



Avista Utilities

2014-2015 Biennial Conservation Report

(BCR)

Docket No. UE-132045

June 1, 2016

Avista 2014-2015 Biennial Conservation Report

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I. Introduction

In compliance with RCW 19.285 and WAC 480-109-120 (4), Avista Corporation, respectfully submits its “2014-2015 Biennial Conservation Report (BCR)” to the Washington Utilities and Transportation Commission (UTC). This report is intended to comply with the requirements outlined below:

WAC 480-109-120 (4) **Biennial conservation report (BCR).**

- (a) On or before June 1st of each even-numbered year, a utility must file with the commission, in the same docket as its current biennial conservation plan, a biennial conservation report regarding its progress in meeting its conservation target during the preceding two years.
- (b) The biennial conservation report must include:
 - (i) The biennial conservation target;
 - (ii) Planned and claimed electricity savings from conservation;
 - (iii) Budgeted and actual expenditures made to acquire conservation;
 - (iv) The portfolio-level cost-effectiveness of the actual electricity savings from conservation;
 - (v) An independent third-party evaluation of portfolio-level biennial conservation savings achievement;
 - (vi) A summary of the steps taken to adaptively manage conservation programs throughout the preceding two years; and
 - (vii) Any other information needed to justify the conservation savings achievement.
- (c) A utility must provide a summary of the biennial conservation report to its customers by bill insert or other suitable method within ninety days of the commission's final action on the report.
- (d) A utility may file the annual conservation report and the biennial conservation report together as one report, provided that the report includes all of the information required in subsections (3) and (4) of this section and states that it serves as both the annual conservation report and the biennial conservation report.

The Company’s 2015 Annual Conservation Report is included as an Appendix to this Biennial Conservation Report.

II. Executive Summary

The Company is pleased to report that it has surpassed its 2014-2015 Biennial Conservation Target. In its Order, the Commission approved Avista’s Ten-Year Potential/Biennial Conservation

target of 404,736 mega-watt hours and 2014-2015 Biennial Conservation Target of 64,956 MWh.¹ In Docket No. UE-140188, the Company agreed to increase its electric conservation achievement by 5 percent over its biennial target which was an increase of 3,248 MWh. Thus, Avista committed to achieving 68,204 MWh of conservation in the 2014-2015 biennium. Avista exceeded its target by 104%, achieving 70,959 MWh from demand-side energy efficiency. Under the Total Resource Cost (TRC) cost-effectiveness test, the electric efficiency benefits exceeded the costs by a ratio of 1.48.

These target figures include local DSM acquisition, upgrades at generation facilities and distribution feeder efficiency improves but does not include any regional savings associated with NEEA market transformation efforts during the biennium².

Table 1: 2014-2015 Electric Conservation Results

	Savings (MWh)	Savings (aMW)	Expenditures
Evaluated Electric Conservation	70,959	8.10	\$23,076,191
Target Electric Conservation	68,204	7.79	\$22,107,759
Percent	104.0%	104.0%	104.4%

Table 2: 2014-2015 Evaluated vs. Planned Electric Conservation

	Savings (MWh)	Savings (aMW)
Evaluated Electric Conservation	70,959	8.10
Planned Electric Conservation	72,546	8.28
Percent	97.8%	97.8%

Table 3: 2014-2015 Washington Electric Energy Savings (Verified Gross Savings)

Segment	kWh	Conversions	I-937 kWh Total
Residential	41,823,365	-7,176,499	34,646,866
Low Income	1,488,180	-1,130,217	357,963
Nonresidential	35,330,436	-1,138,519	34,191,917
Generation	249,000		249,000
Distribution	1,513,000		1,513,000
Total	80,403,981	-9,445,235	70,958,746

¹ Docket No. UE-132045

² The NEEA savings for Avista's Washington portion of the regional savings are 3.47 aMW or 30,397 MWh.

