



2018-2019
Biennial Conservation Report
Washington

Final Submitted June 1, 2020

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Introduction

Pacific Power & Light Company, a division of PacifiCorp, (“PacifiCorp” or the “Company”) submits this 2018-2019 Biennial Conservation Report to the Washington Utilities and Transportation Commission (“Commission”) and the Energy Independence Act (I-937) Commerce Conversation Report to the Washington Department of Commerce (“Commerce”) in response to reporting requirements established as part of the Energy Independence Act. The report is consistent with chapter 19.285 Revised Code of Washington, section 70 which states:

(1) On or before June 1, 2012, and annually thereafter, each qualifying utility shall report to the department on its progress in the preceding year in meeting the targets established in RCS 19.285.40, including expected electricity savings from the biennial conservation target, expenditures on conservation, actual electricity savings results, the utility’s annual load for the prior two years, the amount of megawatt-hours needed to meet the annual renewable energy target, the amount of megawatt-hours of each type of eligible renewable resource acquired, the type and amount of renewable energy credits acquired, and the percent of its total annual retail revenue requirement invested in the incremental cost of eligible renewable resources and the cost of renewable energy credits.”

This report is also consistent with the guidelines set forth in the revised WAC 480-109-100 (3) and Condition (8)(e) in Docket UE-171092, Order 01, addressing reporting requirements.

As directed in Docket UE-100523 memorandum dated May 4, 2012, two separate filings will be submitted for “Conservation” and “Renewables”. This report is addressing the Conservation target and savings.

Consistent with the requirement to pursue all cost-effective, reliable and feasible conservation, the Company completed a comprehensive conservation potential assessment followed by economic resource screening and selection through the Company’s Integrated Resource Planning process. The resulting ten-year conservation forecast, with adjustments as appropriate to account for new information, and biennial target was filed with and approved by the Commission in Docket UE-171092.

Executive Summary

The Company has achieved its 2018-2019 Biennial Conservation Target as set forth in Docket UE-171092, PacifiCorp's Ten-Year Conservation Potential and 2018-2019 Biennial Conservation Target.

A summary of 2018-2019 electric conservation targets and savings results at generation, and expenditures are provided below.

	MWh at generation
Company Conservation Target	78,268
Company Achieved Conservation	80,604
Total Achieved Conservation	88,464
Percent of Target	103%
Excess Conservation Savings	2,336

Consistent with the conditions established by the Commission in Docket UE-171092 Order 01, Attachment A, the cost-effectiveness has been determined based on the Total Resource Cost (TRC) test incorporating the 10 percent conservation benefit and risk adder consistent with the Northwest Power and Conservation Council's approach. Using this test, the benefit to cost ratio for the Company's 2018-2019 Biennial Conservation achieved savings was 1.12.¹

Working in partnership with its customers, Commission staff, and demand side management advisory group members, the Company achieved these results while adhering to the conditions established by the Commission in Docket UE-171092. Appendix 1 of this report summarizes the Company's compliance.

Upon calculating the reported and verified electric savings totals and savings adjustments, the Company is projecting excess 2018-2019 electric savings of 2,336 MWh. Consistent with Order 02 in Docket 152072, the Company has 2,718 MWh of excess 2016-2017 electric savings available. Consistent with Order 03 in Docket UE-132047, the Company has 24,178 MWh of excess 2014-2015 electric savings available. The excess savings from 2014-2015 will no longer be available for application to a 2020-2021 potential shortfall.

¹The cost effectiveness result includes non-energy benefits for the Company Achieved Conservation savings. The Total Achieved Conservation savings, including NEEA, is 1.20 which takes the sum of 2018 and 2019 performance and accounts for changes in HER and NEEA savings to calculate the benefits and costs for cost effectiveness. The Low Income Weatherization program is not included in the portfolio cost effectiveness analysis per WAC 480-109-100(10)(b).

