

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UE 319

In the Matter of)
)
PORTLAND GENERAL ELECTRIC)
COMPANY,)
)
Request for a General Rate Revision.)
_____)

CROSS-REPLY TESTIMONY
OF THE
OREGON CITIZENS' UTILITY BOARD

September 5, 2017



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1 I. INTRODUCTION

2 In this Cross-Reply Testimony, CUB responds to the testimony of PUC Staff and
3 ICNU regarding CUB's proposed Energy Efficiency (EE) Adjustment. The EE
4 Adjustment would offer a credit to residential and small commercial customers who
5 purchase a resource mix that contains more EE than the resource mix purchased by large
6 customers. The PUC Staff offered an alternative calculation for a credit associated with
7 the benefits of the EE investment. However, Staff claimed the residential class benefits
8 from the EE target residential customers to such an extent a credit is not necessary.
9 ICNU opposes a credit.

10 Staff's conclusion that the customer class targeted by EE programs is the only
11 beneficiary of those programs is significant and a drastic change from Oregon's current
12 approach to EE. If the Commission agrees with Staff, then residential customers are
13 being charged \$20 million per year to subsidize EE programs that provide no benefit to
14 residential customers, and this requires significant changes in program funding. In our

1 Cross-Reply Testimony, CUB first discusses the implications of Staff’s analysis and the
2 necessary changes under that analysis. Second, CUB will explain why CUB disagrees
3 with Staff’s analysis and believes Oregon can avoid the drastic changes required by
4 Staff’s conclusions. Third, CUB will address ICNU’s arguments.

5 II. REPLY TO STAFF TESTIMONY

6 Staff summarizes its testimony with a simple finding:

7 Staff finds that over a broad range of assumptions the system benefits of
8 EE measures are allocated to schedules that pay for the EE.¹

9 A. *Staff’s Analysis Erroneously Focuses on Who Is Targeted by EE Programs,*
10 *Not Who Pays for Them*

11 Staff’s analysis does not support the conclusion that the system benefits are
12 allocated to the schedules that pay for EE, because Staff’s analysis did not consider who
13 pays for EE. Instead Staff’s analysis is focused on who is served (which class is targeted)
14 by EE programs:

15 Staff finds that under a broad range of assumptions, customer classes that
16 are served by EE capture all energy and capacity cost savings associated
17 with the EE. Furthermore, customer classes served by EE capture
18 additional cost allocation benefits beyond just energy savings by the
19 nature of how rate spread is developed and are thereby better off in an
20 overall sense.²

21 1. *Which Class Pays and Which Class is Targeted Are Very Different*
22 *Concepts*

23 Oregon forecasts the level of cost effective EE through the IRP process and funds
24 EE programs through SB 1149 public purpose charges and SB 838 EE funding. In
25 neither case is funding allocated to customers based on the program targets. Residential

¹ UE 319/Staff/1600 Kaufman/1

² UE 319/Staff/1600 Kaufman/2.

1 customers, however, fund EE well in excess of the programs that are directed towards
2 residential customers. This is true of both SB 1149 and SB 838 EE programs.

3 For SB 1149 programs, residential customers fund more than half the EE
4 programs, but less than a quarter of the programs target residential customers³:

Residential Share of SB 1149 EE

Year	% share of funding	% share of program
2012	49.43%	21.80%
2013	51.34%	17.10%
2014	51.09%	20.08%
2015	50.16%	32.55%
2016	50.16%	
Total	50.43%	22.37%

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6 If Staff's analysis is correct and EE programs only benefit the class that is
7 targeted with the program, then residential customers are being overcharged. Residential
8 customers should only fund the programs that benefit residential customers. This means
9 that residential customers should only provide 22.37% of the funding. Residential
10 customers are currently being overcharged by more than \$13 million per year for SB
11 1149 EE programs that do not target residential customers.

12 For SB 838 programs, residential customers fund more than half the programs,
13 but less than 40% of the EE programs target residential customers:⁴

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³ CUB Exhibit 301.

⁴ CUB Exhibit 301.

