

**COMMENTS OF UTILITY CONSERVATION SERVICES, LLC (UCONS)
ON PUGET SOUND ENERGY'S BIENNIAL CONSERVATION PLAN**

December 5, 2019

Tom Eckhart, PE
CEO, UCONS, LLC
10612 NE 46th Street
Kirkland, WA 98033
(425) 576-5409 (office)
(425) 827-2489 (fax)
tom@UCONS.com
www.ucons.com

UTC Dkt. No. UE-190905

I. INTRODUCTION AND SUMMARY

Once again, Utility Conservation Services, LLC (UCONS) has reviewed an iteration of Puget Sound Energy's (PSE's) Biennial Conservation Plan (BCP or Plan) to evaluate whether PSE has committed to pursue all cost-effective conservation in hard-to-reach markets, particularly the manufactured home (MH) market. Once again, we conclude that PSE has fallen short. The Plan denies hard-to-reach Washington ratepayers the benefits of an equitable share of cost-effective conservation services, as required under I-937 and as established by the Northwest Power and Conservation Council (Council) in its 7th Power Plan as an important regional goal. Of equal or even greater concern to the disadvantaged MH ratepayer is that the current BCP filing provides neither accountability nor tracking of the conservation potential has been acquired from the MH sector, nor specific budgets or measurable goals that can be reported by PSE to its Conservation Resources Advisory Group (CRAG) in the current 2-year program cycle. This is contrary to the specific language in the Regional Conservation Plan that we convinced the Council to adopt in its 7th Power Plan: an Assessment of how well the region is progressing in achieving the Council's 20-year goal for achieving all -cost effective conservation from this customer class.

After providing some background on UCONS and our efforts over the past five years to persuade the utilities and the Commission to better implement I-937's mandates in regards to the MH market, these comments: (1) describe the inadequacy of the data that went into the BCP regarding the MH and other hard-to-reach markets; (2) describe the failure of the BCP to define a separate program for the MH market; (3) reiterate PSE's failure to remove a significant barrier to MH customer participation in conservation programs by continuing to require a significant customer contribution even though a number of fully-funded utility measures are cost effective; (4) describe the need to better address major inequities in serving various customer classes; and (5) describe the tentativeness of this BCP, given its reliance on PSE's old IRP. We then offer some recommendations to the Commission.

II. BACKGROUND

A. UCONS – Overview

UCONS is a national leader in the development and implementation of residential conservation programs, headquartered in Kirkland, Washington. UCONS has done or is doing business in Washington, California, Oregon, Idaho, Texas, Utah, and New York. We provide services under contract to a large number of utilities, both investor-owned and publicly-owned, as well as to major property management firms. Since 1993, UCONS has delivered direct-install energy efficiency programs to over 320,000 multifamily tenants and over 100,000 manufactured home utility customers. The aggregate energy savings from these efforts total nearly 500,000,000 kWh and 10,000,000 therms. In recent years, we have focused our work on hard-to-reach (HTR) markets, particularly in the manufactured homes (MH) sector and low-income multifamily projects.

B. UCONS Involvement in Advocacy for the MH Customer

For four years, UCONS has been active in advocating for additional and more equitable conservation services for residents of manufactured homes. In late 2015 and early 2016, UCONS worked with manufactured home customer groups, the Northwest Energy Coalition and Washington’s representatives on the Council to advocate for the potential of acquiring cost-effective conservation in HTR markets, particularly the MH sector. In its 7th Power Plan adopted on February 10, 2016, the Council described the “special challenges” of realizing such a conservation potential:

Manufactured Homes: The manufactured home segment may face special challenges related to income, ownership, building codes, and some difficult-to-implement conservation measures specific to manufactured housing and their heating systems. *The assessment should determine whether the adoption of measures in the manufactured home segment is on pace to complete implementation of nearly all remaining cost-effective potential over the next 20 years. Where expected shortfalls appear, specific barriers to implementation should be identified and solutions targeted at those barriers.* While this market segment has been successfully targeted with a limited set of conservation measures (e.g., duct sealing), a more comprehensive approach that identifies and implements an entire suite of cost-effective measures during a single visit may be more cost-efficient.¹

Following the Council’s lead, in July 2016, UCONS published a paper entitled “Energy Efficiency in Manufactured Homes in Washington: The Path Forward.” It summarized the legal framework for utilities to acquire “all cost-effective conservation” under I-937, the work of the

¹ 7th Power Plan at 4012 (recommendation MCS-1) (emphasis added).

