

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1713**

In the Matter of	)	
	)	
PUBLIC UTILITY COMMISSION OF	)	OPENING COMMENTS OF
OREGON,	)	THE CITIZENS' UTILITY BOARD
	)	OF OREGON
Investigation into Large Customer Energy	)	
Efficiency Limitations.	)	
	)	

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1    **I. Introduction**

2           This docket grew out of PGE's last general rate case, UE 283. In that docket,  
3    CUB argued that large customers were receiving a "direct benefit" from SB 838 funded  
4    energy efficiency ("EE") even though SB 838 prohibited large customers from receiving  
5    "any direct benefit" and that the Commission needed to implement a measure to ensure  
6    that the benefits of energy efficiency resource acquisition by SB 838 flow to the  
7    customers that pay SB 838 energy efficiency charges. For the purposes of that rate case,  
8    the parties to the case agreed to settle the issue by opening up a docket that would  
9    consider whether large customers were receiving a direct benefit and what can be done  
10   about it. The parties to that rate case agreed that this docket would address the following  
11   issues:

- 12       • Are customers with loads greater than 1 aMW receiving a direct benefit from  
13       conservation measures funded by amounts collected pursuant to SB 838?

- 1 • What is the meaning of “any direct benefit” as used in ORS 757.689(2)(b)?
- 2 • Are there any barriers that prevent the ETO from obtaining all cost-effective
- 3 energy efficiency?
- 4 • If such barriers exist, what other options exist to gain all cost effective energy
- 5 efficiency, including from customers with loads greater than 1 aMW?
- 6 • Should the ETO approach to funding energy efficiency be flexible to take
- 7 advantage of energy efficiency savings brought about by changes in technology
- 8 and the economy?
- 9 • Should there continue to be a cap on energy efficiency funding provided by the
- 10 ETO to PGE and PAC customers with loads greater than 1 aMW, and if so, what
- 11 criteria should be used to set such a cap?

12 Below, CUB addresses each of these questions. However before doing so, it is important  
13 to provide some background on SB 838’s energy efficiency programs.

14 **II. Background on SB 838**

15 SB 838 established the Renewable Portfolio Standard. However, it also included  
16 a section that provided a funding mechanism for additional energy efficiency:

1 (1) In addition to the public purpose charge established by ORS 757.612,  
2 the Public Utility Commission may authorize an electric company to  
3 include in its rates the costs of funding or implementing cost-effective  
4 energy conservation measures implemented on or after the effective date  
5 of this 2007 Act. The costs may include amounts for weatherization  
6 programs that conserve energy.

7 (2) The commission shall ensure that a retail electricity consumer with a  
8 load greater than one average megawatt:

9 (a) Is not required to pay an amount that is more than three percent of the  
10 consumer's total cost of electricity service for the public purpose charge  
11 under ORS 757.612 and any amounts included in rates under this section;  
12 and

13 (b) Does not receive any direct benefit from energy conservation measures  
14 if the costs of the measures are included in rates under this section.<sup>1</sup>

15 For purposes of this docket, the key provision is: “[t]he commission shall ensure  
16 that a retail electricity consumer with a load greater than one average megawatt...[d]oes  
17 not receive any direct benefit from energy conservation measures if the costs of the  
18 measure are included in rates under this section.” This sets up an easy test to see if the  
19 Commission is complying with this law:

20 **Are customers with loads greater than 1 aMW receiving “any direct benefit”**  
21 **from energy conservation measures” included in rates under SB 838?**

22 If the answer to this question is yes, then SB 838 is being violated.

23 **A. Today's SB 838 Energy Efficiency is a Larger Resource than Originally**  
24 **Proposed.**

25 In 2007, when PGE proposed to include a section on energy efficiency in SB 838,  
26 the purpose was to secure a discreet energy efficiency potential that was identified in  
27 PGE's IRP pertaining to "small and medium sized businesses, schools and moderate-

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<sup>1</sup> SB 838, Section 46 (codified as ORS 757.689).

1 income residential customers."<sup>2</sup> At the time, PGE also proposed to exempt large  
2 customers from paying for these programs. CUB was concerned that this would lead to  
3 large customers receiving an increasing share of the existing SB 1149 funding,<sup>3</sup> while  
4 small customer energy efficiency would be shifted to SB 838 funding. CUB argued that  
5 this could lead to the unfair circumstance where all customers help fund large customer  
6 EE but only small customers fund small customer EE. Accordingly, PGE agreed to cap  
7 the amount of industrial EE at the current share of SB 1149 dollars and CUB supported  
8 the amendment to the RPS.

9         Since that time, there have been significant changes. SB 838 no longer funds a  
10 small number of discreet programs that were not contained within the 3% public purposes  
11 charge. SB 838 is now the primary source of funding for the energy efficiency resource  
12 that is purchased on behalf of the utility.

13         Originally, the total amount collected was 93 cents per month or a 1.1% increase  
14 for residential customers.<sup>4</sup> PGE proposed to collect \$13.9 million annually for  
15 incremental ETO programs through 2012.<sup>5</sup> Today, that amount has grown by more than  
16 300% to \$51.1 million.<sup>6</sup> In 2014, ETO's projected income from PGE for SB 1149  
17 efficiency was \$34.2 million and for SB 838 efficiency was \$51.1 million.<sup>7</sup>

18         Energy efficiency is handled by the utility as an expense, not a capital investment.  
19 This means that dollars are spent in one year, and those dollars produce a stream of  
20 efficiency savings over the life of the efficiency measures. The chart below shows the

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<sup>2</sup> UE 283/PGE/2200/Tinker - Robertson/8.

<sup>3</sup> SB 1149 was legislation that established the public purpose charge, a portion of which funds energy efficiency programs.

<sup>4</sup> PGE Advice Filing -7-25 supplemental.

<sup>5</sup> PGE advise filing 07-25.

<sup>6</sup> ETO 2014 budgeted amount for SB 838 PGE revenues. ETO 2014 Annual Report to OPUC & Board of Directors, page 28, April 15, 2015.

<sup>7</sup> Ibid.