Residential Share of SB 838 EE

Year	% share of funding	% share of program
2012	55.69%	38.82%
2013	56.43%	36.96%
2014	55.74%	35.13%
2015	55.64%	43.11%
2016	55.64%	
Total	55.85%	38.39%

1 Again, if Staff’s analysis is correct, then residential customers are also being
2 overcharged for SB 838 programs. Residential customers should only provide 38% of
3 SB 838 funding. Residential customers are being overcharged by \$7.8 million annually
4 for SB 838 EE programs that do not target residential customers.

5 For all EE programs, residential customers provide 53% of the funds, but only
6 receive 31% of the programs. Residential customers are being charged \$20.5 million for
7 programs that provide no benefit to residential customers.

Residential Share of ALL EE

Year	% share of funding	% share of program
2012	52.29%	30.97%
2013	53.96%	27.24%
2014	53.37%	28.21%
2015	52.65%	38.49%
2016	52.73%	
Total	53.02%	30.98%

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1 2. *Staff's Analysis Requires a Reallocation of SB 838 Funding*

2 According to Staff:

3 Staff analysis shows that the customer class receiving EE measures
4 captures the full system benefit of EE measures⁵.

5 While SB 838 only funds programs for customers under 1aMW, residential
6 customers provide the bulk of the funding. If the Commission agrees with Staff's
7 conclusion, then there is no basis for requiring residential customers to fund EE that
8 supports commercial and small industrial customers under SB 838. The \$7.8 million of
9 SB 838 funding that residential customers pay which goes towards commercial and small
10 industrial EE, should be removed from residential rates and reallocated to commercial
11 and industrial classes.

12 3. *Staff's Analysis Supports Remedial Action Related to SB 1149 Funding*

13 According to Staff:

14 Staff acknowledges that it is possible that some remedial action may be
15 needed in future years if large customers begin receiving direct benefits of
16 EE measures funded by small customers.⁶

17 As the testimony above demonstrates, this is already the case today. Residential
18 customers are funding SB 1149 programs that target non-residential customers. This
19 amounts to a \$13 million subsidy of non-residential customers by residential customers.

20 Because SB 1149 specifies how it funds will be charged to customers,
21 reallocating the funding as CUB proposed above is not allowed, but other remedial
22 actions can be taken. If the Commission agrees with Staff's analysis, then an effort
23 should be made to align the benefits of SB 1149 with the payments under SB 1149.
24 Specifically, the Commission should consider the following remedial actions:

⁵ UE 319/Staff/1600/Kaufman/4.

⁶ UE 319/Staff/1600/Kaufman/4.

1 1) Allocate the benefits of SB 1149 EE to the customer classes that pay for EE.
2 While SB 1149 limits the allocation of which customer classes can be charged the cost of
3 EE programs, it does not limit how the benefits are allocated. The Commission could
4 establish a bill credit to ensure the benefits of SB 1149 EE programs should be allocated
5 based on the funding of those programs. Staff's analysis, which concludes the benefits
6 are greater than the funding, would require a bill credit of more than \$13 million to
7 residential customers.

8 2) Direct the ETO to attempt to match EE programs by class with EE programs by
9 class funding, to the degree that cost effective opportunities align with funding. This
10 means residential collections under SB 1149 would first go to target cost effective
11 residential programs, before being used to subsidize other classes. Only to the extent
12 there are not sufficient cost-effective programs would residential customers' funds be
13 used to subsidize EE from another class.

14 3) In order to ensure that PGE acquires all cost-effective EE as required by SB
15 1547, the Commission should direct the ETO to ensure lost opportunities are prioritized,
16 when more cost effective EE is available than funding from within a particular class. If a
17 class of customers (such as customers above 1aMW) is not able to fund all EE available
18 in a particular year, the ETO should ensure time-sensitive programs (such as ones
19 targeting new buildings) will be prioritized. This would mean the EE resource available
20 from those customers will be purchased over a longer time period, but the full resource
21 will be acquired, consistent with SB 1547.