Energy Independence Act (I-937) Commerce Conservation Report

Energy Independence Act (I-937) Conservation Report 2018-2019

Utility	PacifiCorp	Summary of Achievement and Targets (MWh)	
Report Date	June 1, 2020		
Contact Name/Dept	Cory Scott/Customer Solutions	2018-2019	2020-2021
Phone	503-813-6011	Biennial	Biennial
Email	Cory.Scott@pacificorp.com	Potential 2018-2027	Potential 2020-2029
		394,473	509,495
		Target 2018-2019	Target 2020-2021
		83,484	101,899
		Achievement 2018-2019	
		88,464	
		Excess (Deficit)	
		4,980	

Achievement

Conservation by Sector	2018 Achievement		2019 Achievement	
	MWh	Utility Expenditures (\$)	MWh	Utility Expenditures (\$)
Residential	17,356	\$ 3,318,729	6,415	\$ 3,273,496
Commercial	25,983	\$ 4,512,840	18,220	\$ 3,605,930
Industrial	7,697	\$ 1,477,305	3,396	\$ 589,983
Agriculture	426	\$ 92,248	1,111	\$ 257,763
Distribution Efficiency				
Production Efficiency				
NEEA	3,785	\$ 859,487	4,075	\$ 878,492
Conservation expenditures NOT included in sector expenditures				
Evals, system support, EULR, education, outreach &		\$ 771,563		\$ 787,631
Total	55,247	\$11,032,171	33,217	\$9,393,295

Note: Expenditure amounts do not include any customer or other non-utility costs.

Utility	PacifiCorp
Biennial Period	2018-2019

Notes, including a brief description of the methodology used to establish the utility's ten-year potential and biennial target to capture cost-effective conservation:

Excess conservation from 2016-2017 is 2,718 MWh, none of which was applied to the 2018-2019 biennial results.

Company achieved conservation (excludes NEEA) of 80,604 MWh exceeds 78,268 MWh revised biennial target (or EIA penalty threshold) approved by WUTC and subject to penalty.

Total achieved conservation (includes NEEA) of 88,464 MWh exceeds 83,484 MWh target tracked by the Washington Department of Commerce (or the EIA target). See statute RCW19.285.070

The quantities submitted above include all areas of conservation effort and achievement, because the Commerce Conservation Report includes areas of conservation which are not included for target setting at the Washington Utilities and Transportation Commission (WUTC). The target listed in this report, 83,484 MWh aligns with biennial conservation target prior to the deduction of Northwest Energy Efficiency Alliance (NEEA) forecast; the process utilized by the WUTC to establish the biennial conservation target subject to penalty. On January 12, 2018, the Commission approved a target of 78,268 (74,293 MWh biennial conservation target + 3,975 MWh decoupling commitment) subject to penalty for the 2018-2019 biennium in Order 01 in Docket UE-171092 in accordance with WAC 480-109-120. The target does not include savings reported by NEEA.

Brief description of the methodology used to establish the utility's ten-year potential and biennial target to capture cost effective conservation: PacifiCorp relied on 1) its 2017 "Demand-Side Resource Potential Assessment for the 2017-2036" (February 2017), 2) economic screening of the conservation potential identified through the 2017 Integrated Resource Plan (IRP) development, and 3) other post IRP adjustments (all documented in Appendix 1 of the PacifiCorp's ten-year conservation potential and 2018-2019 biennial conservation target report) to establish its ten-year conservation forecast and biennial conservation target.

The manner by which the Company arrived at its 2018 -2019 biennial conservation target is explained on pages 14-23 of "PacifiCorp's 2018-2019 Biennial Conservation Plan for its Washington Service Area" filed in Docket UE-171092.

The Company's engagement with the Washington DSM Advisory Group during the development of the 2018-2019 target is outlined in the on pages 12-13 of "PacifiCorp's Biennial Conservation Plan for its Washington Service Area" filed in Docket UE-171092.

The commission accepted the company's forecast and target as meeting the requirements to consider all conservation resources that are cost-effective, reliable and feasible by approval of the Company's forecast and targets in Docket UE-171092 on January 12, 2018.

Information on Pacific Power's approved 2020 - 2021 target is available in Docket UE-190908.