1 SB 838 energy efficiency acquisition since SB 838 went into effect. The dollars spent in  
 2 2008 will save an average of 2.1 MWa annually and the average life of the measures  
 3 purchased in 2008 is 11.1 years. The chart demonstrates this graphically by showing the  
 4 stream of the resources that is purchased each year. In 2008, the stream was 2.1 MWa  
 5 per year, and by 2013 the latest stream was 18.18 MWa per year. Because each stream of  
 6 resource is active until the end of the useful life of the efficiency measures, however, the  
 7 active streams accumulate. This means that in 2008, there was only the stream of  
 8 efficiency purchased that year, or 2.1 MWa. In 2013, there were 6 streams that add up to  
 9 a total 2013 SB 838 energy efficiency resource of 62.89 aMW. This is more than 30  
 10 times the 2008 resource.

11

12 SB 838 Resource Stack by mWa savings per year

13

		mWA	mWA	mWA	mWA	mWA	mWA	mWA	mWA	mWA	mWA	mWA	mWA	mWA	mWA
Year procured	avg meas. life (yrs)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2008	11.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	0.21		
2009	11.2		4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	0.96	
2010	11.2			7.21	7.21	7.21	7.21	7.21	7.21	7.21	7.21	7.21	7.21	7.21	1.442
2011	11.3				13.24	13.24	13.24	13.24	13.24	13.24	13.24	13.24	13.24	13.24	13.24
2012	11.3					17.36	17.36	17.36	17.36	17.36	17.36	17.36	17.36	17.36	17.36
2013	11.7						18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18
2014															
2015															
2016															
cum		2.1	6.9	14.11	27.35	44.71	62.89	62.89+	62.89+						

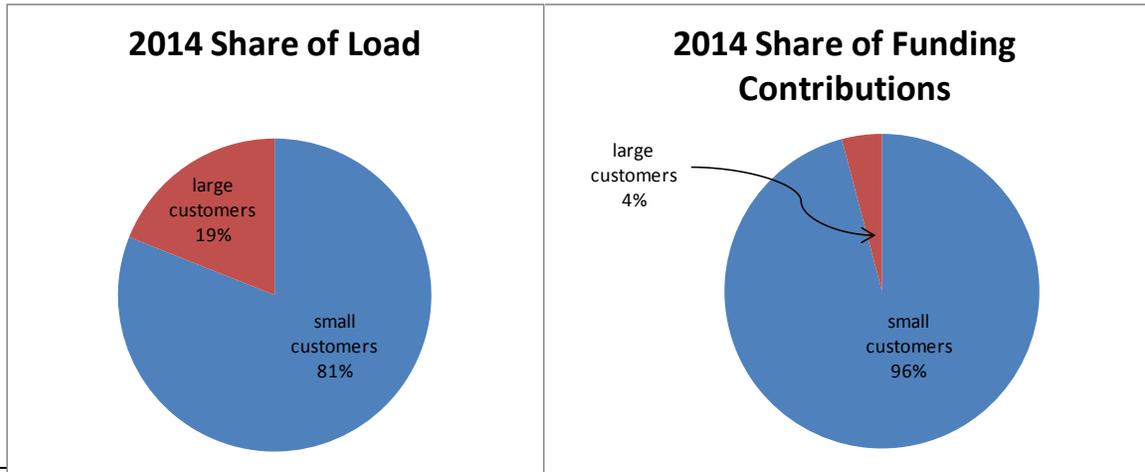
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1 SB 838 is no longer a mechanism to pick up some discreet items that were not  
2 being covered by the public purposes charge. This is now funding as much as 60% of the  
3 EE resource.

4 PGE’s residential customers pay more for SB 838 conservation than they do for  
5 SB 1149 conservation. PGE charges residential customers 0.318 cents per kWh for SB  
6 838 conservation.<sup>8</sup> SB 1149 public purposes charges are collected through a 3%  
7 surcharge on rates, with 56.7% of the surcharge going to ETO funded conservation.<sup>9</sup>  
8 According to the 2013 PUC Oregon Utility Statistics, PGE’s 2013 residential average  
9 consumption was 10,582 kWh and the average residential revenue was \$1106/year.<sup>10</sup>  
10 From these numbers, we can calculate that the average SB 838 charge was \$33.60 and the  
11 average SB 1149 charge was \$18.80. More than 64% of what residential customers pay  
12 for conservation is collected through SB 838.

13 The chart below, which includes SB 1149 efficiency, makes clear how disparately  
14 conservation collections are placed on residential and small commercial customers of  
15 PGE:<sup>11</sup>



<sup>8</sup> PGE Rate Adjustment Schedule 109, page 1.

<sup>9</sup> PGE Rate Adjustment Schedule 108, page 2.

<sup>10</sup> OPUC, 2013 Oregon Utility Statistics, page 11.

<sup>11</sup> See CUB Attachment C.

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2 SB 838 is no longer an incremental program that builds on the SB 1149 program.  
3 Instead, SB 838 is the primary source of energy efficiency funding for PGE.

4 Additionally, we are now at a point where there is large customer EE that will not  
5 be able to be acquired with the SB 1149 funds without increasing the percentage of SB  
6 1149 funds that are allocated to that class. There have been several occasions, such as the  
7 2014 ETO Round Table discussion on this issue, where parties have proposed that we  
8 simply lift that cap and allow as much of the SB 1149 funds go to industrial customers as  
9 necessary to acquire all cost effective EE. This leads to the circumstance that CUB was  
10 concerned about when PGE first proposed this scheme—that all customers, including  
11 small customers, would pay for large customer EE programs but only small customers  
12 would pay for small customer EE.

13 **B. The Purpose of Conservation.**

14 CUB believes that the perspective around conservation is important. The ETO  
15 secures conservation resources from the customer (large or small) on behalf of the utility  
16 for the benefit of the utility and its customers. Incentive payments are not transfer  
17 payments or redistributions of wealth. They are an incentive tool employed by the ETO  
18 to encourage customers/retailers/manufacturers to build a resource that benefits the utility  
19 -- utilities do not pursue conservation to provide an incentive to customers. Incentives  
20 are a cost component of the resource. In many respects, incentive payments for EE are  
21 little different than purchases of coal or natural gas to use as fuel in a power plant –  
22 particularly if the fuel was purchased from an entity that was also a customer of the

1 utility. Rather than being a benefit of efficiency programs, incentive payments are part of  
2 the cost of the programs.