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1 4. *Staff's Analysis Provides No Basis for Allowing More Industrial EE from*
2 *SB 1149*

3 According to Staff:

4 If less than one average MW customers fund EE measures for larger than
5 one average MW customers, less than one average MW customers will not
6 receive the associated system benefits that they have paid for through EE
7 investments in larger than one average MW customers⁷.

8 and

9 If Energy Trust were to fund large customer EE beyond what is funded
10 today through SB 1149 using SB 838 funds, there may be a need to
11 address equity issues as those customers who fund SB 838 would not
12 realize those system benefits.⁸

13 This makes clear Staff's analysis does not support allowing large customers to
14 receive a greater share of EE from SB 1149, since this would only increase the subsidy.
15 ETO has reached the program cap on SB 1149 funding of programs for customers above
16 1aMW. Staff offers no solution to this problem. On the other hand, CUB's proposed rate
17 credit, which focuses on system benefits, would allow large customers to receive a
18 greater share of EE from SB 1149.

19 B. *CUB Disagrees with Staff's Analysis*

20 Staff's testimony supports a shift of \$7.8 million of SB 838 funds from residential
21 customers to commercial and small industrial customers. However, this is a larger
22 residential benefit than the rate credit CUB proposed, and CUB does not agree with
23 Staff's analysis. Staff's analysis contemplates a much different view of EE than Oregon
24 has historically taken.

25 Before SB 1547 required acquisition of all cost effective EE, it was the policy of
26 the OPUC to develop cost effective EE through the IRP planning process. The IRP

⁷ UE 319/ Staff/1600/Kaufman/4.

⁸ UE 319/Staff/1600/Kaufman/11-12.

1 analysis of cost-effectiveness does not include the costs shifts, which are the focus of
2 Staff's testimony. Those are not a cost of EE. They are joint and common costs that get
3 continually reallocated, when there are changes in load.

4 It is important to recognize Oregon acquires all cost effective EE at the least cost
5 possible. This means the IRP analysis looks at the resource cost of EE and compares that
6 to the avoided cost of supply side resources. However, the utility (through the ETO) pays
7 significantly less than both the avoided cost and the resource cost of the EE program.
8 This is because the EE participant also benefits and in most (if not all) programs is
9 expected to bear a significant share of the costs of the EE acquisition. In order to incent
10 this acquisition by the participant, Oregon limits fixed customer charges so they are only
11 used to recover direct customer related costs like metering and billing. Other costs,
12 including costs that are fixed in the short and medium term, are recovered through
13 variable charges. This means the customer who invests in EE sees reductions in his/her
14 variable energy charges, but also in the joint and common costs associated with
15 distribution, transmission, and generation plant.

16 1. *Staff Fails to Account for the Participant's Benefit and the Revenue*
17 *Reduction to the Participant*

18 Staff's analysis focuses on the "benefit" to a class from EE and how the benefit is
19 targeted to customers of that class. However, Staff fails to recognize that the benefit is
20 for the customer who participates in EE programs. Staff focused on what happens after a
21 general rate case reallocates costs, but customers are also impacted between rate cases,
22 because of PGE's decoupling mechanism.

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a. Between Rate Cases – Decoupling

PGE asked for a decoupling mechanism, in order to remove the Company’s disincentive for EE investment, while maintaining the customer’s incentive to invest in EE:

[Decoupling] is a simple balancing account and rate adjustment process that greatly diminishes the disincentives we confront when seeking to support and encourage innovative and effective programs to improve customer energy efficiency. At the same time, the decoupling mechanism allows us to maintain existing pricing structures for customers, which give price signals that support energy efficiency efforts.⁹

PGE’s mechanism removes the disincentive for the Company to support EE. The mechanism ensures when the customer’s bill decreases, because the customer invested in EE, PGE is allowed to recover the fixed costs the customer is no longer paying. PGE achieves cost recovery by placing a surcharge on other customers in the same customer class. Explicitly, decoupling shifts costs from one set of customers, those who invest in EE, to another set of customers, customers who are in the same customer class as the EE participant.