Biennial Target Compared to Actual

Table 1

2018 Biennial Forecast Compared to Actual

Energy Efficiency Program (Tariff Schedule #)	Forecast 2018		Actual 2018	
	Estimated kWh/Yr Savings (at generator)	Estimated Systems Benefit Expenditures	kWh/Yr Savings (at generator)	Systems Benefits Charge Expenditures
Low Income Weatherization (114)	167,348	\$ 709,000	199,859	\$ 929,323
Home Energy Savings (118)	8,881,421	\$ 2,118,789	7,116,910	\$ 2,054,828
Home Energy Reports	9,541,290	\$ 226,390	10,766,128	\$ 334,578
Total Residential	18,590,059	\$ 3,054,179	18,082,898	\$ 3,318,729
wattSmart Business (140) - Agricultural	829,159	\$ 183,185	425,924	\$ 92,248
wattSmart Business (140) - Commercial	13,932,946	\$ 3,200,028	25,982,934	\$ 4,512,840
wattSmart Business (140) - Industrial	12,692,241	\$ 2,762,998	7,696,902	\$ 1,477,305
Total Business	27,454,346	\$ 6,146,211	34,105,760	\$ 6,082,393
Total Company Conservation Programs	46,044,405	\$ 9,200,390	52,188,658	\$ 9,401,121
Northwest Energy Efficiency Alliance (NEEA)	3,501,840	\$ 879,488	3,216,604	\$ 859,487
Total Company Conservation, including NEEA	49,546,245	\$ 10,079,878	55,405,262	\$ 10,260,608
Portfolio Evaluation		\$ 446,895		\$ 318,975
Portfolio Potential Study		\$ 140,540		\$ 102,029
Portfolio Support Summary		\$ 32,785		\$ 26,943
End Use Load Research		\$ 41,762		\$ 35,082
School Energy Education		\$ 60,000		\$ 63,679
Outreach and Communication		\$ 250,000		\$ 224,854
Total Portfolio-Level Expenses		\$ 971,982		\$ 771,563
Total System Benefits Charge Conservation	49,546,245	\$ 11,051,860	55,405,262	\$ 11,032,171

Table 2

2019 Biennial Forecast Compared to Actual

Energy Efficiency Program (Tariff Schedule #)	Forecast 2019		Actual 2019	
	Estimated kWh/Yr Savings (at generator)	Estimated Systems Benefit Expenditures	kWh/Yr Savings (at generator)	Systems Benefits Charge Expenditures
Low Income Weatherization (114)	167,348	\$ 1,051,000	183,052	\$ 530,233
Home Energy Savings (118)	7,590,377	\$ 2,515,615	6,315,778	\$ 2,509,871
Home Energy Reports	-	\$ 305,469	9,175,445	\$ 233,392
Total Residential	7,757,725	\$ 3,872,084	15,674,276	\$ 3,273,496
wattSmart Business (140) - Agricultural	829,159	\$ 190,890	1,110,515	\$ 257,763
wattSmart Business (140) - Commercial	17,439,204	\$ 3,906,480	18,220,253	\$ 3,605,930
wattSmart Business (140) - Industrial	10,925,695	\$ 2,367,660	3,395,781	\$ 589,983
Total Business	29,194,058	\$ 6,465,030	22,726,549	\$ 4,453,677
Total Company Conservation Programs	36,951,783	\$ 10,337,114	38,400,825	\$ 7,727,173
Northwest Energy Efficiency Alliance (NEEA)	3,615,747	\$ 861,752	4,075,438	\$ 878,492
Total Company Conservation, including NEEA	40,567,530	\$ 11,198,866	42,476,263	\$ 8,605,664
Portfolio Evaluation		\$ -		\$ 181,846
Portfolio Potential Study		\$ -		\$ 18,851
Portfolio Support Summary		\$ 573,284		\$ 259,277
End Use Load Research		\$ -		\$ 34,382
School Energy Education		\$ 60,000		\$ -
Outreach and Communication		\$ 250,000		\$ 293,275
Total Portfolio-Level Expenses		\$ 883,284		\$ 787,631
Total System Benefits Charge Expenditures	40,567,530	\$ 12,082,150	42,476,263	\$ 9,393,295