3 There are countless documents from rate cases, IRPs, ETO oversight  
4 proceedings, and other proceedings that discuss energy efficiency. CUB can find none,  
5 other than the implementation agreement following SB 838, where incentive payments  
6 are considered a benefit of EE.

7 The ETO, in its development of cost-effectiveness, lists five benefits of EE:

- 8 ■ avoided costs
- 9 ■ reduced transmission
- 10 ■ reduced risk
- 11 ■ reduced fuel costs,
- 12 ■ and non-energy benefits, such as reducing consumer of water with low  
13 flow showerheads.<sup>12</sup>

14 Of these, the primary benefit has been the avoided cost of having to meet this additional  
15 load. The impact of EE here is extremely significant. Since 1980, Oregon households  
16 and businesses have realized energy efficiency and conservation savings equivalent to  
17 eight to ten power plants.<sup>13</sup> Those eight to ten power plants would have been added to  
18 rates. In addition, they would have diluted the share of system load that is met with low-  
19 cost hydro, and they would likely have contributed additional carbon emissions, which  
20 would have to be addressed by environmental regulations such as 111(d).

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<sup>12</sup> <http://energytrust.org/library/policies/4.06.000.pdf>

<sup>13</sup> [http://www.oregon.gov/Ten\\_Year/Ten\\_Year/Ten\\_Year\\_Energy\\_Action\\_Plan\\_Final.pdf](http://www.oregon.gov/Ten_Year/Ten_Year/Ten_Year_Energy_Action_Plan_Final.pdf)

1 **C. UE 283**

2 CUB raised this issue in PGE’s last rate case and is including the sections of our  
3 testimony that relate to this issue as attachments to these comments. In that docket, CUB  
4 argued that energy efficiency is a resource that is equivalent or superior to generation or  
5 market purchases and that it is unfair for a customer class to be required to secure more  
6 resources that are necessary to meet its load:

7 if the load for a customer class is 43% of the utility system, it does not  
8 make sense that the class should purchase 43% of generation resources,  
9 and 53% of conservation resources. Ideally, that class would fund 43% of  
10 both, or less than 43% of generation resources and more than 43% of  
11 conservation resources (or vice versa, in either case, so that the weighted  
12 average of all the resources that the customer class funded was equal to  
13 my burden on the system). In the current system, small customers, when  
14 accounting for conservation, are funding a larger portion of the resources  
15 than is their burden on the system planning.<sup>14</sup>

16 CUB proposed including energy efficiency as a marginal resource in the marginal  
17 cost of service study as a method to ensure that customers paying SB 838 charges are  
18 receiving the economic benefits of those charges. In response to our testimony, PGE  
19 offered sympathy, but no mechanisms to correct the disparate treatment: “PGE  
20 understands the fairness issues being raised by CUB, including concerns that residential  
21 customers are paying disproportionately for energy efficiency.”<sup>15</sup> The PUC Staff was  
22 also "sympathetic" to CUB's concerns, but offered no mechanisms to correct the  
23 inequity.<sup>16</sup>

24 CUB reluctantly agreed to settle that issue in exchange for a new docket that was  
25 focused on this issue with the hopes that this docket can move from sympathy to  
26 solutions.

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<sup>14</sup> UE 283 -CUB/200/Jenks-McGovern/20.

<sup>15</sup> UE 283 - PGE/1600/Tinker--Liddle/26.

<sup>16</sup> UE283 - Staff/1300/Compton-Bhattacharya/3.

1           It is not clear, however, that this docket will have any more success in resolving  
2 this issue than did the rate case. The formation of this docket settled the issue for the  
3 purposes of UE 283 and avoided the need for the Commission to decide whether,  
4 contrary to the law, large customers receive a direct benefit from SB 838 funded  
5 conservation. However, if this policy docket fails to resolve the issue, it will again be  
6 before the Commission as a factual issue in a rate case.

7           With this background, CUB will now discuss the questions to be addressed in this  
8 docket.

### 9   **III. CUB’s Comments on the Issues**

#### 10   **A. Are customers with loads greater than 1 aMW receiving a direct benefit from** 11    **conservation measures funded by amounts collected pursuant to SB 838?**

12           Yes. First, it is important to recognize that SB 838 refers to “any direct benefits,”  
13 not a specific direct benefit. Some have argued that incentive payments are a benefit –  
14 though as we have shown above, they are generally not considered a benefit, but instead  
15 reflect the cost of the efficiency. Even if one were to consider incentive payments as a  
16 direct benefit, this does not mean that there are not other direct benefits. Another way to  
17 phrase this question would be "are customers with loads greater than 1 mWa receiving  
18 any benefits that are not indirect from conservation measures funded by amounts  
19 collected pursuant to SB 838?"

20           CUB offers the sections of its UE 283 Response and Rebuttal Testimony that  
21 dealt with these issues as Attachments A and B. The analysis presented demonstrates  
22 that large customers are receiving a direct benefit from SB 838 funds. We showed that if  
23 PGE accounted for small customers’ share of conservation funding when allocating

1 energy costs, residential and small commercial rates would go down and large customer  
2 rates would go up. Large customers receive lower rates as a result of SB 838 funding.  
3 This is clearly a direct benefit.

4 SB 838 conservation funds are allowing utilities to avoid having to purchase  
5 higher cost resources and this benefits all customer classes. This is a factual issue, not a  
6 policy issue. If large customer rates are materially lower as the result of SB 838 funds,  
7 then there is a direct benefit. The customer pays lower bills, and has higher profits.  
8 While some would like to avoid this issue by saying that lower rates are an indirect  
9 benefit and not captured by the phrase "any direct benefit," this makes little sense,  
10 because lower cost procurement of resources to meet load is the purpose of energy  
11 efficiency programs. Beyond being illogical, it is Orwellian to label the very purpose of  
12 energy efficiency as an indirect effect, and something unrelated to the purpose, as the  
13 direct effect of the programs.