III. Energy Independence Act (I-937) Commerce Conservation Report

Energy Independence Act (I-937) **Conservation Report 2016**

Utility	Avista Corp.
Report Date	
Contact Name/Dept	Mark Baker, Demand Side Management
Phone	(509) 495-4864
Email	mark.baker@avistacorp.com

Summary of Achievement and Targets (MWh)		
	2014-2015	2016-2017
	Biennial	Biennial
Target	79,334	82,477
Achievement	101,356	
Surplus (Deficit)	22,022	

Planning			
2014 - 2015 Planning		2016 - 2017 Planning	
2014-2023 Ten Year Potential (MWh)	2014 - 2015 Target (MWh)	2016-2025 Ten Year Potential (MWh)	2016 - 2017 Target (MWh)
394,200	79,334	383,063	82,477

Achievement

Conservation by Sector	2014 Achievement		2015 Achievement	
	MWh	Utility Expenditures (\$)	MWh	Utility Expenditures (\$)
Residential		\$4,115,619	35,005	\$4,468,709
Commercial		\$3,781,678	34,192	\$4,162,940
Industrial				
Agriculture				
Distribution Efficiency			1,513	
Production Efficiency			249	
NEEA		\$1,445,817	30,397	\$1,314,999
Conservation expenditures NOT included in sector expenditures				
General		\$1,711,914		\$2,074,515
Total	-	\$11,055,028	101,356	\$12,021,163

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

Utility	Avista Corp.
Compliance Year	2016

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:

The Company's energy efficiency acquisition targets for the 2014-2015 Biennium were based upon a Conservation Potential Assessment (CPA) completed as part of Avista's 2013 Electric Integrated Resource Plan (IRP) by a third-party consultant applying methodologies consistent with the Northwest Power and Conservation Council's (NWPCC) Sixth Power Plan. Avista's 2014-2015 targets were approved in Order No. 01, Docket No. UE-132045, by the Washington Utilities and Transportation Commission (UTC) on December 19, 2013. <http://www.utc.wa.gov/docs/Pages/DocketLookup.aspx?FilingID=132045>
General rate case settlement in 2014 included a 5% increase in the 2014-15 Biennial Target for local energy savings. 64,956 MWh original target + 3,248 MWh (5% increase) = 68,204 MWh (local)
68,204 MWh (local) + 11,130 (NEEA) = 79,334 new 2014-15 Biennial Target

The Company's energy efficiency acquisition targets for the 2016-2017 Biennium were based upon a Conservation Potential Assessment (CPA) completed as part of Avista's 2015 Electric Integrated Resource Plan (IRP) by a third-party consultant applying methodologies consistent with the Northwest Power and Conservation Council's (NWPCC) Sixth Power Plan. Avista's 2016-2017 targets were approved in Order No. 01, Docket No. UE-152076, by the Washington Utilities and Transportation Commission (UTC) on January 28, 2016. <http://www.utc.wa.gov/docs/Pages/DocketLookup.aspx?FilingID=152076>

Energy savings were evaluated on a 2014-2015 biennial basis by a third party and therefore, are being reported on a biennial basis in 2015, as well as NEEA being reported on a biennial basis. Savings numbers are for I-937 and do not include fuel switching of 9,445 MWh.

Commercial and Industrial customers are not tracked separately and are therefore listed under "Commercial."

Expenditures for distribution and production savings are part of the capital budget and not known specifically.

General expenditures are not applied to a specific sector.

Avista's evaluation, measurement and verification (EM&V) was performed by a contracted third party to calculate the verified energy savings in accordance with the Commission's Order. The Company's 2014 DSM Annual Report and 2015 DSM Annual Report (provided under separate covers) provide more data regarding Avista's 2014 and 2015 programs and results. Electric EM&V cost \$789,173 in 2014 and \$483,951 in 2015.

