

June 12, 2015

# VIA ELECTRONIC FILING AND OVERNIGHT DELIVERY

Steven V. King Executive Director and Secretary Washington Utilities and Transportation Commission 1300 S. Evergreen Park Drive SW P.O. Box 47250 Olympia, Washington 98504-7250

# RE: Docket UE-144160—Declaration of Brian S. Dickman

Pacific Power & Light Company, a division of PacifiCorp (Pacific Power or Company), submits for filing the Declaration of Brian S. Dickman in the above-referenced proceeding.

If you have any informal inquiries regarding this matter, please contact Ariel Son, Manager, Regulatory Projects, at (503) 813-5410.

Sincerely,

R. Brejce Sally/un

R. Bryce Dalley Vice President, Regulation

Enclosures

## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

)

)

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

**DOCKET UE-144160** 

DECLARATION OF BRIAN S. DICKMAN

v.

PACIFIC POWER & LIGHT COMPANY,

Respondent.

Brian S. Dickman declares:

1. My name is Brian S. Dickman. My title is Director, Net Power Costs and Load Forecasting at PacifiCorp. My business address is 825 NE Multnomah Street, Suite 600, Portland, Oregon 97232.

2. I am over the age of twenty-one, have personal knowledge of the facts set forth herein, and am competent to testify to those facts.

3. The purpose of this declaration is to support the Schedule 37 Avoided Cost Update (Advice 14-08) filed by Pacific Power & Light Company, a division of PacifiCorp (Pacific Power or Company), in this docket on December 29, 2014. Specifically, my declaration discusses the Company's update to Schedule 37 rates and two proposed changes to the method for calculating published avoided costs in Schedule 37.

#### **Background**

4. The Company's standard avoided cost prices (Schedule 37) are applicable to qualified facility (QF) projects up to 2 megawatts and are offered as fixed prices over a five-

1

year term.<sup>1</sup> On December 29, 2014, the Company filed Advice 14-08 to update the published Schedule 37 prices to reflect updated resource requirements and other inputs to the avoided cost calculation, including wholesale prices for natural gas and elec**w**icity. In its filing, the Company made two changes to Schedule 37. First, the Company included a charge to reflect the costs associated with integrating intermittent QF generation. Second, the Company eliminated payments for capacity based on the costs of simple cycle combustion turbine (SCCT) consistent with the resource sufficiency period identified in the Company's 2013 Integrated Resource Plan (IRP) Update. Following an open meeting on February 12, 2015, the Washington Utilities and Transportation Commission (Commission) suspended the Company's tariff revisions and opened an investigation into the proposed integration charge and other aspects of the filing.<sup>2</sup>

5. After discussions with Commission staff and the Renewable Energy Coalition, the Company filed a letter notice with the Commission to withdraw the proposed variable generation integration charges included in Advice 14-08. As a result, Term and Condition No. 8 from the Company's proposed Tariff Sheet No. 37.2 will no longer apply. The Company, however, reserved the right to include variable generation integration charges in its avoided costs prices at a later date in a different docket. Upon final resolution of the issues in this docket, or at such time as the Commission orders, the Company will revise its proposed Schedule 37 tariff sheets to reflect the withdrawal of the integration charges.

6. The Company continues to support eliminating SCCT costs in Schedule 37 prices during the resource sufficiency period as identified in the 2013 IRP Update. In order

<sup>&</sup>lt;sup>1</sup> Prices are provided in Schedule 37 for a period of 10 years, but only available for a fixed-price purchase agreement of 5 years or less.

<sup>&</sup>lt;sup>2</sup> Wash. Utils. & Transp. Comm'n v. Pacific Power & Light Company, Docket No. UE-144160, Order 01 (Feb 12, 2015).

to maintain the ratepayer indifference objective mandated by the Public Utility Regulatory Policies Act of 1978 (PURPA), deferred capacity costs must be included in avoided costs in a manner consistent with the Company's resource procurement plans identified in its IRP. Specifically, the fixed costs of a displaced generating unit should only be included in avoided costs to the extent and when such generating unit can actually be avoided by the Company. Without the proposed change to the Schedule 37 method, retail customers will pay prices for QFs that are higher than the avoided cost of energy and capacity from other sources.