14 If, rather than rest the foundation of energy efficiency on a foundation of the  
15 semantics of "direct" and "indirect," we examined the real tangible benefits of energy  
16 efficiency, CUB believes that several benefits can easily be proven:

- 17 • Conservation is a resource that is identified in the IRP and is acquired as part of a  
18 least cost procurement strategy. The lower costs associated with conservation are  
19 purchased on behalf of the utility's system and distributed to all customers,  
20 including those with loads that are greater than 1aMW.
  
- 21 • Energy efficiency is expensed each year, but the benefits are derived over the life  
22 of the energy efficiency measures. This means that in any year customers are  
23 benefiting from the fact that the utility is gaining the benefits of conservation paid  
24 for in previous years. The accumulated energy efficiency between the start of SB  
25 838 funding and last year has all been paid for and is all contributing to lower  
26 system costs which benefit all customers this year.

- 1 • Energy Efficiency is a way to reduce carbon emissions and directly qualifies as a  
2 compliance measure under 111(d). Large customers will benefit if SB 838 funds  
3 are used for compliance thereby reducing the need for other more expensive  
4 compliance activities which require funding from all customers. Even if 111(d) is  
5 rejected by lawsuits, SB 838 conservation will reduce carbon emissions and will  
6 reduce the cost of complying with future carbon regulation.

7 **B. What is the meaning of “any direct benefit” as used in ORS 757.689(2)(b)?**

8 Precedence abounds for the interpretation of the “direct benefits” of energy  
9 efficiency in contemporary literature and studies.<sup>17</sup> There is general consensus that  
10 energy efficiency programs bring direct benefits to all customers:

11 Direct benefits include lower costs for energy generation, transmission and  
12 distribution, improved system reliability, dampened price volatility in  
13 wholesale markets, and the possibility of delaying or deferring costly  
14 system upgrades<sup>18</sup>

15 This is not a novel view. Lawrence Berkeley National Laboratory identify direct  
16 benefits as “energy cost and non-energy operational savings”<sup>19</sup> What is novel, is the idea  
17 that any direct benefits that may accrue to the system and customers exclude these  
18 significant positive impacts of energy efficiency. But currently, for the purposes of SB  
19 838, direct benefits seems to be interpreted to mean only incentive payments made to  
20 encourage a customer to install an energy efficiency measure. This makes little sense.

21 First, the plain wording of the statute is clear—the phrase “any direct benefits”  
22 contains the word “any.” Incentive payments, even if considered a benefit and not a cost,  
23 are not the only direct benefits that occur when a utility invests in cost-effective  
24 efficiency.

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<sup>17</sup> <http://www.leonardo-energy.org/blog/compendium-many-benefits-energy-efficiency>  
<https://www.iea.org/Textbase/npsum/MultipleBenefits2014SUM.pdf>  
<http://energycoalition.eu/sites/default/files/Energy%20Savings%202030%20IEEP%20Review%20of%20Cost%20and%20Benefits%20of%20Energy%20Savings%202013.pdf>

<sup>18</sup> <http://www.leonardo-energy.org/blog/compendium-many-benefits-energy-efficiency>

<sup>19</sup> <http://emp.lbl.gov/sites/all/files/incorp-nonenergy-benefits-aceee.pdf>

1           Second, while this has previously been applied exclusively to incentive payments,  
2 CUB can find no other circumstance where the Commission, utilities or the ETO defines  
3 incentives as a direct benefit of energy efficiency. Incentives are part of the cost of the  
4 program. The utility purchases the least cost resource. It just happens that that resource is  
5 being purchased from customers.

6           Third, during the legislative session, PGE defined this to mean that large  
7 customers would not see their share of SB 1149 expenditures increase. This is where the  
8 cap on large customer EE expenditures began.

9           Fourth, defining incentives as a direct benefit may affect other programs.  
10 Upstream incentives are incentives that are not paid to the customer, but are paid to  
11 manufactures or retailers to get them to produce, stock or promote a product. It has  
12 proven to be a cost-effective approach to energy efficiency. But if SB 838 is interpreted  
13 to prohibit incentives to large customers, ETO and NEEA may need to start screening  
14 their upstream incentives to make sure that none of those incentives are going to entities  
15 that are also large customers.

16           In a related point, one might address the idea that if lower system costs are to be  
17 excluded from the category of ‘direct benefits,’ then they clearly must be assigned to the  
18 category “indirect benefits,” as lower system costs are clearly a benefit of energy  
19 efficiency to all customers. However, in existing literature, indirect benefits are generally  
20 recognized to be defined as non-energy benefits:

21           The impact of industrial energy efficiency measures is routinely calculated  
22 in terms of energy savings, and often greenhouse gas abatement, but  
23 industrial energy efficiency projects can also generate multiple benefits for  
24 companies and the economy. These include indirect or “non-energy  
25 benefits” such as operations and maintenance (O&M) savings, immediate  
26 and future capital cost avoidance, and avoided compliance costs associated

1 with meeting environmental regulatory requirements. Monetary savings or  
2 gains from these outcomes can contribute to increased company-level  
3 productivity, profitability and competitiveness. From a wider perspective,  
4 energy efficiency projects can contribute to sector-wide or industry-wide  
5 improvements in terms of international competitiveness, industrial  
6 productivity and other values for society such as the creation of wealth and  
7 jobs.<sup>20</sup>

8 The Small Business Administration concurs with this assessment, listing indirect  
9 benefits as:

- 10 • Enhanced Employee Productivity
- 11 • Reduced Operations and Maintenance Costs
- 12 • Increased Customer Comfort
- 13 • Increased Asset Value
- 14 • Enhanced Public Image<sup>21</sup>

15 CUB could not find a single source that characterized lower system costs, or  
16 energy savings (in dollars or usage) as indirect benefits. Compounded with the lack of  
17 ability to define lower energy costs as a direct benefit, nor an indirect benefit, logic  
18 would lead us to the fallacy that lower energy system costs are no benefit at all. CUB  
19 objects this potential view.

