**COMMISSION STAFF COMMENTS REGARDING**

**PACIFIC POWER & LIGHT COMPANY’S**

**2012-2013 BIENNIAL CONSERVATION REPORT**

**JUNE 30, 2014**

**DOCKET UE-111880**

**Background**

On May 30, 2014, Pacific Power & Light Company (PacifiCorp or company) filed its 2012-2013 Biennial Conservation Report (BCR) with the Washington Utilities and Transportation Commission (Commission), as required by Order 01 in this docket.[[1]](#footnote-2) The company has agreed to file an amended report to adjust its reported savings based on a review of its home insulation measures and address minor issues raised by staff and other stakeholders.

Throughout the biennium, staff met regularly with PacifiCorp’s Washington Demand-Side Management (DSM) Advisory Group. This allowed staff to conduct an ongoing review of the company’s progress toward meeting its biennial target and review proposed program changes.

Staff’s review of PacifiCorp’s BCR has focused on evaluating whether the company met the reporting requirements outlined in RCW 19.285.070 and WAC 480-109-040 and whether the company correctly reported its savings for the biennium.

In these comments, staff will summarize PacifiCorp’s report, highlight key pieces of information, and identify lingering issues. Staff will also discuss recent and anticipated changes in the rules and policies affecting energy conservation. After reviewing PacifiCorp’s amended report and the comments filed by other parties in this matter, staff will make a final recommendation on whether the Commission should issue an order finding that PacifiCorp has met its biennial conservation target at the July 25, 2014, recessed open meeting.

**PacifiCorp’s Biennial Conservation Report**

In Order 01 of this docket, the Commission approved a 2012-2013 biennial conservation target range of 76,291 to 79,322 megawatt-hours (MWh) for PacifiCorp. The company reports that it exceeded the top end of the range by 41 percent, achieving 111,932 MWh. The company spent about $19.5 million, which is about seven percent less than the $20.9 million budget the Commission approved. A summary of PacifiCorp’s reported savings and expenses is in Table 1:

**Table 1: Summary of PacifiCorp’s 2012-2013 Conservation Achievements**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Target** | **Actual** | **Percent of target** |
| **Savings (MWh)** | 79,322 | 111,853 | 141% |
| **Savings (average MW)** | 9.055 | 12.769 |
| **Expenditures** | $20,892,766 | $19,461,529 | 93% |

Using the Northwest Power and Conservation Council’s cost-effectiveness test, PacifiCorp reported a portfolio-wide cost-effectiveness ratio of 2.3.

PacifiCorp’s significant overachievement of its target was largely driven by its commercial and industrial customers. In addition to higher-than-expected participation from customers in these sectors, the company also saw a number of larger projects completed ahead of schedule. As a result, PacifiCorp recorded more than 17,000 MWh (47 percent) of additional savings from these sectors than what it had projected when setting its biennial target.

Another significant driver in PacifiCorp’s overachievement was its participation in the Northwest Energy Efficiency Alliance (NEEA), which provided the company with about 12,000 MWh of savings above what the company had expected. PacifiCorp’s share of NEEA savings was 70 percent above what the company had expected when setting its target.

The final significant factor in the overachievement was the addition of the Home Energy Reports program, in which PacifiCorp partners with Opower to provide about 11,500 of its residential customers with bimonthly energy usage reports designed to encourage behavioral changes that reduce a household’s electricity consumption. This program was added in late 2012, so it was not reflected in the target-setting process, but contributed more than 8,000 MWh of savings over the biennium. Based on the results of the 18-month initial pilot program, the company plans to expand this service during the 2014-2015 biennium to include up to 35,000 additional residential customers.

**Discussion**

Generally, staff is pleased with the quality and detail of PacifiCorp’s BCR. The information was clearly and concisely presented, and the need for additional information was minimal. Staff’s comments will focus on three areas: the third-party review, PacifiCorp’s line loss assumptions, and pilot programs.

