

CONFIDENTIAL

Attachment C

One Time Calculation of Incremental Cost for Each (All) Eligible Resource(s)

480-109-210(2)(a)(i) Utility must make a one-time calculation of incremental cost for each eligible resource at the time of acquisition or, for historic acquisitions, the best information available at the time of acquisition

Formula **One Time Calculation** of Incremental Cost:

Energy-Levelized Incremental Cost:

[Levelized Cost Eligible Renewable Resource – Levelized Cost Alternative]

Capacity-Levelized Incremental Cost:

[Levelized Cost Eligible Renewable Resource – Levelized Cost Alternative]

Energy + Capacity = Incremental Cost

Resource	Incremental Levelized Cost (\$/REC/MWh)	Levelized Cost Eligible Renewable Resource (\$/MWh)	\$	Energy	Capacity	Capacity	\$	\$
			Total Annual Cost (\$)	Levelized Cost	Levelized Cost	Total Alternative Cost (\$)	Incremental Cost (\$)	Washington Share (\$)
Goodnoe Hills	14.13	89.86	23,998,180	66.28	9.44	20,223,968	3,774,212	-
Leaning Juniper	3.58	76.91	23,505,014	64.26	9.06	22,409,681	1,095,332	-
Marengo I	6.47	81.28	31,977,638	65.53	9.28	29,431,936	2,545,702	-
Marengo II	12.11	87.89	16,471,142	66.28	9.50	14,202,225	2,268,916	-
Lemolo 1 (Upgrade 2003)	(45.23)	3.91	51,351	37.76	11.37	645,674	(594,322)	-
Lemolo 2 (Upgrade 2009)	(65.95)	51.55	886,739	92.87	24.62	2,021,147	(1,134,408)	-
JC Boyle (Upgrade 2005)	(66.44)	3.26	113,445	39.00	28.09	2,336,870	(2,223,425)	-
Prospect 2 (Upgrade 1999)	(40.27)	4.31	39,062	34.93	10.47	411,164	(372,102)	-
Top of the World	8.51							
Dunlap I	8.51							
Seven Mile Hill I	8.51							
Glenrock I	8.51							
Campbell Hill	8.51							
Bennett Creek								
Hot Springs								
Pavant I								
Enterprise								
Adams Solar								
Bear Creek Solar								
Bly Solar								
Elbe Solar								
Total Renewable Resource Cost			97,042,570			91,682,665	5,359,905	-

Note: Washington's share of the resource varies from year to year, depending on the state's actual System Generation (SG) Allocation factor.

Note: Please refer to confidential workbook '190448-PPL-WP-2a-Resource-Cost-Anlys-2018-WA-RPS-Rpt-r-8-23-19 (C)' for details

Washington Share:	
2018 ALL RESOURCES	
TOTAL INCREMENTAL COST = ENERGY + CAPACITY	-

2018 Actual Data: Annual Calculation of Revenue Requirement Ratio

480-109-210(2)(a)(ii) Utility must annually calculate its revenue requirement ratio for 1) All Resources 2) Required Resources Target Year

Formula **Annual Calculation** of Incremental Cost (Revenue Requirement Ratio):

1) Total Incremental Cost All* Resources:

{[sum of incremental costs of All* eligible resources + cost of unbundled RECs] - [revenue RECs]} / annual revenue requirement

2) Total Incremental Cost Required Resources for Target Year:

{[sum of incremental costs of Target Year* eligible resources used for target year compliance + cost of unbundled RECs] - [revenue RECs]} / annual revenue requirement

