



Appendix C

Bonneville Power Administration Tiered Rate Methodology



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The value of energy and peak capacity at utilities that are Bonneville Power Administration (BPA) customers may be evaluated based on BPA Tiered Rates Methodology (BPA TRM BP-12-A-03). While the entire methodology is very complex and includes many rate categories, the differential monetized values of energy and capacity at these utilities is estimated well from BPA load-shaping rates and demand rates.

Heavy-Load Hours and Light-Load Hours

A time-of-use type of price signal is sent to BPA customers by the differentiation of heavy-load hours (HLHs) and light-load hours (LLHs). Heavy-load hours are hours from 06:00 until 22:00 Pacific Time, excluding Sundays and six North American Electric Reliability Council holidays: New Year’s Day, Christmas Day, Labor Day, Thanksgiving Day, Memorial Day, and Independence Day (NERC 2014). All other hours are LLHs.

Load-Shaping Rates

The energy rates shown in Table C.1 and Table C.2 apply to Tier 1 electricity supply at many BPA customer utilities in the Northwest.

Table C.1. BPA Load-Shaping Rates from October 1, 2011 through September 2013 (BPA 2012 Power Rates Schedules and General Rate Schedule Provisions)

Month	Load-Shaping Rate	
	HLH (\$/kWh)	LLH (\$/kWh)
Oct	0.03786	0.03120
Nov	0.03837	0.03140
Dec	0.04110	0.03339
Jan	0.04003	0.03170
Feb	0.04093	0.03317
Mar	0.03957	0.03233
Apr	0.03753	0.03041
May	0.03506	0.02440
Jun	0.03597	0.02302
Jul	0.04207	0.02991
Aug	0.04435	0.03215
Sep	0.04345	0.03359



Table C.2. BPA Load-Shaping Rates from October 1, 2013 through September 2015 (BPA 2014 Power Rates Schedules and General Rate Schedule Provisions)

Month	Load-Shaping Rate	
	HLH (\$/kWh)	LLH (\$/kWh)
Oct	0.03159	0.02743
Nov	0.03556	0.03127
Dec	0.03884	0.03327
Jan	0.03780	0.03067
Feb	0.03689	0.03060
Mar	0.03023	0.02510
Apr	0.02576	0.02012
May	0.02100	0.01308
Jun	0.02273	0.01457
Jul	0.03049	0.02450
Aug	0.03396	0.02709
Sep	0.03365	0.02790

Demand Rates

For most utilities that are BPA customers, the demand rates shown in Table C.3 and Table C.4 apply. The demand billing determinant is calculated as the highest hourly power purchase amount during the HLH in a calendar month, less the average power purchased during all HLHs in the month, less a grandfathered amount that has been determined from the particular utility’s performance in prior years. Demand charges apply in any month in which the calculated billing determinant is a positive value.

The first two terms may be known from a utility’s hourly distribution power data for the month. These first two terms are most important for assessing a differential impact from demand charges. The third term is important for calculating a month’s demand charges, but it may often be ignored when comparing alternative scenarios.¹

¹ More detailed analysis is necessary if the determinant is often near to and less than zero.

Table C.3. BPA Demand Rates from October 1, 2011 through September 2013 (BPA 2012 Power Rates Schedules and General Rate Schedule Provisions)

Month	Demand Rate (\$/kW/month)
Oct	9.18
Nov	9.31
Dec	9.97
Jan	9.70
Feb	9.92
Mar	9.60
Apr	9.10
May	8.50
Jun	8.72
Jul	10.20
Aug	10.75
Sep	10.53

Table C.4. BPA Demand Rates from October 1, 2013 through September 2015 (BPA 2014 Power Rates Schedules and General Rate Schedule Provisions)

Month	Demand Rate (\$/kW/month)
Oct	9.33
Nov	10.50
Dec	11.47
Jan	11.17
Feb	10.90
Mar	8.93
Apr	7.61
May	6.20
Jun	6.72
Jul	9.01
Aug	10.03
Sep	9.94