Table 3

2018-2019 Biennial Forecast Compared to Actual

Energy Efficiency Program (Tariff Schedule #)	Forecast 2018 & 2019		Actual 2018 & 2019	
	Estimated kWh/Yr Savings (at generator)	Estimated Systems Benefit Expenditures	kWh/Yr Savings (at generator)	Systems Benefits Charge Expenditures
Low Income Weatherization (114)	334,696	\$ 1,760,000	382,912	\$ 1,459,556
Home Energy Savings (118)	16,471,798	\$ 4,634,404	13,432,688	\$ 4,564,699
Home Energy Reports	9,541,290	\$ 531,859	19,941,574	\$ 567,970
Total Residential	26,347,784	\$ 6,926,263	33,757,174	\$ 6,592,225
wattSmart Business (140) - Agricultural	1,658,318	\$ 374,075	1,536,439	\$ 350,011
wattSmart Business (140) - Commercial	31,372,150	\$ 7,106,508	44,203,187	\$ 8,118,770
wattSmart Business (140) - Industrial	23,617,936	\$ 5,130,658	11,092,683	\$ 2,067,288
Total Business	56,648,404	\$ 12,611,241	56,832,309	\$ 10,536,069
Total Company Conservation Programs	82,996,188	\$ 19,537,504	90,589,483	\$ 17,128,294
Northwest Energy Efficiency Alliance (NEEA)	7,117,587	\$ 1,741,240	7,292,042	\$ 1,737,978
Total Company Conservation, including NEEA	90,113,775	\$ 21,278,744	97,881,525	\$ 18,866,273
Portfolio Evaluation		\$ 446,895		\$ 500,822
Portfolio Potential Study		\$ 140,540		\$ 120,880
Portfolio Support Summary		\$ 606,069		\$ 286,220
End Use Load Research		\$ 41,762		\$ 69,464
School Energy Education		\$ 120,000		\$ 63,679
Outreach and Communication		\$ 500,000		\$ 518,129
Total Portfolio-Level Expenses		\$ 1,855,266		\$ 1,559,194
Total System Benefits Charge Conservation	90,113,775	\$ 23,134,010	97,881,525	\$ 20,425,466

Savings Reporting Adjustments

In the Washington Conservation Working Group, parties agreed “to the extent practicable, there should be consistency between the use of prescriptive unit energy savings estimates in the establishment of the biennial target and the reliance on those same savings estimates in the utility’s demonstration that it met the biennial target.”² Consistent with this approach, the results provided in the Company’s 2018 and 2019 Annual Reports on Conservation Acquisition have been adjusted, incorporating the key planning assumptions used in establishing the 2018-2019 target. The adjustments are discussed in detail in the following sections.

Home Energy Reports

Two adjustments were made to savings for the Home Energy Reports program. The first adjustment incorporates impact evaluation results for both years. The second adjustment accounts for the two year measure life and calculates the incremental (second year that exceed first year) savings.

A third party impact evaluation has recently been completed on Washington’s Home Energy Reports program for program years 2018-2019. Results from the evaluation provided verifiable energy savings that were achieved by customers who were participants in Home Energy Reports program for the Legacy, Expansion and Refill waves.

As a result, the Company is adjusting the reported savings from this program to reflect the verified net savings from the evaluation. The Company is increasing savings reported in 2018 and 2019 due to realization rates of 95% and 112%, respectively.

During this biennial period, the Company used a two year measure life for this program³. This means the 2019 reported savings needs to be adjusted to reflect only the savings that are incremental, beyond those reported in 2018. Therefore, the savings reported in the Biennial for 2019 includes the incremental savings. Savings in 2019 were calculated by subtracting 2018 verified net savings. In addition, 2019 received an increase of 780,397 kWh to account for savings resulting from the verified net realization rate of 112%. The impact on 2018 and 2019 savings adjustments is provided in Table 4 and Table 5.

² Washington Conservation Working Group Consensus Document as of June 30, 2011.

³ Two year life was also utilized for 2016-2017 period.

Table 4 documents the application of the first adjustment, applying realization results to the 2018 savings. Applying this adjustment generates an overall decrease in reported savings for 2018 (year one).

Table 4⁴
2018 Home Energy Reports Adjustment Calculations

Home Energy Report:	<u>2018 kWh</u>	<u>Source/Notes</u>
	10,766,128	Claimed Gross kWh at Gen - Table 1
	9,373,000	Evaluated net savings at site before uplift - WA Home Energy Report Evaluation
	(218,000)	Adjusted savings @ site from other 2018 energy efficiency programs as identified in 2018-2019 Home Energy Reports program evaluation
	9,154,000	Verified net savings at site
	10,039,192	Verified net savings at generation
	95%	Evaluated net realization rate
	(726,937)	Savings adjustment @ Gen for Home Energy Reports 2018 (2018 Verified net savings - 2018 Claimed Savings)

Table 5 documents the application of the evaluation adjustment to 2019 results.