IV. Biennial Portfolio Electric Cost-Effectiveness

Table 4: 2014 WA Electric Total Resource Cost (TRC)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$32,358,969	\$379,484	\$32,738,454
Natural Gas Avoided Costs	(\$2,510,066)	(\$38,142)	(\$2,548,208)
Non-Energy Benefits	\$121,690	\$589,431	\$711,121
TRC Benefits	\$29,970,594	\$930,773	\$30,901,367
Non-Incentive Utility Costs	\$4,062,861	\$230,638	\$4,293,499
Customer Costs	\$15,574,633	\$944,880	\$16,519,513
TRC Costs	\$19,637,494	\$1,175,518	\$20,813,012
TRC Ratio	1.53	0.79	1.48
Residual TRC Benefits	\$10,333,100	(\$244,745)	\$10,088,355

Table 5: 2015 WA Electric Total Resource Cost (TRC)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$37,490,427	\$783,668	\$38,274,095
Natural Gas Avoided Costs	(\$563,864)	(\$42,783)	(\$606,647)
Non-Energy Benefits	\$423,806	\$313,764	\$737,570
TRC Benefits	\$37,350,369	\$1,054,650	\$38,405,019
Non-Incentive Utility Costs	\$3,493,869	\$250,422	\$3,744,291
Customer Costs	\$15,555,605	\$909,461	\$16,465,066
TRC Costs	\$19,049,475	\$1,159,883	\$20,209,357
TRC Ratio	1.96	0.91	1.90
Residual TRC Benefits	\$18,300,895	(\$105,233)	\$18,195,662

Table 6: 2014-2015 Biennial WA Electric Total Resource Cost (TRC)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$69,849,396	\$1,163,152	\$71,012,549
Natural Gas Avoided Costs	(\$3,073,930)	(\$80,925)	(\$3,154,855)
Non-Energy Benefits	\$545,496	\$903,195	\$1,448,691
TRC Benefits	\$67,320,963	\$1,985,423	\$69,306,386
Non-Incentive Utility Costs	\$7,556,730	\$481,060	\$8,037,790
Customer Costs	\$31,130,238	\$1,854,341	\$32,984,579
TRC Costs	\$38,686,969	\$2,335,401	\$41,022,369
TRC Ratio	1.74	0.85	1.69
Residual TRC Benefits	\$28,633,995	(\$349,978)	\$28,284,017

V. Summary of Adaptive Management during 2014 – 2015

The 2014 – 2015 Biennium has been a period of transition for the Avista DSM group, a department reorganization occurred early into the biennium. This restructure brought the department under one leader, responsible for all DSM operations, including program management, implementation, reporting, planning and evaluation.

Avista filed and received approval to revise its Schedule 90³ to improve portfolio performance starting in 2014. The revisions increased the maximum incentive cap for measures from 50% of project incremental cost to 70%, as well as analyzing long-lived lighting measures (i.e. LEDs) in the same manner of other energy efficiency measures.

During the biennium, Avista piloted a number of programs:

- The Company ran a pilot smart thermostat program and the results from the impact evaluation are positive and the Company will look at incorporating this measure into its regular residential portfolio;
- The Air Guardian pilot, which is a direct install of a timing valve for compressed air system was rolled out in late 2015 and is still in the beginning stages of the pilot;
- The Company entered into an agreement to pilot an industrial strategic energy management program with Cascade Engineering, however the programmatic costs as well as the

³ The primary DSM electric tariff governing Avista’s DSM programs.

potential savings were not promising so the program would most likely not be cost-effective long term and was not continued into 2016; and

- The Company performed a third test of the FleetHeat pilot, controlling block heaters on fleet vehicles, with findings in April that suggest over 2000 kWh per fleet vehicle treated. We will prepare to offer an evaluated prescriptive program in 2017.

With the passing of Washington State Initiative-502, sales of recreational marijuana became legal beginning July, 8th 2014. This increased the growth of marijuana producers in Avista's Washington service territory. These producers traditionally have large inefficient lighting loads, as well as ventilation systems. Avista DSM engineers and program managers have engaged with these producers to test more efficient lighting options, as well as other efficiencies in their processes.

Small business customers are difficult to reach and often do not own the spaces for which they operate. To overcome these difficulties Avista sent out a request for proposal (RFP) in 2014 for a small business audit and direct install program. SBW was awarded the contractor, and in 2015 they began going door to door to Avista small business customers providing building, HVAC and lighting audits, as well as doing direct installation of LED bulbs, faucet aerators, pre-rinse sprayers, smart power strips, shower heads, vending and cooling miser controls. This high touch program has been quite effective in delivering cost-effective energy savings with a high level of customer satisfaction.