Council, and barriers to acquisition of conservation from this market. We urged utilities to develop, and the Utilities and Transportation Commission (Commission or UTC) to approve, conservation plans that would address this conservation potential.

Accordingly, we participated in the consideration of PSE's BCP for 2018-2020, filing initial comments. On behalf of the customer groups representing this customer class, we noted that the customer who lives in a mobile home park does not own their land and does not have title to their property. As a result, utility (rebate) programs offered regionally cannot overcome the barriers to conservation program participation. With no on-bill financing program available to them, this customer class does not qualify for most energy efficiency loan programs offered in PSE's service area.² At the January 10 Commission Open Meeting to consider PSE's Plan, Chairman Danner expressed his view that he would like to see some progress this year in the MH market.³ When nothing was forthcoming from PSE, UCONS filed with the Commission a proposal that, if adopted, would provide such progress.⁴ Despite the urging of the Northwest Energy Coalition that PSE consider this or other proposals,⁵ there still was no progress.

So, UCONS again submitted comments when PSE filed its annual BCP update in late 2018.⁶ We pointed out the shortcomings of PSE's Plan and urged the Commission to require PSE to "adaptively manage" its conservation portfolio to include a greater focus on the MH market.

Finally, there was some progress, or at least some hope of progress: at the Commission's urging, PSE agreed to contract with Cadmus for a study of the MH market, one of the purposes of which

² Comments of Utility Conservation Services, LLC (UCONS) on Puget Sound Energy's Biennial Conservation Plan, Dkt. No. UE-171087 (Dec. 1, 2018). In those comments, we described UCONS's response to a Request for Information (RFI) from PSE in which UCONS proposed an innovative program to provide services to owners of manufactured homes in PSE's service territory. PSE responded, stating: "We are pleased to inform you that the Hard to Reach Manufactured Home concept will be incorporated into one of our Request for Proposal (RFP) concepts for the 2018-2019 Energy Efficiency Services program portfolio." PSE then proceeded to include a program for manufactured homes into a program for rental customers, despite the fact, known to PSE, that the vast majority of residents of manufactured homes own, not rent, their homes, and therefore would not be eligible for the rental program.

³ January 10, 2018, Open Meeting Recording at 57:10.

⁴ Proposed Energy Efficiency Program Submitted on Behalf of Low-Income Customers in Manufactured Homes in Puget Sound Energy's Service Territory, Dkt. No. UE-171087 (June 19, 2018).

⁵ Letter from Amy Wheelless, NWECA, to Mark Johnson, Executive Director and Secretary, WUTC, Dkt. No. UE-171087 (June 22, 2018).

⁶ Comments of Utility Conservation Services, LLC (UCONS), on Puget Sound Energy's 2019 Annual Conservation Plan, Dkt. No. UE-171087 (Dec. 10, 2019).

was to “determine what additional opportunities could provide cost-effective energy efficiency to this [manufactured home] market.”⁷

C. The Cadmus Study

Cadmus issued its Study on July 15, 2019. Among various findings, it provides four types of data that demonstrate there is significant conservation potential remaining in the MH market in PSE’s service territory:

1. *Nearly half of manufactured homes have received no conservation measures.* The Study states that there are approximately 69,000 manufactured homes in PSE’s service territory.⁸ However, only about half of those have received conservation services.⁹ Therefore, about half of MH customers have not received conservation services and are a significant source of conservation potential.
2. *Of the manufactured homes that have received measures, the measures received are extremely limited.* The Study lists the conservation measures provided for the 50% of MH customers who have received measures. While 39% received LED bulbs and 26% percent received rebates on energy-efficient appliances, the numbers for other measures are lower, ranging from heating systems at 20% to a smart thermostat at 4%. In another place, and using different data, the Study confirms this by stating the number of homes that received various types of measures. Showerheads were provided to 15,969 homes