Resource	TARGET YEAR: ALL AVAILABLE RESOURCES BASED ON ACTUAL RESULTS			TARGET YEAR: FORECAST SUBJECT TO CHANGE		
	sum of incremental costs of all eligible resources	RECs Generated or Purchased	Revenue from REC sales	sum of incremental costs of all eligible	RECs purchased	Revenue from REC sales
Goodnoe Hills	258,822	18,315	0			
Leaning Juniper	57,422	16,022	0			
Marengo I	172,949	26,729	0			
Marengo II	158,170	13,065	0			
Lemolo 1 (Upgrade 2003)	(45,547)	1,007	0			
Lemolo 2 (Upgrade 2009)	(5,539)	84	0			
JC Boyle (Upgrade 2005)	(13,619)	205	0			
Prospect 2 (Upgrade 1999)	(10,713)	266	0			
SG Total		75,693				
Top of the World	359,775	42,284	0			
Dunlap I	473,483	55,648	0			
Seven Mile Hill I	100,775	11,844	0			
Glenrock I	205,422	24,143	0			
Campbell Hill	423,334	49,754	0			
CAGW Total		183,673				
WIND REC Only						
Bennett Creek Windfarm - REC Only		9,667	0			
Hot Springs Wind Farm - REC Only		8,846	0			
Solar REC Only						
Pavant		26,549	0			
Enterprise		64,705	0			
REC Only Total		109,767				
Total	2,325,266	369,133	0			
WA Share	2,325,266	369,133	0			

Annual Revenue Requirement (most recent rate case)	330,209,153	
CALCULATION 1 :	2,325,266	CALCULATION 2:
	0.70%	

2019 Estimated Data: Annual Calculation of Revenue Requirement Ratio

480-109-210(2)(a)(ii) Utility must annually calculate its revenue requirement ratio for 1) All Resources 2) Required Resources Target Year

Formula **Annual Calculation** of Incremental Cost (Revenue Requirement Ratio):

1) Total Incremental Cost All* Resources:

{[sum of incremental costs of All* eligible resources + cost of unbundled RECs] - [revenue RECs]} / annual revenue requirement

2) Total Incremental Cost Required Resources for Target Year:

{[sum of incremental costs of Target Year* eligible resources used for target year compliance + cost of unbundled RECs] - [revenue RECs]} / annual revenue requirement

Resource	ALL AVAILABLE RESOURCES ESTIMATED			TARGET YEAR: BASED ON EXPECTED COMPLIANCE RESOURCES		
	sum of incremental costs of all eligible resources	RECs Generated or Purchased	Revenue from REC sales	sum of incremental costs of all eligible resources	RECs Generated or Purchased	Revenue from REC sales
Goodnoe Hills	227,492	16,098	0	227,492	16,098	0
Leaning Juniper	58,734	16,388	0	58,734	16,388	0
Marengo I	168,665	26,067	0	168,665	26,067	0
Marengo II	151,524	12,516	0	151,524	12,516	0
Lemolo 1 (Upgrade 2003)	(54,638)	1,208	0	(54,638)	1,208	0
Lemolo 2 (Upgrade 2009)	(7,188)	109	0	(7,188)	109	0
JC Boyle (Upgrade 2005)	(16,343)	246	0	(16,343)	246	0
Prospect 2 (Upgrade 1999)	(11,397)	283	0	(11,397)	283	0
SG Total		72,915			72,915	
Top of the World	413,651	48,616	0	413,651	48,616	0
Dunlap I	250,406	29,430	0	250,406	29,430	0
Glenrock I	205,209	24,118	0	205,209	24,118	0
Campbell Hill	225,298	26,479	0	225,298	26,479	0
CAGW Total		128,643			128,643	
WIND REC Only						
Bennett Creek Windfarm		3,216	0		3,216	0
Hot Springs Wind Farm		1,923	0		1,923	0
SOLAR REC Only						
Adams Solar		5,022	0		5,022	0
Bear Creek Solar		5,132	0		5,132	0
Bly Solar		4,059	0		4,059	0
Elbe Solar		5,022	0		5,022	0
Pavant		53,461	0		53,461	0
Enterprise		88,276	0		88,276	0
REC Only Total		166,111			166,111	
Total	1,893,965	367,669	0	1,893,965	367,669	0
WA Share	1,893,965	367,669		1,893,965	367,669	

Annual Revenue Requirement (most recent rate case)		330,209,153		330,209,153
	CALCULATION 1:	1,893,965	CALCULATION 2:	1,893,965
		0.574%		0.574%

(iii)(A) & (B) Annual Reporting Summary Data: 2018 and 2019

2018

Utility must (A) report its total incremental cost as a dollar amount and in dollars per megawatt-hour of renewable energy generated by all eligible renewable resources in the calculation (a)(i) of this subsection; and (B) multiply the dollars per megawatt-hour cost calculated in (a)(iii)(A) of this subsection by the number of megawatt-hours needed for target year compliance.