Let’s assume at the end of this case, residential customers pay an \$11/month customer charge and 11 cents/kWh variable charge. When a customer participates in an EE program, that customer’s usage goes down. The participating customer saves 11 cents/kWh. Under PGE’s decoupling tariff (Schedule 123), 7.739 cents/kWh is then added to the decoupling tariff for each kWh saved, and this amount is charged to the residential class. The 3.261 cent difference between the 11 cents and the 7.739 cents represents the reduced variable costs when loads are reduced.

⁹ UE 197/PGE/100/Piro /17.

1 For example, assume a residential customer uses 1000 kWh per month and
2 participates in an EE program that reduces his/her usage by 10%:

3 PGE’s monthly costs are reduced by \$3.26 (\$.03261 X 100 kWh).
4 The participant’s bill is reduced by \$11 (\$.11 X 100 kWh).
5 Non-participant residential bills increase by \$7.74 (\$.07739 X 100 kWh).
6

7 In 2104, PGE residential customers saved 90,666 MWh due to that year’s EE programs.¹⁰

8 This then caused a decoupling adjustment:

PGE Costs Decline	\$ 295,571
Decrease in Bills to Residential Customers Investing in EE	\$ 997,326
Increase in Bills to the Residential Class	\$ 701,755

9 Rather than providing a benefit to the customer class receiving the EE investment,
10 the customer class is actually harmed by the cost shifting from participating customers to
11 the rest of the class.

12 b. After a General Rate Case

13 After a rate case, some costs are reallocated between customer classes. While this
14 reduces the impact on non-participants, it does not offset the costs being reassigned to
15 them from participating customers. The Staff’s Rebuttal Testimony showed if there was
16 a reduction of 1,000,000 MWh, the utility’s avoided costs would fall by \$48.4 million,
17 and the total costs assigned to residential customers would decline by \$61 million¹¹. The
18 revenues from the residential class would decline by \$110 million (1 million MWh times
19 11 cents/kWh), and this revenue reduction would come entirely from the EE participants.
20 If the subset of residential customers who participate in EE programs sees their bills

¹⁰ 2014 ETO Annual Report to the PUC, page 75

¹¹ UE 319/Staff/1600/Kaufman/7

1 decline by \$110 million, while the entire residential class see their bills decline by only
2 \$61 million, then the subset of residential customers who are not EE participants will see
3 their bills increase by approximately \$49 million (110 million – 61 million).

4 2. *Joint and Common Costs Are Not Caused by EE programs, and Should*
5 *Not Be Identified as Costs Associated with EE*

6 Much of the utility's revenue requirement is based on fixed capital investments
7 used to serve multiple customers. They are referred to as "joint and common costs."
8 While future investments will be affected by changes in load, existing investments are
9 not. Therefore as load changes, there is a constant reallocation of these costs to
10 customers. This is not unique to utilities. Our highway system is a system of capital
11 investments recovered through variable charges (primarily gas taxes). If a customer
12 invests in a more fuel-efficient automobile, that customer's share of highway funding
13 declines, while a customer who purchases a gas guzzler will see his/her share increase.

14 Changes in load cause a reallocation. Joint and common costs assigned to a class
15 (such as line transformers) are reallocated within that class. Joint and common costs
16 assigned to the entire system (such as fixed generation) are reallocated between and
17 within customer classes. This is true not just of efficiency, which drives down loads, but
18 other changes in load. When a residential customer purchases an EV, that customer is
19 increasing his/her share of joint and common costs. When a teenager leaves for college
20 and enters another utility's service territory, that parents' share of joint and common costs
21 declines.

22 While we conduct cost of service studies to allocate joint and common costs,
23 those studies are built on a lot of assumptions, and the OPUC has recognized it is as

1 much “art as science.”¹² These are shared costs, and our cost of service methodology
2 should lead to a fair allocation.

3 The Commission has adopted a set of policies, such as keeping the customer
4 charge low and decoupling, that encourage EE and allow for reallocation of fixed costs
5 based on usage. CUB has supported these policies and believes they are fair and
6 reasonable.

7 But these policies are not a cost of EE, nor are they the benefit of EE that is
8 recognized in the IRP. While the participating customer may invest his/her money in EE,
9 in order to gain from this cost shift, the utility, itself, does not. EE is a cost effective
10 resource to invest in, as compared to other resources. This is the purpose of funding EE,
11 and these are the costs and benefits CUB believes should be considered here.