*Third party reviewer*

PacifiCorp contracted with SBW Consulting, Inc. (SBW) to review the company’s conservation programs and verify its claimed savings. DNV GL assisted as a subcontractor. Generally, SBW found that PacifiCorp has employed solid practices in tracking and measuring the achievements of its conservation programs. SBW identified a handful of minor process issues, but stated that the company’s transition to a new, web-based system for tracking its conservation programs will likely address most of them. Staff agrees with SBW’s recommendation that once the web-based platform is fully operational, PacifiCorp should include a thorough review of the software’s functionality in a future independent conservation program review.[[2]](#footnote-3)

One of the review’s findings was that PacifiCorp used incorrect unit energy savings values when calculating its savings from its attic and floor insulation measures. SBW concluded that the error was an isolated event, and recommended that PacifiCorp reduce its reported savings by 250 kilowatt-hours based on the finding.

In addition to accepting the recommendation, PacifiCorp also engaged in a proactive review with the third-party administrator of its insulation program to determine whether any additional adjustments were needed. The review identified another 2 MWh of erroneously claimed savings that were removed before the company filed its BCR. After filing the BCR, the company identified an additional 8 MWh of savings that were mistakenly claimed. PacifiCorp plans to file an amended report in the first week of July 2014 that will remove the 8 MWh. Staff appreciates PacifiCorp’s proactive approach to reviewing and adjusting its claimed savings.

Staff agrees with SBW’s recommendation that future program reviewers be provided more information about the cost-effectiveness calculations that PacifiCorp obtains from third parties.[[3]](#footnote-4) While the details of these calculations may be considered out of scope, staff believes that a third-party reviewer can only conduct a comprehensive program review if it understands, at least at a high level, the calculations behind the metrics of the program that it is being asked to review.

Finally, staff notes that SBW did not do any onsite project evaluations during its review. Staff believes that onsite evaluations are an important component of program reviews, as evidenced by SBW’s concern that site evaluations done by other parties lacked detail about data collection and analysis methods.[[4]](#footnote-5) Future program reviews should involve onsite project evaluations.

*Line losses*

PacifiCorp grosses up the conservation it measures at the end user by a line loss factor to represent not only the energy that a customer avoided using, but the energy that would have been lost in the transmission and distribution process had that energy been generated and consumed.

While this is a standard practice, staff noted during its review of the BCR that PacifiCorp’s line loss values appeared to be high. Through a data request, the company stated that it uses the following line loss values:

* 9.67 percent for residential and agricultural customers,
* 9.53 percent for commercial customers, and
* 8.16 percent for industrial customers.

These values are somewhat higher than those used by Puget Sound Energy (PSE), which assumes line losses of 8.02 percent for residential customers and 6.55 percent for commercial and industrial customers.[[5]](#footnote-6) Avista Corporation (Avista) plans and measures its conservation achievements at the end user; the company does not gross up its figures to report savings at generation. Avista does, however, assume a line loss rate of 6 percent in its distribution planning.

Given that PacifiCorp transmits a large portion of the energy it provides to Washington customers over great distances, staff was not surprised to see a higher line loss percentage for PacifiCorp, but did not have readily available documentation for the percentages being used. At staff’s request, the company provided documentation for its line loss assumptions.

After reviewing the supporting documentation, which is a line loss study prepared by a consultant in 2011, staff does not have any objection to PacifiCorp’s line loss assumptions. Staff recognizes that opportunities for reducing the company’s line loss rates are limited, given the characteristics of its distribution system and the fact that the long-distance transmission lines it uses are mostly owned by third parties. However, staff will work with the company and the DSM Advisory Group during the current biennium to identify potential opportunities for reducing line losses on the company’s Washington system.

*Pilot and Education Budget*

In Order 01 of this docket, the Commission authorized PacifiCorp to spend up to 10 percent of its conservation program budget on educational and pilot programs “whose savings impact has not yet been measured.”[[6]](#footnote-7)

As noted in its previous comments on PacifiCorp’s conservation filings, staff remains concerned that the company is not taking advantage of this policy,[[7]](#footnote-8) which is designed to encourage innovation and help new efficiency technologies enter the market. PacifiCorp engaged in two programs in the 2012-2013 biennium that fell into this category, Home Energy Reports and Energy Education in Schools, that accounted for $568,000 (about 3 percent) of the company’s budget.

Now that PacifiCorp has completed an evaluation to verify the savings from its Home Energy Reports Program, Energy Education in Schools is the company’s only program that falls into this category, and it only accounts for 0.6 percent of the company’s 2014-2015 biennial budget.[[8]](#footnote-9) Staff encourages PacifiCorp to work with the DSM Advisory Group to identify new technologies and programs that could support the Commission’s policy.