Table 5
2019 Home Energy Reports Adjustment Calculations

Home Energy Report:	<u>2019 kWh</u>	<u>Source/Notes</u>
	9,175,445	Claimed Gross kWh at Gen - Table 2
	9,364,000	Evaluated net savings at site before uplift - WA Home Energy Report Evaluation
	(286,000)	Adjusted savings @ site from other 2019 energy efficiency programs as identified in 2018-2019 Home Energy Reports program evaluation
	9,078,000	Verified net savings at site
	9,955,843	Verified net savings at generation
	112%	Evaluated net realization rate
	780,397	Incremental 2019 Savings Adjustment Savings adjustment for incremental Home Energy Reports 2019 (2019 Verified net savings - 2019 Claimed Savings)

Northwest Energy Efficiency Alliance (“NEEA”)

NEEA estimated savings in the Company’s Washington service territory resulting from its initiatives based on the same baseline assumptions used in the development of the

⁴ See Tables 9 and 13 from Home Energy Reports 2018-2019 Evaluation for realization rates and uplift summary.

Company’s 2016-2017 biennial conservation target⁵. NEEA’s savings are relative to the Northwest Power and Conservation Council’s 7th Plan baselines.

Savings reported from NEEA initiatives in the Company’s 2018 annual report was based on preliminary estimates provided by NEEA at the time the annual report was created. The 2019 NEEA savings were firmed up in time for the annual report. The savings calculation adjustment is provided in Table 6.

Table 6
Revised NEEA 2018 and 2019 Savings

NEEA Savings Pacific Power Washington

Program Year	Annual saving reported kWh (at Site)	Revised savings kWh (at Site)	Annual saving reported kWh (at Generator)	Revised savings kWh (at Generator)	Net kWh Adjustment (at Generator)
2018	2,935,149	3,453,949	3,216,604	3,785,099	568,495
2019	3,718,676	3,718,676	4,075,438	4,075,438	-
Total Adj					568,495

Adjustment Summary

The net effect of all adjustments applied to the 2018-2019 biennial savings is a decrease of 9,417 MWh. These adjustments include the effects of line losses.

Table 7 provides a summary of program adjustments in MWh and reporting year.

Table 7
Adjustments by Type and Year (MWh at generation)

Adjustment (MWh)	2018	2019	Total
Home Energy Reports	(727)	(9,259)	(9,986)
NEEA	568		568
Total	(158)	(9,259)	(9,417)

⁵ See memo from NEEA, Appendix 3 of this report.

Supporting Documents for Conservation

Provided below are links to supporting documents relied upon in support of the Company's planning assumptions and associated reporting of actual savings results for the Biennial Conservation Target for 2018 and 2019.

1. Demand-Side Resource Potential Assessment for the 2017-2036 (February 2017), Volume 1 through Volume 5.
<https://www.pacificorp.com/environment/demand-side-management.html>
2. 2018 and 2019 Annual Report(s) on Conservation Acquisition, filed in Docket UE-171092.
<https://www.pacificorp.com/environment/demand-side-management.html>
3. PacifiCorp's 2018-2019 Biennial Conservation Plan for its Washington Service Area filed in Docket UE-171092.
<https://www.utc.wa.gov/docs/Pages/DocketLookup.aspx?FilingID=171092>
4. Demand-side Management Business Plan(s) including 2019 Annual Conservation Plan filed in Docket UE-171092.
<https://www.utc.wa.gov/docs/Pages/DocketLookup.aspx?FilingID=171092>
5. Independent third-party process and impact evaluations completed during the 2018-2019 biennium, validating program results, assessing ex-post program savings and providing information used to inform future conservation potential assessments, conservation forecasts and the establishment of targets.
<https://www.pacificorp.com/environment/demand-side-management.html>

Appendices

Appendix 1 – 2018-2019 Plan Condition Requirements and Compliance

Appendix 2 – Washington Verification of Savings Review

Appendix 3 – NEEA Memorandum of 2018-2019 Final Savings