### Avoided Cost Calculation

7. Schedule 37 avoided cost calculations are separated into two periods: 1) resource deficiency, and 2) resource sufficiency. In the Company's tariff filing, the Company relied on its 2013 IRP Update to demarcate the deficiency period, which begins coincident with the next major thermal resource acquisition in 2027.<sup>3</sup> Identifying the periods of resource deficiency and sufficiency properly matches the avoided cost calculation with the Company's resource planning process. If the Company becomes resource deficient, *i.e.* a new base load thermal generator is needed, the avoided costs are set equal to the fixed and variable costs of a combined cycle combustion turbine (CCCT) from the IRP.

8. For current prices, the deficiency period did not occur until 2024 and, therefore, the effective prices reflect only sufficiency period avoided costs. Similarly, in the analysis supporting the Company's proposed prices, the Company is not resource deficient until 2027, which is beyond the published price horizon.<sup>4</sup> Therefore, avoided cost prices for a QF that are determined and fixed for periods prior to 2027 fall entirely within the period of

<sup>&</sup>lt;sup>3</sup> Table 5.5 of the 2013 IRP Update (Docket No. UE-120416) also provided as Table 1 of Attachment A in Advice 14-08.

<sup>&</sup>lt;sup>4</sup> In the Company's 2015 IRP (Docket No. UE-140546) filed March 31, 2015, the next major thermal generator acquisition is projected to occur in 2028. Table 8.7 of the 2015 IRP.

resource sufficiency.

9. Avoided costs during the sufficiency period are based on the Company's Generation and Regulation Initiative Decision model (GRID) using two runs simulating the dispatch of resources in the Company's west control area: one scenario without any new resources and one with an additional generic 50 average megawatt resource included at zero cost. The difference in net power costs between the two runs is the avoided cost. Including zero-cost energy in the GRID model causes a redispatch of the system as the highest incremental cost resources are displaced to accommodate the additional energy. Avoided costs result from a combination of reduced wholesale market purchases (or increased market sales in some hours) and reduced generation from the Company's dispatchable thermal units.

10. In the past, capacity payments have also been included during the sufficiency period based on the fixed costs of a SCCT for three months each year (i.e. one-fourth of the fixed cost of an SCCT was included as a capacity payment annually), implying that the Company would incur such costs to meet capacity needs during periods of peak load absent the QF generation. However, as demonstrated in the Company's 2013 IRP Update, the Company does not need to acquire a thermal generating resource until 2027 at the earliest; therefore, QFs receiving the proposed Schedule 37 pricing will not be avoiding SCCT capacity costs.<sup>5</sup>

#### Avoidable Capacity Costs

11. Before 2027, the Company relies on front office transactions (FOTs), which are representative of short-term wholesale market purchases, to balance the Company's capacity needs. During the resource sufficiency period, short-term firm market purchases

<sup>&</sup>lt;sup>5</sup> Based on information from the 2013 IRP Update, Table 1 of the Company's Schedule 37 update shows that the Company's next deferrable thermal capacity resource is a 423 MW CCCT in 2027.

contribute to meeting PacifiCorp's firm obligation inclusive of a 13 percent planning reserve margin, which ensures the Company has sufficient capacity to maintain reliability at a reasonable cost. For example, in the 2013 IRP Update FOTs rise to over 1,400 megawatts in 2026, the last year before a new major thermal resource is added. Including SCCT costs in Schedule 37 is inconsistent with the Company's resource needs and does not represent costs that can actually be deferred by the addition of a QF with a fixed-price contract lasting five years.

12. Using the Company's GRID model to calculate sufficiency period avoided costs captures the impact of QF generation displacing short-term market transactions. The following table provides the results of the GRID run used in the Company's filing, and shows that the modeled avoided costs during the sufficiency period are based on approximately 99 percent market transactions and approximately 1 percent reduced thermal generation.

#### **GRID Model Avoided Cost Breakdown**

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Market transactions (avoided purhcases/increased sales)	99.09%	98.87%	98.76%	98.64%	98.62%	98.57%	<b>98</b> ,51%	98.73%	98.70%	98.84%
Reduced thermal dispatch	0.91%	1.13%	1.24%	1.36%	1.38%	1.43%	1.50%	1.28%	1.30%	1.16%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Including displacement of market transactions during the sufficiency period treats firm market purchases as the avoided capacity resource, which is consistent with the use of firm market purchases in meeting the Company's capacity needs in its IRP.