**Conservation policy updates**

Staff has been working to resolve a number of general issues that have been identified during the first three biennial cycles. Many of these issues are being addressed through an open rulemaking proceeding and other issues have been addressed through Commission orders or informal collaborations between staff, the utilities, and external stakeholders. This section will briefly summarize these processes and their impact on this and future conservation filings.

*Energy Independence Act Rulemaking*

The Commission has opened a rulemaking procedure in Docket UE-131723 to update WAC 480-109, the Commission’s rule implementing the Energy Independence Act (EIA). The proposed rule may address several issues raised by various parties since the biennial conservation cycle began in 2010.

Informal draft rule language was made available to parties on April 9, 2014, and discussed at the Commission’s workshop with stakeholders on May 15, 2014. Staff is reviewing the comments received on the informal draft rule. The proposed rule will be filed later in 2014, and will be subject to additional comment and revision before being finalized. Following is a brief summary of the key conservation issues that staff expects will be addressed in the proposed rule:

* **Pursue all.** RCW 19.285.040(1) requires utilities to “pursue all available conservation that is cost-effective, reliable and feasible.” Staff’s comments on the three regulated utilities’ 2010-2011 biennial conservation reports identified a general process by which staff would interpret this broad language when evaluating whether a utility met the requirement.[[9]](#footnote-10) The informal draft rule defined the term “pursue all” and further expounded on the process that staff has identified. Following the Commission’s rulemaking workshop on May 15, 2014, staff has been working with stakeholders to resolve concerns around this language.
* **Conditions lists.** WAC 480-109-010(4)(c) allows the Commission to approve a utility’s 10-year conservation potential and two-year conservation target subject to conditions. In the three planning cycles that have occurred since the EIA’s conservation requirements went into effect, the Commission has crafted a number of standard conditions. The informal draft rule incorporated many conditions which were generally applicable to all three companies and widely accepted by the parties involved. Examples of this include the interim reports a utility is required to file and the role of conservation advisory groups.
* **Legislative changes.** The rule will also incorporate recent legislative changes that will affect future conservation filings. Chief among these changes is a law passed in the 2014 session that will allow utilities that exceed their target in a given biennium to “bank” the overage and apply it toward meeting up to 25 percent of the targets in the two succeeding biennia.

The full text of the informal draft rule is available in Docket UE-131723.[[10]](#footnote-11)

*NEEA*

In its memo on the utilities’ 2010-2011 biennial conservation plans,[[11]](#footnote-12) staff noted that the three utilities took different approaches in how they claimed savings from NEEA and that multiple stakeholders felt that a common approach was warranted. The Commission agreed and ordered the utilities to craft a uniform approach for treatment of NEEA savings.[[12]](#footnote-13)

In response, the utilities proposed to remove NEEA savings from the target-setting process.[[13]](#footnote-14) Utilities would continue to fund NEEA and report the amount of savings they received from doing so, but would not reflect those savings when setting their target or apply them toward meeting their target. The Commission accepted this approach and allowed the utilities to begin using it in the 2014-2015 biennium.

*UES values/baselines*

Another issue that staff identified in its memo on the utilities’ 2010-2011 biennial conservation reports related to how frequently utilities update the assumed savings values for their conservation measures. The Commission has directed the utilities to use the unit energy savings (UES) values that the Council’s Regional Technical Forum (RTF) calculates for each measure, where they exist and are appropriate.[[14]](#footnote-15) However, the utilities vary in how frequently they update their assumptions to reflect current RTF practice. PacifiCorp and Avista update every other year when preparing their next biennial target; this allows the utilities to use the same value when setting their target and measuring whether they met it. PSE voluntarily updates UES values every year.

Staff recognizes that PSE’s approach may increase a company’s risk of not meeting its target. In an effort to quantify this risk, staff has arranged for PacifiCorp and Avista to report at the end of the 2014-2015 biennium the difference between using the same UES values for the entire biennium and updating them annually. Staff may use this information to formulate a recommendation on how companies should treat UES values in the future.