⁷ Cadmus, *Manufactured Homes Market Study* (July 15, 2019) (Cadmus Study or Study). The Study’s Executive Summary describes its origins and purpose:

This study grew out of joint interest expressed by Puget Sound Energy (PSE), the Washington Utilities and Transportation Commission, and stakeholders to examine the manufactured home sector, given longstanding interest in this energy conservation in this housing market. To make this examination more holistic and timely, PSE engaged with interested stakeholders to develop a research study to better understand the manufactured home market in its service area and determine what additional opportunities could provide cost-effective energy efficiency services to this market. This market study is one step in helping formulate a plan of action.

Cadmus Study, at 1.

⁸ Cadmus Study, at 20, Table 9.

⁹ Cadmus Study, at 21, Table 10. This table breaks down the percentages of those participating in PSE programs by county. While King and Thurston Counties show a 53% participation rate, other counties show participation rates in the 40% range or lower.

and duct sealing to 16,038.¹⁰ Other measures were provided to fewer homes. So, even of the approximately 35,000 homes that received some measures, many, if not most, received only modest conservation assistance. Accordingly, there remains significant conservation potential even among those homes that already have been served.¹¹

3. *The Study quantifies significant remaining conservation potential.* The Study quantifies significant untapped conservation potential in the MH market for both electric and gas service. At 10 years, the potential is 24 aMW and 0.19 MM Therms; at 20 years the potential is 47 aMW, 0.34 MM Therms.¹² The Study further breaks down conservation potential by type of measure, stating that ductless heat pumps would achieve the greatest savings.¹³
4. *Almost nothing has been accomplished in the MH Market during the current BCP cycle.* The Cadmus Study contains the following table which shows PSE has paid little attention to the MH market in recent years:

¹⁰ Cadmus Study, at 45, Figure 18; 16, Table 5.

¹¹ Note that the Northwest Power and Conservation Council expressed concern in its 7th Power Plan that MH residents typically only receive a single measure:

While this market segment has been successfully targeted with a limited set of conservation measures (e.g. duct sealing), a more comprehensive approach that identifies and implements an entire suite of cost-effective measures during a single visit may be more cost-efficient.

¹² Cadmus Study, at 55, Table 33.

¹³ Cadmus Study, at 57, Table 34.

Program Participation Data

Annual Program Participation Counts

Program	2010	2011	2012	2013	2014	2015	2016	2017	2018
Single Family Weatherization - ARRA	1,279	4,874	1,967	3,007	505	334	36	--	--
Mobile Home Duct Sealing	--	--	2,758	2,309	3,450	2,446	106	--	--
Appliances Rebates	--	--	899	2,058	1,777	405	294	668	453
Home Energy Assessments	17	102	129	152	211	354	636	930	935
Appliance Recycling and Replacement	--	--	915	--	--	802	603	548	346
Space Heating Rebates	3	--	--	263	296	386	420	460	434
Low Income Weatherization	295	258	167	238	261	325	269	213	232
Window Rebates	99	11	33	73	162	201	106	71	52
Space and Water Heating Rebates	206	169	197	--	--	--	--	--	--
Smart Thermostat Rebates	--	--	--	--	--	--	29	111	65
Single Family Weatherization	--	--	21	24	17	8	67	30	21
Water Heating Rebates	--	--	--	16	35	43	30	17	16
Manufactured Homes New Construction	20	11	6	--	--	--	--	--	7
Fuel Conversion	3	1	1	1	5	3	3	4	--

The steep decline in installed measures in the last two years is counter to the goals of the 7th Plan and I-937. This curtailment of conservation services has not been reported to PSE's CRAG or the Commission and should be a red flag to those addressing equity issues and regional conservation goals. In other words, this underserved market has become even more underserved since the Council called for a focus on this market in the 7th Power Plan.