While not comprehensive, this is certainly a summary of the adaptive management Avista employed during the past biennium to deliver cost effective DSM programs.

VI. COMPLIANCE

In compliance with Commission Order No. 04 in Docket No. UE-151148, specifically requesting a progress update on the administration of its DSM program, addressing the following:

(1) Avista's efforts to improve the management of its DSM program since January 2016,

Response:

The Company's DSM team has achieved, and actually exceeded its 2014-2015 energy savings targets, we did that by continuously innovating, adapting, and expanding program offerings. The Company remains committed to its approach to energy efficiency, based on two key principles. The first is to pursue all cost-effective kilowatt hours and therms by offering financial incentives for most energy saving measures with a simple financial payback of over one year. The second key principle is to use the most effective "mechanism" to deliver energy efficiency services to customers.

Avista continues to actively manage and monitor the progress of its programs that are delivered to customers with an emphasis on continuous improvements. We hold weekly meetings with Program Managers and Management to serve as an opportunity for status reports on project progress, results, and current issues. Avista's DSM management continues to focus on the employment of utility best practices related to DSM program implementation and oversight.

(2) Avista's attempts to improve its systems for monitoring DSM spending levels and conservation acquisition since January 2016, and

Avista is finalizing contract negotiations with Nexant to purchase and integrate their iEnergy DSM Central enterprise software as the single system of record. The Company believes that a single system of record will improve its reporting ability, as well as, increase transparency by providing externals remote access. The Company has been utilizing past business mapping exercises, as well as coordinating with other regional utilities on potential program templates which may help speed the software integration.

(3) an update on the membership, attendance, and activities of the Company's Advisory Group since January 2016.

Avista has had continuous energy efficiency stakeholder involvement since 1992. The Company's program offerings, planning, evaluation findings, underlying cost-effectiveness tests and results are reviewed during stakeholder meetings. Currently, the Company holds in-person meetings at least twice per year⁴, hosts several webinars annually, provides a detailed analysis of the results of DSM operations on a monthly and annual basis, identifies large projects and provides a quarterly newsletter summarizing recent DSM activities. Since January 2016, Avista has held 2 meetings with the Advisory Group, by way of conference calls, emails and webinars as well as in-person meetings held. The spring meeting, which was on the heels of the Spring NEEA Energy Exchange Conference in Coeur d'Alene, ID, was one of the most attended meetings in several years, with 12 external members in-person and 2 additional externals calling in. In addition, the Company had numerous phone discussions with core members⁵ of the Advisory Group on topics related to the Biennial Conservation Report, current and future evaluations. Avista's DSM Advisory Group consists of interested regulatory, consumer and energy industry parties⁶.

Attached as Appendix (E) is a copy of the agenda and slide presentation given at the Advisory Group meeting in April, 2016. This presentation includes slides related to DSM advisory roles and responsibilities.

The Company appreciates the long-standing collaborative working relationship with the Commission, its Staff and other stakeholders.

⁴ Spring meeting was held on April 28 and 29, 2016 in Coeur d'Alene, Idaho, and the fall meeting will be held in Spokane in September 2016.

⁵ Members of the Washington and Idaho Commission Staff and Public Counsel.

⁶ The Advisory Group is Avista's non-binding oversight and advisory group for energy efficiency. The Advisory group is currently composed of the UTC staff, the IPUC Staff, OPUC Staff, the Public Counsel Unit of the Washington Office of Attorney General, Northwest Energy Coalition, SNAP, The Energy Project, Northwest Energy Efficiency Alliance, Northwest Power and Conservation Council, Northwest Energy Efficiency Council, Idaho Conservation League, Putnam Price and the Opportunity Council.

VII. CONCLUSION

The Company is pleased that it has surpassed its 2014-2015 Biennial Conservation Target by 104%, achieving 70,959 MWh from demand-side energy efficiency. Under the Total Resource Cost (TRC) cost-effectiveness test, the electric efficiency benefits exceeded the costs by a ratio of 1.48.