Resource	(A)			(B)	
	Total Incremental Cost (as dollar \$ amt.)	MWh	Total Incremental Cost (\$/MWh)	Number of Megawatt-hours Needed for Target Year Compliance	Total Incremental Cost (\$/MWh) Multiplied by Number of Megawatt-hours Needed for Target Year Compliance
Goodnoe Hills	258,822	18,315	14.13	18,315	258,822
Leaning Juniper	57,422	16,022	3.58	16,022	57,422
Marengo I	172,949	26,729	6.47	26,729	172,949
Marengo II	158,170	13,065	12.11	13,065	158,170
Lemolo 1 (Upgrade 2003)	(45,547)	1,007	(45.23)	1,007	(45,547)
Lemolo 2 (Upgrade 2009)	(5,539)	84	(65.95)	84	(5,539)
JC Boyle (Upgrade 2005)	(13,619)	205	(66.44)	205	(13,619)
Prospect 2 (Upgrade 1999)	(10,713)	266	(40.27)	266	(10,713)
Top of the World - Top of the World	359,775	42,284	8.51	42,284	359,775
Dunlap I - Dunlap I	473,483	55,648	8.51	55,648	473,483
Seven Mile Hill I	100,775	11,844	8.51	11,844	100,775
Glenrock I - Glenrock I	205,422	24,143	8.51	24,143	205,422
Campbell Hill	423,334	49,754	8.51	49,754	423,334
Bennett Creek Windfarm - Bennett Creek Windfarm		9,667		9,667	
Hot Springs Windfarm - Hot Springs Windfarm		8,846		8,846	
Adams Solar	0	0		0	0
Bear Creek Solar	0	0		0	0
Bly Solar	0	0		0	0
Elbe Solar	0	0		0	0
Pavant Solar		26,549		26,549	
Enterprise Solar		64,705		64,705	
TOTAL	2,325,266	369,133		369,133	2,325,266

*NOTE: does not include 2018 vintage RECs carried forward to 2019 compliance period

2019

Utility must (A) report its total incremental cost as a dollar amount and in dollars per megawatt-hour of renewable energy generated by all eligible renewable resources in the calculation (a)(i) of this subsection; and (B) multiply the dollars per megawatt-hour cost calculated in (a)(iii)(A) of this subsection by the number of megawatt-hours needed for target year compliance.

Resource	(A)			(B)	
	Total Incremental Cost (as dollar \$ amt.)	MWh	Total Incremental Cost (\$/MWh)	Number of Megawatt-hours Needed for Target Year Compliance	Total Incremental Cost (\$/MWh) Multiplied by Number of Megawatt-hours Needed for Target Year Compliance
Goodnoe Hills	227,492	16,098	14.13	16,098	227,492
Leaning Juniper	58,734	16,388	3.58	16,388	58,734
Marengo I	168,665	26,067	6.47	26,067	168,665
Marengo II	151,524	12,516	12.11	12,516	151,524
Lemolo 1 (Upgrade 2003)	(54,638)	1,208	(45.23)	1,208	(54,638)
Lemolo 2 (Upgrade 2009)	(7,188)	109	(65.95)	109	(7,188)
JC Boyle (Upgrade 2005)	(16,343)	246	(66.44)	246	(16,343)
Prospect 2 (Upgrade 1999)	(11,397)	283	(40.27)	283	(11,397)
Top of the World - Top of the World	413,651	48,616	8.51	48,616	413,651
Dunlap I - Dunlap I	250,406	29,430	8.51	29,430	250,406
Glenrock I - Glenrock I	205,209	24,118	8.51	24,118	205,209
Campbell Hill - Campbell Hill	225,298	26,479	8.51	26,479	225,298
Bennett Creek Windfarm - Bennett Creek Windfarm		3,216		3,216	
Hot Springs Windfarm - Hot Springs Windfarm		1,923		1,923	
Adams Solar		5,022		5,022	
Bear Creek Solar		5,132		5,132	
Bly Solar		4,059		4,059	
Elbe Solar		5,022		5,022	
Pavant Solar		53,461		53,461	
Enterprise Solar		88,276		88,276	
TOTAL	1,893,965	367,669		367,669	1,893,965

*NOTE: does not include 2019 vintage RECs carried forward to 2020 compliance period