13. Other states served by the Company have recently addressed, or are currently reviewing, the calculation of the Company's sufficiency period avoided cost prices. On May 12, 2015, the Wyoming Public Service Commission approved updated Schedule 37 prices including the same change to eliminate the payment of SCCT fixed costs during the

sufficiency period as proposed by the Company in Advice 14-08.<sup>6</sup>

14. In Utah the Company proposed to eliminate SCCT costs from the sufficiency period in its May 7, 2014 filing to update Schedule 37 prices. The Utah Public Service Commission initially adopted the Company's proposal, but reversed its decision and directed the Company to provide additional evidence supporting the change in its next Schedule 37 update. <sup>7</sup> The Company made its next filing on April 30, 2015, again supporting the elimination of SCCT costs in the sufficiency period. That filing is currently under review by the Utah Public Service Commission.

15. In Oregon, Schedule 37 prices are set equal to projected wholesale market prices during the sufficiency period with no additional imputation of SCCT fixed costs.<sup>8</sup> The determination of sufficiency period avoided cost prices is currently under review by the Public Utility Commission of Oregon in docket UM 1610.

### Alternative Rate Design

16. The Company's proposed Washington Schedule 37 prices are equal to the avoided costs from the GRID model, including the displacement of wholesale market transactions, expressed as a flat \$/MWh rate. The previously included capacity payment based on a SCCT is set to \$0. While the result of the proposed tariff structure is that a QF will get paid a fixed price for all energy generated regardless of the time of generation, the price is an annual average that includes periods of higher avoided costs (i.e. during periods of peak demand) and lower avoided costs. As an alternative to a flat price, to better reflect the

<sup>&</sup>lt;sup>6</sup> See Docket No. 20000-458-EA-14 (record number 14021). The Wyoming Public Service Commission approved PacifiCorp's Schedule 37 update at an open meeting on May 12, 2015. A final order is forthcoming. <sup>7</sup> The Company subsequently filed a petition for review of final agency action with the Utah Supreme Court, which review is ongoing. See\_Office of Consumer Services; Division of Public Utilities; and PacifiCorp dba Rocky Mountain Power v. The Public Service Commission of Utah, Case No. 20150066-CA (Utah Court of Appeals).

<sup>&</sup>lt;sup>8</sup> E.g., Docket No. UM 1129, Order No. 11-505 at 4 (Dec. 13, 2011).

value of QF generation during on- and off-peak periods, the Company is willing to revise its proposed Schedule 37 prices to differentiate the energy payment into on- and off-peak. periods, with prices during on-peak periods set higher to reflect the increased value of QF generation. Basing the on- and off- peak differential on the spread between on- and off-peak Mid-Columbia market prices produces results shown in the table below, which are also compared to the Company's initial filing (excluding integration costs).

		Washington Schedule 37									
	Differentiated	Prices (\$'MWh)	Dec 2014 Filing	Difference							
	Mid-C Spread		(\$/MWh)	\$/NiWh							
Year	HLH	LLH	Base Load	HLH	LLH						
2015	\$36.36	\$27.52	\$32.48	\$3.88	(\$4.96)						
2016	\$38.31	\$28.99	\$34.12	\$4.19	(\$5.13)						
2017	\$41.00	\$30.56	\$36.40	\$4.60	(\$5.84)						
2018	\$44.07	\$32.79	\$39.10	\$4.97	(\$6.31)						
2019	\$47.13	\$34.76	\$41.70	\$5.43	(\$6.94)						
2020	\$50.09	\$36.82	\$44.14	\$5,95	(\$7.32)						
2021	\$51.97	\$39.86	\$46.64	\$5.33	(\$6.78)						
2022	\$53.69	\$42.96	\$48.97	\$4.72	(\$6.01)						
2023	\$56.27	\$45.02	\$51.30	\$4.97	(\$6.28)						
2024	\$58.56	\$47.12	\$53.39	\$5.17	(\$6.27)						

## Conclusion

17. In order to meet the objective of ratepayer indifference, deferred capacity costs must be included in avoided costs in a manner consistent with the Company's resource procurement plans identified in the IRP or IRP Update. The Company's filing is based on its 2013 IRP Update which indicates that the next avoidable thermal resource will not be procured until 2027, and that the Company will rely on short-term wholesale market transactions to balance its capacity needs prior to that time. Schedule 37 avoided costs should not include the capacity costs of a SCCT assumed to be avoided during the sufficiency period when the Company cannot actually avoid such costs. Assuming the Company can avoid a SCCT, and including such costs in Schedule 37, is not consistent with the Company's resource procurement plans and does not represent costs that can actually be

deferred by the addition of a QF with a fixed price contract lasting five years.

I declare under the penalty of perjury under the laws of the State of Washington that the foregoing is true and correct. Signed at Salt Lake City, Utah on June 12, 2015.

<u>B.S.1</u> Han S. Dickman