20 **C. Are there any barriers that prevent the ETO from obtaining all cost-effective**  
21 **energy efficiency?**

22 Yes. According to the ETO:

23 Passed in 2007, Oregon’s Renewable Energy Act, SB 838, authorized the  
24 OPUC to approve the collection of additional electric efficiency funds  
25 from PGE and Pacific Power customers using less than one aMW per  
26 year. Customers using more than 1 aMW do not pay these supplemental

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[http://www.iea.org/media/workshops/2014/eeu/industry/IEA\\_Industrialnonenergybenefitsbackgroundpaper\\_FINAL.pdf](http://www.iea.org/media/workshops/2014/eeu/industry/IEA_Industrialnonenergybenefitsbackgroundpaper_FINAL.pdf)

<sup>21</sup> <https://www.sba.gov/content/indirect-energy-saving-benefits>

1 charges and may not benefit from this funding. SB 838 does not address  
2 voluntary payment of supplemental efficiency charges.

3 Energy Trust efficiency programs are not funded on a strict funds-in,  
4 funds-out basis, yet the SB 838 limitation implies such a logic. To ensure  
5 compliance with the limitation, after 2007, Energy Trust, the OPUC, PGE,  
6 Pacific Power and stakeholder organizations including the Citizens' Utility  
7 Board of Oregon, CUB, and the Industrial Customers of Northwest  
8 Utilities, ICNU, informally agreed that Energy Trust will keep funding for  
9 large customer incentives to the historic proportion of SB 1149. If large  
10 customer incentives exceed the pre-2007 percentage of SB 1149 funding,  
11 Energy Trust would have two years to align these incentives with the  
12 historic allocation.

13 Due to success of the programs in delivering high volume and low-cost  
14 savings to large customers, incentives to these customers have grown.  
15 Given current trends in program investment, spending for large customers  
16 in PGE's service territory will need to be curtailed in approximately 2015  
17 or sooner. This funding limitation means that Energy Trust may not be  
18 able to secure all cost-effective efficiency from these customers.<sup>22</sup>

19 PGE agrees that this is about to happen:

20 PGE does foresee potential barriers within the next five years to achieving  
21 all cost-effective energy efficiency (EE) in the IRP. To highlight one such  
22 barrier and as discussed in PGE's Response to CUB Data Request No.  
23 026, large-user funding limitations could become a barrier to achieving all  
24 cost-effective EE savings in that business sector. Project interest for this  
25 customer group has been much higher in the past three years than the  
26 years against which the funding cap is measured. We expect this trend of  
27 interest to remain steady or increase, largely in the semiconductor  
28 industry, hospitals, and colleges and universities with a range of cost-  
29 effective projects.<sup>23</sup>

30 The Commission has also recognized that without "legislative or regulatory action" to fix  
31 this problem, some cost-effective energy efficiency will not be achieved:

32 We recognize PGE's commitment to work with the ETO to identify and  
33 pursue future cost-effective EE measures, as well as the concerns raised  
34 about the SB 838 funding cap.

35 We acknowledge PGE's Action Item (2)(a) as revised to read:

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<sup>22</sup> Brief: Energy Trust of Oregon Energy Efficiency Programs June 7, 2013 page 26 of 34.

<sup>23</sup> UE 283/CUB Exhibit 105.

1 114 MWa of cost-effective Energy Efficiency (EE) by 2017, with a  
2 target increase to 124 MWa in the event that statutory cost  
3 limitations are relieved through legislative, or other appropriate  
4 regulatory, action.

5 We share concerns that, without legislative or regulatory action, PGE may not be  
6 able to achieve all cost-effective EE. We note that the parties to PGE's pending  
7 rate case, docket UE 283, have submitted a stipulation recommending the  
8 Commission open a new docket to address, among other things, solutions to any  
9 barriers that prevent the ETO from obtaining all cost-effective energy  
10 efficiency.<sup>24</sup>

11 **D. If such barriers exist, what other options exist to gain all cost-effective energy**  
12 **efficiency, including from customers with loads greater than 1 aMW?**

13 The barrier to acquiring EE is caused by the interpretation of incentives as direct  
14 benefits. But as we have said, there is no other place where incentives are described as  
15 benefits of EE. We are attempting to acquire EE at the least cost. If paying an incentive  
16 to a customer will get that customer to put up their own money for the non-incentive cost  
17 of an EE project and if the cost of that program is the least-cost way to acquire the  
18 resource that we need to meet load, we do it.

19 But if we align the definition of direct benefit with the basic purpose of energy  
20 efficiency programs, we recognize that the direct benefit to the utility and to customers  
21 from EE is lower cost procurement of energy for the utility system, then there is little  
22 barrier to acquiring more large customer EE. Recognizing this would require that the  
23 direct benefits of SB 838 funded EE (lower system costs to the utility) be tracked in some  
24 manner and allocated only to the customers who are funding those programs. Once the  
25 benefits of EE are shared with the customers who fund the EE, it no longer is relevant  
26 whether the large customer share of SB 1149 EE increases or if SB 838 funded EE

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<sup>24</sup> OPUC Order No. 14-415, page 8.

1 programs aimed at large customers. There would no longer be a barrier to acquiring all  
2 cost-effective EE. Even if the Commission continued to consider incentive payments  
3 within the definition of “any direct benefits,” the barrier would be removed because the  
4 allocation of SB 1149 could increase, because removing the cap on SB 1149 expenditures  
5 would no longer be unfair.

6 In UE 283, CUB proposed using the marginal cost of service study as a way to  
7 ensure that the benefits of EE are flowing to the customers who pay for EE. We continue  
8 to believe that our proposal was a reasonable methodology. But at the same time, we  
9 recognize that there could be dozens of alternative methodologies. A marginal cost of  
10 service study is inherently forward-looking. An alternative would be to do an embedded  
11 cost study, which would look at the SB 838 funds spent to date and the benefits that flow  
12 from those dollars today. Rather than allocate generating resources based on long-term  
13 marginal costs, it would calculate the current dollar figure of direct benefits from current  
14 SB 838 EE and allocate that to customers under 1aMW.

15 One outcome for a policy docket is to have the Commission require utilities that  
16 use SB 838 funds to adopt a methodology in their next general rate case that allocates the  
17 direct benefits from SB 838 funded EE to customers under 1aMW.