12 In earlier testimony, CUB argued EE had a resource value similar to rooftop solar,
13 and most of the elements being used to develop the Resource Value of Solar (RVOS) in
14 UM 1716 would also apply to EE. Importantly, the cost shifts of joint and common costs
15 are not part of that resource value methodology.

16 3. *Reallocated Joint and Common Costs Represent Partially Depreciated*
17 *Capital Investment That Is Available to Serve New Customers*

18 PGE had 859,396 customers in 2016.¹³ This is approximately 60,000 more
19 customers than were served 10 years ago.¹⁴ These customers need a distribution plant,
20 transmission lines, and power generators. These customers utilize some of the plant that
21 is no longer being utilized, due to EE measures. Serving new customers with preexisting,
22 partially depreciated investments provides an additional benefit of EE programs.

¹² OPUC Order No 95-322.

¹³ OPUC Utility Statistics, 2016. http://www.puc.state.or.us/Pages/Oregon_Utility_Statistics_Book.aspx

¹⁴ OPUC Utility Statistics, 2016. http://www.puc.state.or.us/Pages/Oregon_Utility_Statistics_Book.aspx

1 Because EE is a resource and is included in the IRP, PGE can plan to utilize the
2 freed up resources to serve other customers and avoid new investments. In a stagnant
3 system, with no growth in new customers, the reallocation of joint and common costs
4 might be considered a real cost. In the context of a growing customer base and a
5 predictable plan for EE deployment, however, it provides capital investment that can be
6 utilized to serve the new customers.

7 4. *There Are System Benefits of EE*

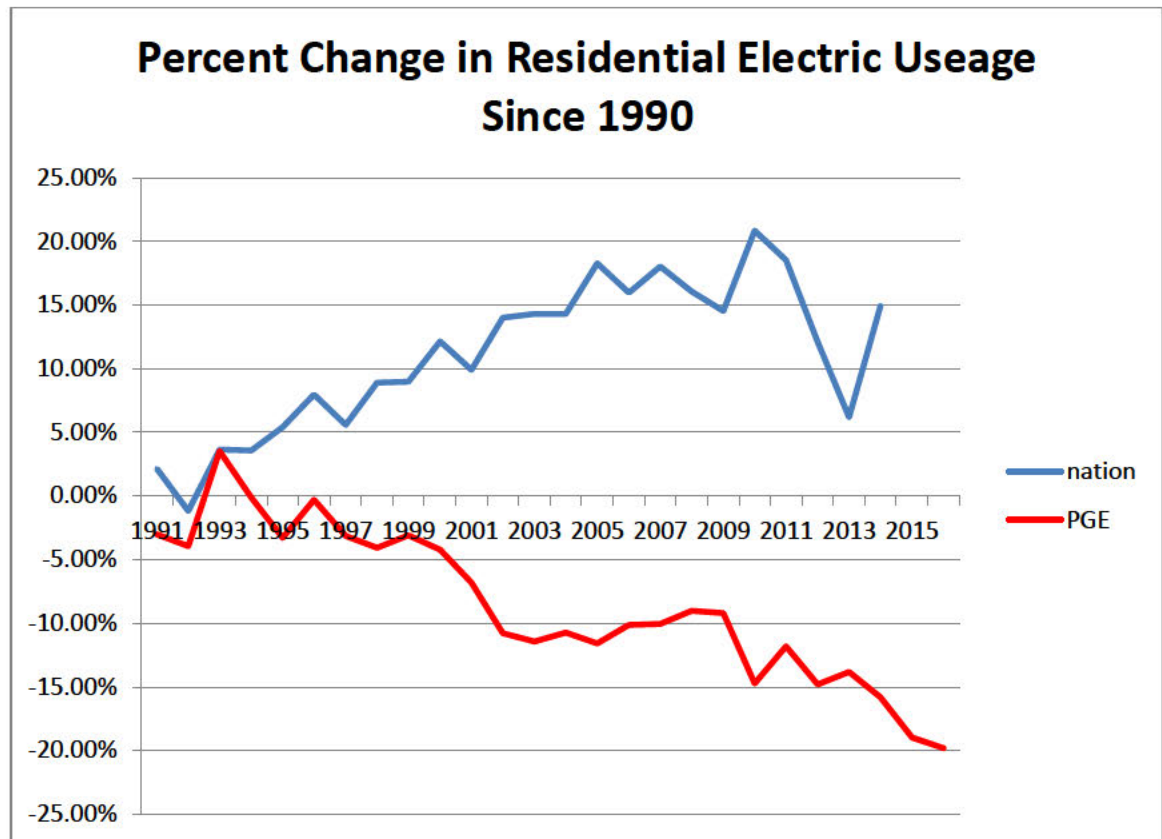
8 Staff's analysis focuses on how a reduction in load reduces cost assignment,
9 rather than how EE reduces system costs. But in the IRP, the focus is on resource
10 planning and how to meet the energy needs of customers at the least cost overall.
11 Purchasing EE is cost effective when it can be done at a cost less than the avoided cost of
12 additional energy. The fact that the EE purchase changes load, which reallocates existing
13 costs, is not a cost of EE because those costs are sunk and will exist with or without the
14 EE investment. It is the cost of investments in power plants, distribution, and
15 transmission networks which can be utilized by other customers. If we can purchase EE
16 for 2 cents/kWh, rather than an avoided cost resource at 4 cents, and we are practicing
17 least cost procurement, then we should purchase the cheaper resource. The reallocated
18 joint and common costs are not relevant for the resource decision.