*Opower*

Staff comments on the biennial conservation plans filed for the 2014-15 biennium identified inconsistencies in how the companies measure savings from the home energy reports programs they run through Opower.[[15]](#footnote-16) All three companies have now contracted with Opower for the service, but each measures savings differently.

The main difference in approaches is in the measure life – how long the behavioral changes created by the reports are assumed to last before residents return to their old habits and utilities need to “repurchase” the savings with additional reports. PSE and Avista use two-year measure lives, which means that the reports in the first year create savings that last into the second year, so only a fraction of the second-year savings are treated as new savings for the program. PacifiCorp, on the other hand, assumes a one-year measure life, which means that the company assumes that all the savings in a given year are the result of that year’s reports alone. The practical impact of these differences is that on a per-household basis, PacifiCorp claims a much higher level of savings from its Home Energy Reports program than Avista and PSE.

Staff stated in the comments on the 2014-15 biennial conservation plans that it would work with the utilities during the biennium to devise a “reasonable and consistent approach.”[[16]](#footnote-17) Staff met with the utilities, external stakeholders, and a representative from Opower on May 22, 2014, to discuss this matter. The meeting provided valuable insight into current industry practice and the benefits and drawbacks of different approaches to measuring savings from behavioral programs. Staff continues to explore the matter.

**Conclusion**

Staff will review the comments of other stakeholders and provide a recommendation as to whether the Commission should accept PacifiCorp’s biennial conservation report and issue an order finding that the company met its biennial conservation target at the July 25, 2014, recessed open meeting.

1. See Docket UE-111880, at ¶ 29. [↑](#footnote-ref-2)
2. *2012-2013 Biennial Conservation Report*, Docket UE-111880, Appendix 2 at page 61. [↑](#footnote-ref-3)
3. *Id.* at page 60. [↑](#footnote-ref-4)
4. *Id.* at page 45. [↑](#footnote-ref-5)
5. *Puget Sound Energy’s 2012-2013 Biennial Electric Conservation Achievement*, Docket UE-111881, at page 99. [↑](#footnote-ref-6)
6. *In the Matter of Pacific Power & Light Company’s 2012-2021 Ten-Year Achievable Conservation Potential and 2012-2013 Biennial Conservation Target Under RCW 19.285.040 and WAC 480-109-010,* Docket UE-111880 Order 01 ¶ 28. [↑](#footnote-ref-7)
7. *UTC Staff Comments Regarding Electric Utility Reports on Ten-Year Achievable Conservation Potential and Biennial Conservation Targets;* Docket UE-132047 at page 15. [↑](#footnote-ref-8)
8. *Id.* [↑](#footnote-ref-9)
9. *In the Matter of Evaluating Electric Utility Conservation Achievements Under the Energy Independence Act;* Dockets UE-100170, UE-100176, and UE-100177; Staff Comments, July 16, 2012, page 9. [↑](#footnote-ref-10)
10. *Notice of Opportunity to File Written Comments,* Docket UE-131723, April 9, 2014. [↑](#footnote-ref-11)
11. Dockets UE-100170, UE-100176, and UE-100177; Open Meeting Memo, Aug. 9, 2012, Attachment A. [↑](#footnote-ref-12)
12. See *In the Matter of PacifiCorp d/b/a Pacific Power & Light Company’s 2010-2011 Biennial Conservation Target Under RCW 19.285.040*, Docket UE-111770, Order 03 ¶ 28. [↑](#footnote-ref-13)
13. See *Joint Proposal for Consistent Approach to Northwest Energy Efficiency Alliance Claimed Conservation Savings*, Docket UE-111770, Oct. 31, 2012. [↑](#footnote-ref-14)
14. See *In the Matter of Pacific Power & Light Company d/b/a PacifiCorp’s Report Identifying its 2014-2023 Ten-Year Achievable Electric Conservation Potential and Its 2014-2015 Electric Biennial Conservation Target Under RCW 19.285.040 and WAC 480-109-010,* Docket UE-132047, Order 01 ¶ 6. [↑](#footnote-ref-15)
15. *UTC Staff Comments Regarding Electric Utility Reports on Ten-Year Achievable Conservation Potential and Biennial Conservation Targets;* Dockets UE-132043, UE-132045, and UE-132047; pages 15-17. [↑](#footnote-ref-16)
16. *Id.*, page 17. [↑](#footnote-ref-17)