18 Another alternative is a legislative solution. Staff recommended this in UE 283.<sup>25</sup>  
19 PGE said this may be the only solution.<sup>26</sup> CUB is open to legislative solutions. But CUB  
20 recognizes that there is more discussion about legislative solutions at the PUC than there  
21 is in the legislature. Proposals to kick the can down the road on administrative solutions

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<sup>25</sup> UE 283 - Staff/1300/Compton-Bhattacharya/10

<sup>26</sup> UE 283 - CUB/200/Jenks-McGovern/17

1 while we wait for legislative solutions should be viewed skeptically, unless they are  
2 accompanied by a commitment to seek legislation.

3 **E. Should the ETO approach to funding energy efficiency be flexible to take**  
4 **advantage of energy efficiency savings brought about by changes in technology**  
5 **and the economy?**

6 Yes. But currently it is limited by statute and by the unusual interpretation of the  
7 words “any direct benefit.”

8 **F. Should there continue to be a cap on energy efficiency funding provided by the**  
9 **ETO to PGE and PAC customers with loads greater than 1 aMW, and if so,**  
10 **what criteria should be used to set such a cap?**

11 No. There should be no cap on the contributions that large customers provide for  
12 coal, or renewables, or hydro or gas-fired generation and there should be no cap on the  
13 level of funding that the ETO provides to large customers. Procuring the resources that  
14 meet loads at the least-cost should be our goal. One of the core purposes of integrated  
15 resource planning is to treat demand-side and supply-side resources in a similar fashion.  
16 Both are ways to achieve load resource balance.

17 Planning for these resources on an equal basis will not lead to least-cost  
18 procurement if there is a cap on the amount that can be charged to large customers or a  
19 cap on the amount that can be spent acquiring the resource from large customers. In fact,  
20 where a cap on funding prevents the utility from acquiring its least-cost resource, then it  
21 will be required to procure a higher-cost resource.

22 In Oregon, these caps are causing problems. PGE will no longer be able to  
23 purchase all cost-effective efficiency, raising rates for everyone.

1 CUB does not argue in this docket that the level of the cap should be adjusted.  
2 Instead, we have shown that this cap, which was installed as a proxy method to prevent  
3 large customers from receiving direct benefits from SB 838 funds, is no longer a  
4 sufficient or workable proxy. Large customers have become accustomed to enjoying the  
5 benefits of lower system costs through a conservation program that is ingrained into the  
6 utility service and funded by other customers. This is quite clearly defined as free  
7 ridership in every economic context. In this case, we have the worst of both worlds: a  
8 group of customers that opt out of funding, but still receive the benefits of the  
9 conservation. CUB believes that there are solutions, but they do not lie with moving the  
10 cap. Instead, either (1) large customers must pay proportionately into the conservation  
11 program along with all other customers or (2) the customers who continue to pay  
12 disproportionately more to system energy efficiency should receive the full value of  
13 those, and the benefits should not be allowed to be diluted by the larger pool of free  
14 riders. Both of these solutions would eliminate the need for the cap altogether.

15 **IV. Conclusion**

16 CUB strongly believes that it is time that Oregon modernizes its view on energy  
17 efficiency as a resource that will become increasingly important in meeting load in a  
18 sustainable way. Small customers have, up until now, borne the cost of that burden, and  
19 large customers have enjoyed the benefit. It is becoming increasingly evident with  
20 pending environmental regulation and least cost resource procurement that conservation  
21 to meet load is not merely voluntary. As part of an integrated approach to meeting  
22 customer needs in an economic and equitable manner, pricing and participation methods  
23 that correlate benefits with costs should be implemented. This calls for a rigorous

1 analysis on the precedent and legality of allowing some customers to underfund energy  
2 efficiency as a resource while others overfund it. CUB supports an approach where all  
3 customers pay their share of system costs, including energy efficiency, and small  
4 customers do not pay more than their share.

5 This issue will not go away. The level of SB 838 funding continues to grow, and  
6 pending 111(d) rules will require the use of SB 838 funding as a carbon mitigation tool.  
7 Currently the foundation of our largest energy efficiency program is build on a legally  
8 questionable determination that the *direct benefits* of EE programs is unrelated to the  
9 purpose of those programs and the purpose of those programs is simply an *indirect*  
10 *benefit*.

Respectfully submitted,



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1 irrelevant if PGE is actually recovering more than its total net variable power costs since  
2 these include costs associated with wind forecasting error and wind integration. In other  
3 words, there is no reason to fix a problem that does not exist.

#### 4 **IV. Energy Efficiency and Marginal Cost of Service**

5 As we talk about energy efficiency (“EE”) and customer classes, it is important to  
6 recognize that there are two ways in which EE interacts with customer classes: first, ETO  
7 Programs offer incentives to customer classes to achieve savings; second, customer  
8 classes fund ETO EE programs through surcharges on utility bills. These surcharges vary  
9 by customer class. In the testimony that follows, CUB will discuss both the programs  
10 targeting customer classes and the funding charged to customer classes.

##### 11 **A. EE Is An Energy Resource Which Should Be Included In Any Marginal Cost** 12 **Study**

13 Energy efficiency<sup>33</sup> is an energy resource that has been and is being consistently  
14 deployed throughout Oregon, specifically in PGE's service territory. Not only is EE an  
15 energy resource, at 2.4 cents per kWh,<sup>34</sup> it is the most cost effective resource. This  
16 implies, from a least cost/least risk planning point of view, that on the margin, all energy  
17 needs should be first met by EE. In fact, for Oregon residential customers, EE has been  
18 the primary resource added to meet load growth.

19 Therefore, as the go-to energy resource, EE must be included in the modeling of  
20 energy marginal costs. A model of energy marginal costs that excludes EE would be

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<sup>33</sup> CUB uses ETO EE as a minimum EE benchmark, although it recognizes that EE is deployed by other parties and independent of the ETO.

<sup>34</sup> [http://energytrust.org/library/reports/2013\\_ETO\\_Annual\\_Report.pdf](http://energytrust.org/library/reports/2013_ETO_Annual_Report.pdf) at pg 26.