19 PGE has been pursuing EE for more than 30 years and the effect can be seen by
20 the following graph¹⁵:

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¹⁵ National data if from Energy Information Agency (EIA), PGE data is from Oregon Utility Statistics, published by the OPUC.



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PGE’s residential customers used 12,178 kWh per year in 1990. In 2016, it had decreased to 9,766.¹⁶ If we assume that without EE, residential usage would have stayed at 1990 levels, then residential customers would be using more than 1.8 million additional MWhs of electricity. If we assume residential usage would have grown as it has nationally, residential customers would have consumed more than 3 million additional MWhs of electricity without EE. Because residential customers are served with less than 1/3rd of EE programs, these numbers should be tripled to identify the total saving from EE. In other words, the PGE system’s annual saving attributed to EE is likely between 5.4 million and 9 million MWh, or between 600 and 1100 aMW. Serving this load would have required PGE to invest in additional generation resources (of various vintages). PGE’s ratebase for generation would be greater, its fuel costs would be

¹⁶ OPUC Oregon Utility Statistics.

1 higher, and it may have had to make additional investments in transmission and
2 distribution. Because PGE's current resource mix includes some low cost, rate-based
3 hydro, these additional resources would have had a higher average cost than current
4 system resources, leading to higher generation costs for all customers. The kWh charges
5 for power supply would have been higher for all customers than it would have been
6 without EE. This reflects the system benefits of EE. Even if we only assume the 1/3 of
7 EE that is attributed to residential customers, replacing those kWh would lead to higher
8 cost resources, which would have increased the per kWh charge for power supply across
9 the system.

10 CUB continues to believe EE is a least cost resource for the utility system. The
11 fact that allocation changes with load does not distract from the fact that EE is purchasing
12 a least cost resource, not for a customer class, but for the system. Residential customers
13 are purchasing more EE than other classes of customers. Residential customers are
14 purchasing a set of resources with a lower cost, and they should get credit for the benefits
15 of these purchases.

16 C. *CUB Supports Staff's Alternative Methodology for Calculating an EE Credit*

17 Staff proposes an alternative method for calculating a rate credit for customers
18 under 1 aMW, based on an embedded cost differential. CUB has reviewed Staff's
19 methodology and believes it is a reasonable approach to calculating such a credit. Though
20 CUB believes the method CUB proposed in Reply Testimony is also reasonable.