D. Enactment of Clean Energy Transformation Act (CETA)

In its 2019 session, the Washington Legislature enacted the Clean Energy Transformation Act (CETA or Act).¹⁴ While that legislation contains many provisions, three are most relevant here.

First, it reiterates, in several places, the mandate that utilities acquire all cost-effective conservation.¹⁵ While one statement of that mandate might have been ample to effect action, the Legislature apparently wanted to emphasize the point.

Second, the Act recognizes a cost of carbon that is to be used in resource planning.¹⁶ This means that conservation measures which may not have been cost effective in the past now may be

¹⁴ SB 5116, ch. 288, Laws of 2019.

¹⁵ CETA, §§4(1)(a), 4(6)(a), 5(3).

¹⁶ CETA, §§14(3), 15.

because of the imputed cost adder. In other words, utilities should be acquiring more conservation than before because, under Washington law, more of it will be considered cost-effective.

Third, the Legislature requires in the Act that the distribution of “energy and nonenergy benefits” be “equitable.”¹⁷ This means that underserved segments of the customer base should not be continue to be overlooked or underserved.

III. COMMENTS ON PSE’S BCP

With this background, we offer the following comments on PSE’s BCP.

A. The BCP Lacks Meaningful Data on Which to Base a Strategy for Acquiring All Cost-Effective Conservation.

For PSE to fulfill its statutory obligation to acquire all cost-effective conservation, it needs to know and evaluate (1) how much cost-effective conservation has been available for acquisition in a given market; (2) how much it has successfully acquired in under its current two-year conservation plan; and, therefore, (3) how much is available to be acquired in the next two-year plan cycle. The utility must, of course, constantly update its analyses based on new information and on new cost-effectiveness criteria (such as new mandates to consider the cost of carbon in planning decisions). For the MH market, PSE has either not performed that analysis or has not shown its work if in fact it has performed it.

It is our understanding, based on a 2016 meeting between UCONS and Commission staff, that IOUs do not report conservation achievement on a sector-by-sector basis. Rather, the utilities averaged data across all customer classes. We had hoped that the focus of the 7th Power Plan on hard-to-reach markets, including the MH market, would have led to more thorough and detailed reporting. Such data would help the Commission and the Council in monitoring each utility’s progress in serving such markets and make it possible to determine the full extent to which certain classes are underserved with conservation measures.

UCONS and MH customer groups were hopeful that these data inadequacies would be remedied this year by the Commission and utility-initiated Cadmus Study of the MH market in PSE’s service territory. As part of our stakeholder input to the Study, and in our hope to better inform PSE’s BCP, we requested the following data from the UTC and from the utility in order to report how PSE’s MH customers were served:

- Level of investment in specific program measures;
- Number of homes treated;

¹⁷ CETA, §§1(6), 4(8), 6(1)(c)(iii).

- Information on the comprehensiveness of such programs; and
- Number of low-income homes served (and the number on non-low income homes served).

We were surprised to hear that neither the Commission nor PSE kept such records. Over three and one-half years have passed since the Council adopted the 7th Power Plan, and the utility is not providing that data – even though such data would seem necessary to document progress, or lack of progress, in fulfilling the utility’s I-937 obligations. The 7th Power Plan, in MCS-1, called for an assessment of “whether the adoption of measures in the manufactured home segment is on pace to complete nearly all remaining cost-effective potential over the next 20 years.” Without providing the requisite data, how can PSE demonstrate its progress in obtaining an average of 5% of such potential each year from comprehensive conservation programs (if all remaining cost-effective potential is to be acquired within 20 years), and how will the Commission evaluate PSE’s progress?

B. The BCP Fails to Call Out a Separate Strategy for Serving the MH Market in Order to Meet Regional Goals.

While the BCP does not document PSE’s past efforts to serve the MH market, other sources confirm that progress has been slight. Data from the Washington State Department of Commerce, Washington State University, and the Cadmus Study show how little was accomplished in 2018 and 2019 for the MH customer in PSE’s service area. Without specific program goals (again not provided in PSE’s current BCP filing) and without regular monthly progress reports to the CRAG to promptly address shortfalls in achieving goals, it is apparent that nothing will improve over the next two years for the hard-to-reach PSE customer who resides in a manufactured home.