1 both inaccurate and misleading. Fortunately, EE is a tractable, cumulative resource that  
 2 is well documented by both PGE and the ETO.

3 The following table demonstrates the recent acquisition of EE in Oregon through  
 4 programs that target specific customer classes (later on CUB will discuss EE in terms of  
 5 the customer class that funded the resource).

6 **Table 1: ETO EE Programs Targeting Customer Classes<sup>35</sup>**

aMW	commercial	industrial	residential	total	units
2008	8.3	6.7	13.7	28.7	mWa
2009	10.2	7.8	9.3	27.3	mWa
2010	17.2	15.2	12.5	44.9	mWa
2011	18.4	14.8	14.1	47.3	mWa
2012	22.1	14.7	16.1	52.9	mWa
2013	23.4	16.9	15.4	55.7	mWa
2014	23.6	18.9	14.8	57.3	mWa
total	123.2	95	95.9	314.1	mWa

7 EE is a cumulative resource. The 316 mWa of EE will, therefore, accumulate and  
 8 continue to grow and serve Oregon customers year after year. By way of example, once  
 9 a home is weatherized, its load reduction remains permanently off of the servicing  
 10 utility’s system for as long as the home is standing. This means that resources which  
 11 would otherwise have been used in the annual production of the former (pre-  
 12 weatherization) energy load will continue to be spared. To give an idea of the scope of  
 13 the EE investment impact, consider that the total amount of all electric EE deployed by  
 14 the ETO since 2008, serves more energy needs than all of PGE's hydro resources

<sup>35</sup> CUB Exhibit 103 tab ETO tables.

1 combined.<sup>36</sup> All ETO EE specifically acquired from PGE customers, from 2008 to date,  
 2 nearly matches all of the PGE wind resource to date.<sup>37</sup>

3 **Table 2: EE Acquired From PGE Customers (2008-2013)**<sup>38</sup>

PGE specific		
year	amw	units
2008	18.58	mWa
2009	20.4	mWa
2010	25.6	mWa
2011	28.18	mWa
2012	32.23	mWa
2013	35.62	mWa
total	160.61	mWa

4 The impact is even more significant if one includes all EE investment back to  
 5 2002, since the Energy Trust began:<sup>39</sup>

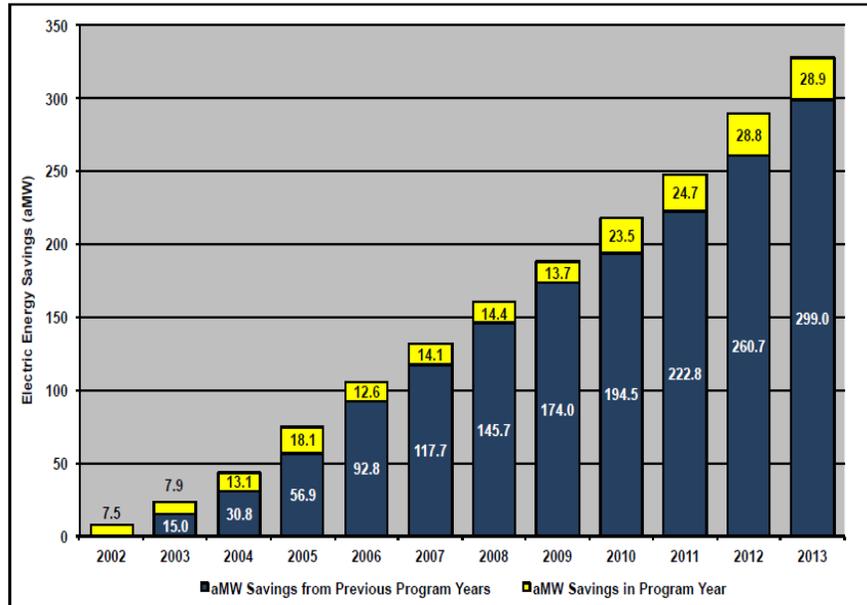
<sup>36</sup> [http://files.shareholder.com/downloads/POR/3215315514x0x738218/180e3b26-c79e-4c3b-998b-77ed43731cf7/Final\\_2013\\_Annual\\_Report.pdf](http://files.shareholder.com/downloads/POR/3215315514x0x738218/180e3b26-c79e-4c3b-998b-77ed43731cf7/Final_2013_Annual_Report.pdf) at page 15, which estimates max hydro energy supplied at 250 mWa

<sup>37</sup> [http://files.shareholder.com/downloads/POR/3215315514x0x738218/180e3b26-c79e-4c3b-998b-77ed43731cf7/Final\\_2013\\_Annual\\_Report.pdf](http://files.shareholder.com/downloads/POR/3215315514x0x738218/180e3b26-c79e-4c3b-998b-77ed43731cf7/Final_2013_Annual_Report.pdf) at page 15, which estimates max hydro energy supplied at 250 mWa

<sup>38</sup> CUB Exhibit 103 tab ETO tables.

<sup>39</sup> CUB Exhibit 103 tab ETO Brief.

Figure 1: Net Electric Energy Savings for Energy Trust Energy Efficiency Programs, 2002–2013



Sources: Calculations by Pinnacle Economics using detailed Energy Trust Program data  
 Notes: 1) Net electric energy savings have been adjusted for Energy Trust True Up. 2) Net electric energy savings include NEEA electric energy savings.

1

2 ***i. EE Is Included In IRP As A Resource***

3 According to PGE’s IRP, the top performing portfolios of resource options to  
 4 meet future demand are all made up of EE, baseload natural gas, RPS-eligible renewables  
 5 and natural gas peaking units:

6 The top three portfolios perform similarly and each could be considered a  
 7 viable candidate for a preferred portfolio. Each of these three candidate  
 8 portfolios follow the above described model of combining EE, base load  
 9 natural gas plants, new renewables to meet RPS requirements, and natural  
 10 gas peaking units to provide capacity.<sup>40</sup>

11 PGE is planning to use EE combined with natural gas plants and renewables to  
 12 meet load growth and natural gas peaking units to provide capacity. The marginal cost  
 13 study should, therefore, reflect these actual marginal resources.