21 D. *Residential Customers Are Being Harmed*

22 If the Commission accepts Staff's conclusion, residential customers are being
23 harmed, because they are paying more than \$20 million for EE, none of which benefits

1 them. More than \$8 million of the \$20 million is within SB 838 and can be easily
2 corrected in this rate case by reallocating the SB 838 funding.

3 CUB's conclusion focuses on the resource procurement, not the reallocation of
4 fixed costs caused by load changes. If the Commission accepts residential customers are
5 purchasing a resource mix that includes more cost effective EE, then the residential
6 customers should receive credit for the benefits they have purchased.

7 Either way, residential customers are being treated unfairly.

8 III. REPLY TO ICNU

9 ICNU opposes CUB's EE proposal for several reasons. ICNU argues large
10 customers would be required to pay more than the 3% limitation of EE funding. ICNU
11 also states CUB's position would allow customers over 1aMW to receive incentive
12 funding from SB 838. ICNU argues the precedent of the VRET docket prohibits cost
13 shifting, when a customer buys a different resource mix than the larger system.

14 A. *CUB's Proposal Does Not Require Large Customers to Pay More than 3% for*
15 *Public Purposes*

16 CUB agrees SB 1149 limits large customers from contributing more than 3% to
17 the public purpose charge (EE is one of the public purpose programs, but is not the only
18 one). However, CUB's proposal does not make any changes to this funding. CUB's
19 proposal concerns allocation of benefits, not costs. As an economic regulator, the PUC
20 clearly has the power to distinguish between costs and benefits.

21 B. *Allowing Customers Above 1aMW to Receive Incentive Funding from SB 838*

22 Nowhere in CUB's testimony does CUB propose spending SB 838 dollars on
23 large customers. While there is a problem associated with the program cap on large

1 customer EE spending within SB 1149, that problem can be solved without changes in
2 how SB 838 dollars are spent.

3 C. *VRET Precedent*

4 In the VRET decision, the Commission conditioned large customer VRET service
5 on a demonstration:

6 that there is no risk of cost-shifting on nonparticipating customers due to
7 any direct or indirect VRET service and resource obligations, including
8 stranded costs of the existing cost of service rate base system.¹⁷

9 There are several factors that distinguish this issue from the VRET.

10 1. *Customers Have Been Buying Different Resource Portfolios for a Decade*

11 In the example of the VRET, there was a proposal to allow large customers to
12 purchase a different set of resources, and the Commission established conditions that had
13 to be met before such purchases would be allowed. In this case, customers under 1aMW
14 have been purchasing a different resource mix since the passage of SB 838. The issue is
15 not whether we should allow this or not, but what are the economic implications.

16 2. *The VRET Concerned Higher Cost Resources, Not Lower Cost Resources*

17 Under the VRET, large customers wanted to purchase renewable resources
18 assumed to be higher cost than system resources. The Commission clearly was
19 concerned with preventing subsidies enabling these higher cost resources. In this case,
20 customers below 1aMW are purchasing lower cost resources. The issue is not a subsidy
21 to incentivize the resource acquisition, but recognition that small customers are
22 purchasing a lower cost portfolio.

¹⁷OPUC Order No. 16-251.

1 3. *EE Is a Planned Resource, VRET Is Not*

2 A major difference, which has a large effect on cost shifting and stranded costs, is
3 the fact that EE is a resource the utility plans for in its IRP, whereas the VRET was not.
4 Knowing the level of EE in its resource mix allows the utility to purchase the right
5 volume of supply side resources. VRET resources are not considered in the IRP. When
6 large customers switch to VRET service, the resources the utility planned to utilize to
7 meet the large customers' load are stranded and can add costs. The generation that is not
8 utilized when a customer invests in EE is not stranded, because the utility's resource plan
9 uses that power to serve its system load.

10 4. *The VRET Actually Is an Argument in Support of an Adjustment*

11 Large industrial customers and residential customers purchase different resource
12 mixes. Residential customers have more EE in their resource mix than large industrial
13 customers. If the Commission accepts the Staff's analysis, then residential customers are
14 directly subsidizing the cost of EE being utilized by industrial customers, which was what
15 the concern of the VRET order. If the Commission accepts EE is a system resource, then
16 large industrial customers are purchasing a more expensive resource mix than residential
17 customers, just as was contemplated by the VRET. But they are not paying for the full
18 cost of that higher cost resource, because they are receiving some of the benefits of the
19 lower cost EE purchased by smaller customers. This is the subsidy the VRET was trying
20 to avoid.