Again, the regional goal of obtaining all potential from this market in 20 years cannot be met without an adequate and equitable focus on this market.

C. The Few Measures Specifically Called Out in the BCP for the MH Market Continue to Require Substantial Customer Co-Payments.

The BCP does contain some measures directed at the MH sector, such as floor insulation, duct sealing, and double-pane windows.¹⁸ However, these measures would still require customer contributions which is a huge barrier to participation.¹⁹

¹⁸ BCP, Exh. 3, at 37-38.

¹⁹ We described this barrier, along with others in various filings with the Commission and in our “Path Forward” White Paper prepared in July 2016.

There are several measures which can be provided at NO cost to the ratepayer, and yield a cost-effective program, including lighting, low flow showerheads, and duct sealing. Ductless heat pumps are another measure that can cost-effectively be provided with no contribution from MH ratepayers.

Requiring financial contributions from ratepayers who simply cannot afford them is a barrier to meaningful participation that continues to go unaddressed and inevitably will result in another two years during which available cost-effective conservation will not be acquired by PSE from the MH sector.

D. The BCP Fails to Address Inequities in Serving Various Customer Classes.

Serving various customer classes equitably has long been a policy goal of the Commission.²⁰ By enacting CETA, the Legislature has further embedded that policy in statute.²¹ As we have consistently pointed out, the MH customer class provides over 5% of PSE's gross electric revenues but receives less than 2% of its conservation budgets.²²

By lumping MH conservation measures in with the measures PSE provides to all residential ratepayers, the BCP completely fails to address such inequities. And by failing to develop adequate metrics for acquired conservation and for what has yet to be acquired from HTR ratepayers, PSE is not fulfilling Washington State's policy goals for the equitable treatment of those ratepayers.²³

There is ample evidence that PSE has been underserving its low-income customers. The Cadmus Study reports that only 59% of manufactured home households are above 200% of the federal poverty level, compared to 85% of single-family households.²⁴ Given that there are about 67,000 manufactured homes in PSE's service territory, this means over 27,000 MH customers in PSE's service territory are below 200% of the federal poverty level. And yet the table from the Study inserted above indicates that fewer than 300 of these disadvantaged

²⁰ See WAC 480-109-100(7) ("A utility must offer a mix of conservation programs to ensure it is serving each customer sector, including programs targeted to the low-income subset of residential customers.")

²¹ CETA, §§1(6), 4(8), 6(1)(c)(iii).

²² We have described the derivation of this number in past communications with PSE and Commission Staff.

²³ We recommend a recent study, developed in part by Michael Colgrove, Executive Director of the Energy Trust of Oregon (ETO), entitled "Toward Standardized Equity Measurement in the Clean Energy Industry, Work Plan and Literature Reviews," (September 1, 2019). The ETO has been particularly active in this area. <https://www.energytrust.org/wp-content/uploads/2018/10/DEI-Operations-Plan-Executive-Summary.pdf>

²⁴ Cadmus Study at 2.

ratepayers have participated annually in a low-income weatherization program. Data from WSU and Commerce support the Cadmus data and therefore confirm this lack of attention to low-income customers.

This situation arises at least in part because PSE only allows low-income agencies to serve disadvantaged MH customers. While there are *federal* requirements that federal dollars be distributed through such agencies, I-937 imposes no such requirement for utility investments. Washington's low-income agencies perform a great service but there are limits on how many customers they are able to qualify and serve. Utilities should not limit the allocation of utility conservation funds to the detriment of a large majority of low-income ratepayers. The California Public Utilities Commission (CPUC) and California investor-owned utilities have addressed this issue successfully for many years. In California, the low-income agencies provide services to the low-income manufactured home ratepayer, and the utilities go out for bids from qualified contractors to ensure that an equitable level of conservation services is provided to this disadvantaged customer class.

