro year occurs, the Commission has the
18 tools to provide the regulatory relief the Commission deems appropriate.

19 **V. FEATURES OF THE PCAM**

20 **Q. Is the Company's proposed method of calculating "actual" short-term costs well
21 explained, well documented and reproducible?**

22 A. No. Mr. Widmer proposes in his testimony to use the GRID model to produce short-

1 term costs to compare to authorized costs rather than comparing actual accounting
2 recorded costs to authorized costs as the two other power cost adjustment mechanisms
3 approved in Washington State do.¹⁰ This is a fundamental departure from approved
4 practices. The results of the GRID Model are not reproducible from the testimony
5 provided. Indeterminate specification of the GRID model in the Company's testimony
6 fails the burden needed to assure the proposed PCAM will function in the public
7 interest.

8 **Q. The Company proposes the inclusion of new contracts or resources over 2 years in**
9 **length if they are less than 50 aMW. Why do you believe no long-term contracts**
10 **greater than 2 years should be included in the PCAM deferral calculation?**

11 A. The Commission expressly stated in the *PacifiCorp Order*, "It is not appropriate to
12 include new resources in a power cost adjustment mechanism. New resources must be
13 considered in a general rate cases or power cost only rate cases."¹¹ Mr. Widmer does
14 not present any justification for their inclusion of long-term contract that are less than
15 50 aMW, failing the Company's burden in this instant case.¹²

16 **Q. Didn't the Commission's approval of the Avista ERM Settlement include**
17 **contracts longer than 2 years if they were under 50 aMW?**¹³

18 A. Yes. However, the Commission expressly noted in the *PacifiCorp Order* that, "The
19 application and appropriateness of these principles [exclusion of new long term

¹⁰ Exhibit No. ____ (WTM-1T), p. 29, l. 23, p. 30, l. 2.

¹¹ *PacifiCorp Order*, ¶ 91.

¹² Exhibit No. ____ (WTM-1T), p. 31, ll. 1-11.

¹³ ERM Settlement, Docket No. UE-060181.

1 resources] must take into account the specific circumstances facing the utility.”¹⁴ The
2 Company has not met its burden of proof in demonstrating how its circumstances
3 *require* a deviation from the Commission principles. Mr. Widmer’s testimony is
4 completely silent on this issue. The Company fails to acknowledge that the contract
5 feature arose as one feature among a basket of compromises that *as a whole* were in the
6 public interest.

7 One weakness of power cost adjustment mechanisms in general is the differential
8 regulatory treatment for one method of meeting load over another. Since a power cost
9 adjustment is intended to address *short-run* cost changes resulting from unusual
10 weather, a dividing line must be created between short-run and long-run costs.
11 Regardless of where this line is drawn there will be a schism in regulatory treatment of
12 costs to meet load. Simply pointing out this schism and arguing for greater and greater
13 inclusion of long-term contracts and resources is not a satisfactory analysis of the
14 proper demarcation between short-run and long-run costs. The proper analysis should
15 look to utility operation and the original purpose of the power cost adjustment itself.
16 Limiting short-run costs to two year contracts allows a utility to hedge two years worth
17 of hydroelectric production and is the common maximum length of contracts entered
18 into by the “front office” or trading floor of a utility. While all new contracts and new
19 resources effect short-term costs regardless of whether the contracts are long-term or
20 short-term, the inclusion of long-run contracts greater than two years *is* a violation of

¹⁴ *PacifiCorp Order*, ¶ 91.

1 the short-run nature of the mechanism and must only be considered in unique
2 circumstances. While I continue to support the ERM settlement, I have very strong
3 concerns about the way in which the “50 aMW” feature may be used. The first review
4 of power costs under the new ERM settlement has not yet occurred. Before *even*
5 *introducing* for consideration such a feature in another PCA, several years of operation
6 of the current Avista ERM should occur.

7 **Q. Does this complete your testimony?**

8 A. Yes.