21 IV. CONCLUSION

22 There is no doubt that the current method of allocating the costs and benefits of
23 EE is unfair to residential customers. CUB believes it is unfair because residential

1 customers are purchasing a resource mix with a greater share of EE, and the system
2 benefits of that EE should be allocated to the customers who purchase it. Staff argues
3 there is no system benefit – all benefit goes to the class of customers targeted by EE. By
4 applying Staff’s theory to current funding, the result is a \$20 million subsidy of
5 commercial and industrial customers by residential customers. Either way, a fix is
6 needed.

7 CUB believes that there are several approaches that can be taken to solve this.

- 8 1) The Commission can require that PGE include EE as a resource in the
9 marginal cost study.
- 10 2) The Commission can require PGE to include a rate credit that allows
11 customers under 1aMW to be compensated for the system benefit that is being
12 purchased by the SB 838 EE. CUB and Staff have both proposed methods to
13 calculate that credit.
- 14 3) If the Commission accepts Staff’s analysis that EE benefits the customer class
15 targeted with the EE, then the Commission should reallocate SB 838 funding,
16 so residential customers only fund the programs that benefit them. The
17 Commission should then take remedial action to deal with the subsidy of EE
18 contained in SB 1149.

	A	B	C	D	E	F	G
1	<u>Residential Share of SB 1149 EE</u>						
2	Year	% share of funding	% Share of Program	Residential Funding	Total Funding	Average Megawatts Residential Programs	Average Megawatts All programs
3	2012	49.43%	21.80%	\$24,147,429.21	\$48,849,979.41	3.24	14.86
4	2013	51.34%	17.10%	\$23,933,242.57	\$46,619,310.79	2.98	17.43
5	2014	51.09%	20.08%	\$25,579,151.72	\$50,069,943.39	3.39	16.88
6	2015	50.16%	32.55%	\$25,243,747.73	\$50,325,529.54	4.45	13.67
7	2016	50.16%	NA	\$24,596,636.31	\$49,037,821.64		
8	Total	50.43%	22.37%				
9							
10							
11	<u>Residential Share of SB 838 EE</u>						
12	Year	% Share of Funding	% Share of Program	Residential Funding	Total Funding	Average Megawatts Residential Programs	Average Megawatts All Programs
13	2012	55.69%	38.82%	\$22,815,987.01	\$40,966,323.25	6.74	17.36
14	2013	56.43%	36.96%	\$27,986,337.11	\$49,592,836.85	6.72	18.18
15	2014	55.74%	35.13%	\$26,940,590.66	\$48,332,302.28	6.96	19.81
16	2015	55.64%	43.11%	\$23,327,273.46	\$41,927,204.30	7.57	17.56
17	2016	55.64%	NA	\$23,327,273.46	\$41,927,204.30		
18	Total	55.85%	38.39%				
19							
20							
21	<u>Residential Share of ALL EE</u>						
22	Year	% Share of Funding	% Share of Program	Residential Funding	Total Funding	Average Megawatts Residential Programs	Average Megawatts All programs
23	2012	52.29%	30.97%	\$46,963,416.22	\$89,816,302.66	9.98	32.22
24	2013	53.96%	27.24%	\$51,919,579.68	\$96,212,147.64	9.7	35.61
25	2014	53.37%	28.21%	\$52,519,742.38	\$98,402,245.67	10.35	36.69
26	2015	52.65%	38.49%	\$48,571,021.19	\$92,252,733.84	12.02	31.23
27	2016	52.73%	NA	\$47,454,133.83	\$89,996,756.58		
28	Total	53.02%	30.98%				
29							
30	Sources:						
31	Columns D and E are from CUB DR 40 and are used to calculate column B						
32	Columns F and G are from ETO annual reports to the OPUC and are used to calculated column C						