Exhibit No. ___ (APB-3)
Docket UE-111190
Witness: Alan P. Buckley

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PACIFICORP d/b/a PACIFIC POWER & LIGHT COMPANY,** **Respondent.**	**DOCKET UE-111190**

EXHIBIT TO TESTIMONY OF

Alan P. Buckley

STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

Various Company Responses to UTC Staff Data Requests

January 6, 2012

UE-111190/PacifiCorp
October 26, 2011
WUTC Data Request 92

WUTC Data Request 92

Requester: Alan Buckley

Please provide a detailed explanation of the differences between the hourly energy values for Western Hydro resources used in the Company's last general rate case (Docket UE-100749), and those same values in this general rate case filing. The referenced values for Docket UE-100749 can be found in the confidential rebuttal workpapers of Mr. Duvall, file WA GRC_Hourly Hydro Energy_1010 04 13 ### WA UE-100749 (GRC Mar. 2012) Rebuttal. The referenced confidential workpaper file in this docket is WAGRC_Hourly Hydro Energy (1103OFPC)###WA UE-11xxxxGOLD(GRC May2013). There appears to be a significant decrease in available energy (and Max capacity) associated with each Western hydro resource.

Response to WUTC Data Request 92

Please refer to the Company's response to ICNU Data Request 6.10 in this proceeding.

PREPARER: Connely Baldwin

SPONSOR: Greg Duvall

UE-111190/PacifiCorp
October 26, 2011
ICNU Data Request 6.10

ICNU Data Request 6.10

Please provide a detailed explanation and all supporting work papers for the variation in the hydro generation for each West hydro generating facility between the current proceeding and UE-100749.

Response to ICNU Data Request 6.10

In the UE-100749 proceeding, the Company inadvertently excluded all outages for hydro facilities. Neither planned nor forced outages were accounted for in the modeling, which artificially increased the hydro generation available for the basins modeled in Vista (Lewis, Klamath and North Umpqua). In the Company's responses to ICNU Data Requests 1.26 through 1.29 in the UE-100749 proceeding, the Company stated that outage rates for hydro units had been inadvertently excluded, and indicated that it would include outage rates for hydro in future filings.

PREPARER: Connely Baldwin

SPONSOR: Greg Duvall

UE-111190/PacifiCorp
November 3, 2011
ICNU Data Request 6.10 – 1st Supplemental

ICNU Data Request 6.10

Please provide a detailed explanation and all supporting work papers for the variation in the hydro generation for each West hydro generating facility between the current proceeding and UE-100749.

1st Supplemental Response to ICNU Data Request 6.10

Further to the Company's response to ICNU Data Request 6.10 dated October 26, 2011.

Please refer to Confidential Attachment ICNU 6.10 -1 1st Supplemental for hourly hydro generation in the Company's 2010 general rate case (Docket UE-100749), which excluded planned and forced outages.

Please refer to Confidential Attachment ICNU 6.10 -2 1st Supplemental for hourly hydro generation in the current proceeding, which included the planned and forced outages. Planned outages are inputs to the Vista model, and the model optimizes the utilization of streamflow around the timing and duration of the planned outages. The impact of forced outages is reflected after the Vista run as explicit reduction in generation, given the unexpected nature of forced outages.

Please refer to Confidential Attachment ICNU 6.10 -3 1st Supplemental for the development of planned and forced outages in the current proceeding. The preparation of the files is as follows:

1. Identify planned and forced outages for January 1, 2007 through December 31, 2010.

For planned and forced outages do steps 2 through 5 separately:

2. Sort outages by plant and convert length from hours to days.

3. Use pivot table to average the number of days offline per month at each plant.

4. Sum the outages by month to get average number of outage days per month.

5. Create outage cases for each plant based on the results from step 4 above:

    a. The number outage days in each month are placed randomly in weeks of the month.
    b. For months with a high number of outage days, the days were scheduled in contiguous weeks.
    c. Months containing less than 1 average outage day were ignored or combined.

d. The sum of the yearly outages at each plant was checked to match the results of step 4.

6. Planned outage cases are input into Vista.

7. Forced outage cases are further assigned a random starting day within the month and applied to Vista output. The Vista generation and capacity output is reduced so that it does not exceed the outage-reduced capacity. The forced outages are applied as a capacity limit which is zero for single-unit plants and the remaining plant capacity for multiple unit plants. The outage-reduced generation is the lesser of the remaining capacity and the scheduled generation. In many cases, a single-unit outage results in no lost generation.

This process is used for the Lewis, Klamath and North Umpqua Rivers. For run-of rivers, the outages have been reflected in the historical generation that is the basis of the normalized generation for the test period.

Confidential information is provided subject to the terms and conditions of the protective order in this proceeding.

PREPARER: Connely Baldwin

SPONSOR: Greg Duvall

ICNU Data Request 1.26

Please explain how and provide supporting workpapers or numerical examples showing how the forced outage rates for hydro units are reflected in the GRID data.

Response to ICNU Data Request 1.26

The Company inadvertently excluded forced outages in its filing. The Company will provide this information in a supplemental response no later than June 17, 2010.

PREPARER: Mark Smith

SPONSOR: Gregory N. Duvall

UE-100749/PacifiCorp
June 7, 2010
ICNU Data Request 1.27

ICNU Data Request 1.27

Please explain how and provide supporting workpapers or numerical examples showing how scheduled outages for hydro units are reflected in the GRID data.

Response to ICNU Data Request 1.27

The Company inadvertently excluded scheduled outages in its filing. The Company will provide this information in a supplemental response by June 17, 2010.

PREPARER: Mark Smith

SPONSOR: Gregory N. Duvall

ICNU Data Request 1.28

Please provide workpapers used to derive the outage rates for hydro units. Please provide the source data showing each hydro outage event (unit, data, time, lost energy, hour duration, event type, cause, NERC cause code, etc.) considered in the events.

Response to ICNU Data Request 1.28

Please refer to the Company's response to ICNU Data Request 1.26.

PREPARER: Mark Smith

SPONSOR: Gregory N. Duvall

ICNU Data Request 1.29

Please provide workpapers used to derive the scheduled outage inputs for hydro units. Please provide the source data showing each hydro outage event (unit, data, time, lost energy, hour duration, event type, cause, NERC cause code, etc.) considered in the events.

Response to ICNU Data Request 1.29

Please refer to the Company's response to ICNU Data Request 1.27.

PREPARER: Mark Smith

SPONSOR: Gregory N. Duvall