**ATTACHMENT A**

**PACIFIC POWER & LIGHT COMPANY**

**AVOIDED COST CALCULATION**

**WASHINGTON - DECEMBER 2014**

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WAC 480-107-055, related to schedules of estimated avoided costs, states that avoided costs should be based on:

1. The most recent project proposals received pursuant to an RFP issued under these rules;
2. Estimates included in the utility’s current integrated resource plan filed pursuant to WAC 480-100-23;
3. The results of the utilities most recent bidding process; and
4. Current projected market prices for power.

The starting point for the avoided cost calculation in this filing is the load and resource balance from the Company’s 2013 Integrated Resource Plan (IRP) Update, filed on March 31, 2014. The avoided cost prices are then developed consistent with the West Control Area inter-jurisdictional allocation methodology adopted by the Washington Utilities and Transportation Commission in Docket No. UE-061546.

## Load and Resources

## Table 1 presents the Company’s load and resource balance from the 2013 IRP Update. Table 1 shows that the next major thermal resource acquisition is planned to occur in 2027.

## Avoided Cost Calculation Methodology

The avoided cost calculation is separated into two distinct periods: (1) the Short Run – a period of resource sufficiency in which the avoided costs are based on the marginal production cost of existing resources, and (2) the Long Run – a resource deficit period in which new resources are required to provide both capacity and energy to meet the Company’s resource requirements. Avoided costs during the deficit period are based on the cost of a combined cycle combustion turbine.

The load and resource balance from the 2013 IRP Update, shown in **Table 1,** indicates resource sufficiency for all ten years of the avoided cost study period from 2015 to 2024. Consequently, only Short Run avoided costs are included in the current filing.

*Short Run Avoided Costs*

Avoided costs during the resource sufficiency period are based on the displacement of purchased power and existing thermal resources as modeled by the Generation and Regulatory Initiative Decision Tools (GRID) model. To calculate avoided costs, two production cost studies are prepared, where the only difference between the two studies is an assumed 50 aMW resource modeled at zero cost. The outputs of the production cost model run are provided as **Table 2**. The proposed avoided costs do not include any capacity payments during the sufficiency period, consistent with the 2013 IRP Update, which does not require any new resources until 2027.

Since, energy generated by a qualifying facility may vary, avoided costs at 75%, 85%, and 95% capacity factors are prepared to illustrate the impact of differing generation levels. For illustrative purposes, total avoided cost at various capacity factors are shown in **Table 3.** Since no capacity payments are included in total avoided costs rates, the rates do not vary at different capacity factors.

**Table 4** shows the calculation of avoided costs differentiated into on-peak and off-peak prices. To make this calculation, the Company assumes that all capacity costs are incurred to meet on-peak load requirements. However, since there are no capacity payments during the resource sufficiency period, total avoided costs rates are the same during on-peak and off-peak hours.

For informational purposes, **Table 5** shows a comparison between the avoided costs currently in effect in Washington and the proposed avoided costs in this filing.

Finally, the proposed Schedule 37 avoided cost rates for intermittent wind and solar qualifying facilities will be reduced by solar and wind integration costs shown in **Table 6**.