Therefore, it would seem reasonable for utilities to provide, and for the Commission to require them to consistently provide, an equitable share of conservation services to these low-income ratepayers over the 20-year period established by the Council, so that about 5% of them are served each year. That would result in approximately 1300 low-income PSE customers in manufactured homes being served annually instead of the 300 who currently receive conservation benefits. In this way, current inequities in serving MH customers could be reduced.

E. The BCP Overemphasizes Further Studies and Continuing Programs that Have Not Addressed Regional Goals or I-937 Goals

PSE has “studied on bill financing” since 2016 without actually implementing it, while continuing to recommend conservation programs that its disadvantaged customers are unable to afford. In addition, as the Cadmus Study demonstrates, requiring a customer contribution over the past 4 years has yielded far less energy savings to the utility and far fewer benefits to the ratepayer than the programs PSE implemented from 2010 through 2015. CRAC members have been told that the reason for such low participation levels in recent years has been due to “market saturation.” The Cadmus Study clearly demonstrates that is not the problem.

The point that the BCP overlooks is that members of this customer class cannot shoulder the financial burden of paying for conservation investments. So, for the region to acquire all cost-effective conservation from these disadvantaged customers, one of two things must happen. Either the utility must provide significant financing assistance, such as on-bill financing, or it must not demand a substantial customer contribution. PSE prefers to continue “studying” on-bill financing, as it has been doing since 2016, which strongly suggests it does not intend to implement it.

Substantial customer contributions pose another, related barrier. Utilities offering rebate programs often require multiple “bidders” for substantial measures, which may require multiple contractors visiting to the home. However, as PSE Market Study participants learned from the customer representatives, having “multiple contractors” visiting a park is either not allowed by park managers or heavily discouraged. Therefore, we urge PSE to address these barriers to serving the MH customer class, and other low-income HTR customers, by significantly reducing or eliminating customer contributions. PSE did not offer comprehensive conservation programs prior to 2016, but achieved far higher levels of conservation savings to the benefit of the end use customer. That was achieved by not requiring a customer contribution (a successful model also employed in Oregon and California).

F. The BCP Is Still a Work in Progress, Making Commenting Difficult.

On page 1 of its Executive Summary, the BCP states:

Consistent with Order 01 in Dockets UE-180607 and UG-180608,¹ the 2020-2021 savings figures, cost-effectiveness estimates, and anticipated program spends included in the November 1, 2019 filing of this 2020-2021 BCP are based on the pro-rata share of the 2017 IRP’s (Integrated Resource Plan’s) 10-year conservation potential.

Within 30 days of PSE’s filing the final 2019 IRP on January 15, 2020, PSE will make a petition filing, which will enumerate any necessary updated Target and Threshold figures. PSE will file the petition into the 2020-2021 BCP Docket. PSE will collaborate with its Conservation Resource Advisory Group (CRAG) to address any program adjustments that aren’t accounted for beyond the established Portfolio structure, which is designed to accommodate Target revisions.

In other words, this BCP is based on the 2017 IRP and will need to be updated when the 2019 IRP is completed. It is more difficult to comment on this BCP’s adequacy when it is based on old data. Accordingly, the Commission should provide for further comments on any revision to this BCP and consequently make temporary any order or decision on this November 2019 BCP.

IV. RECOMMENDATIONS

Accordingly, we recommend that the Commission:

1. Take no final “action” on this BCP, given that it will be updated after the next IRP is filed.
2. Direct PSE to produce data on energy efficiency information for the program years 2018 and 2019 on the following:

- Level of investment in specific program measures;
 - Number of homes treated;
 - Information on the comprehensiveness of such programs; and
 - Number of low-income homes served (and the number on non-low income homes served).
3. Direct PSE to produce this same information going forward.
4. Direct PSE, in its update to the BCP it files after completing its next IRP, to:
- Quantify the available cost-effective conservation in the MH market in its service territory;
 - Set forth strategies and measures to acquire that conservation;
 - Address the 20-year conservation goal by requiring budgets and measurable goals that the utility will report to the Commission and to the CRAG, commencing January 2020; and
 - Commence utility funding of low-income programs by both private contractors and low-income agencies to annually reach a minimum number of low-income ratepayers, beginning in 2020.