<sup>40</sup> PGE 2013 IRP, Executive Summary, page 207.

1 ***ii. The Governor’s Energy Plan Proposes That All Load Growth Comes From EE***

2 The Governor of Oregon has developed a 10-year energy plan for the State which  
3 emphasizes the use of EE:

4 **The 10-Year Energy Action Plan focuses on three core strategies:**

5 **1. Maximize energy efficiency and conservation to meet 100 percent of**  
6 **new electricity load growth.**

7 Oregon ranks fourth in the nation in energy efficiency. Since 1980,  
8 Oregon households and businesses have realized energy efficiency and  
9 conservation savings equivalent to eight to ten power plants. The result  
10 has been lower energy bills, a cleaner environment, and a thriving local  
11 energy service industry that exports its technology and expertise to the  
12 world. To build on this success, to capture deeper, harder-to-reach  
13 efficiency and conservation opportunities, and to scale them community-  
14 wide, will require new data, new financing tools, rate design changes and  
15 trained workers. The Northwest Power and Planning Council’s 6th Power  
16 Plan states that the region can meet 85 percent of new load growth through  
17 energy efficiency and conservation. This plan calls for Oregon to meet all  
18 new electric load growth through energy efficiency and conservation. We  
19 will start at home. Every occupied state-owned building will establish  
20 baseline energy use, undergo an energy audit and identify cost-effective  
21 retrofits in the next ten years, improving the performance of up to four  
22 million square feet of identified office space and using the state as a  
23 market driver for greater energy efficiency and conservation projects.<sup>41</sup>

24 Whether the expectations is 85% of regional load growth being served by EE as  
25 the Governor quotes from the NPPC or 100% as the Governor calls for within Oregon,  
26 there is little doubt that Oregon plans to rely on EE for the majority of its load growth.  
27 EE truly is the marginal resource.

28 ***iii. The Last 15 Years Of Data Show That EE Has Been The Marginal Cost***

29 The following table compares PGE’s projected residential test year load to actual  
30 load in 2000. It shows that the number of customers has increased by 16%, while the  
31 average monthly usage has decreased by 14%. The result is that while the number of

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<sup>41</sup> Cover letter from Governor John Kitzhaber, page 1, attached to 10-Year Energy Action Plan, December 14, 2012.

1 customers has increased by 16%, the amount of resources needed to serve that new  
2 increased level of customer load has increased by less than 1%.

3 **Table 3: PGE is Meeting Residential Load Growth With EE**

year	residential customers	average load (kWh/month)	total residential load (MWh)
2000 <sup>42</sup>	637,331	11,663	7,433,191
2015 <sup>43</sup>	740,049	10,084	7,462,740
% change	16%	-14%	0.40%

4 **B. EE Is Different Than Other Resources Because Customer Classes Buy It In**  
5 **Different Increments.**

6 Current EE funding has been established legislatively, with all customers funding  
7 EE through the public purpose charge contained in SB 1149 and some customers funding  
8 additional EE from authority granted the Commission in SB 838.

9 **i. SB 1149**

10 In 1999, the Oregon Legislature passed SB 1149 which established a public  
11 purpose charge of 3% and directed that 63% of the 3% public purpose charge go to new  
12 cost-effective conservation and new market transformation programs:

13 Beginning on the date an electric company offers direct access to its retail  
14 electricity consumers, except residential electricity consumers, the electric  
15 company shall collect a public purpose charge from all of the retail  
16 electricity consumers located within its service area for a period of 10  
17 years. Except as provided in paragraph (b) of this subsection, the public  
18 purpose charge shall be equal to three percent of the total revenues  
19 collected by the electric company or electricity service supplier from its  
20 retail electricity consumers for electricity services, distribution, ancillary

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<sup>42</sup> Oregon Utility Statics Guidebook, OPUC, <http://www.puc.state.or.us/docs/statbook2006.pdf>.

<sup>43</sup> UE 283 PGE/1402/Cody/4.

1 services, metering and billing, transition charges and other types of costs  
2 included in electric rates on the effective date of this 1999 Act... .

3 (3)(a) The Public Utility Commission shall establish rules implementing  
4 the provisions of this section relating to electric companies.

5 (b) Subject to paragraph (e) of this subsection, funds collected by an  
6 electric company through public purpose charges shall be allocated as  
7 follows:

8 (A) Sixty-three percent for new cost-effective conservation and new  
9 market transformation;<sup>44</sup>

10 It is important to note that the law required the 3% charge, to be levied, not just  
11 on the energy portion of the bill but on “distribution, ancillary services, metering and  
12 billing, transition charges and other types of cost.” This means that EE collected through  
13 the public purpose charge is charged to customers in a different manner than electric  
14 generation. Electric generation is charged to customers based on their need for energy  
15 and capacity, but not on their use of distribution plant. The result of this is that customer  
16 classes with less energy demand and higher distribution usage will pay more for demand-  
17 side investments (energy efficiency) than those same customers would pay for a supply-  
18 side investment (Port Westward 2 or Tucannon). The customers who use less energy but  
19 more distribution are the customers with smaller individual loads, residential and small  
20 commercial.

21 **ii. SB 838**

22 The Renewable Energy Act, SB 838, allows for the collection of additional funds  
23 for investment in cost-effective EE, but only from customers whose usage falls below  
24 1aMW:

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<sup>44</sup> SB 1149, Section 3: <http://energytrust.org/About/PDF/sb1149.pdf>.

1 SECTION 46. (1) In addition to the public purpose charge established by  
2 ORS 757.612, the Public Utility Commission may authorize an electric  
3 company to include in its rates the costs of funding or implementing cost-  
4 effective energy conservation measures implemented on or after the  
5 effective date of this 2007 Act. The costs may include amounts for  
6 weatherization programs that conserve energy.

7 (2) The commission shall ensure that a retail electricity consumer with a  
8 load greater than one average megawatt:

9 (a) Is not required to pay an amount that is more than three percent of the  
10 consumer's total cost of electricity service for the public purpose charge  
11 under ORS 757.612 and any amounts included in rates under this section;  
12 and

13 (b) Does not receive any direct benefit from energy conservation measures  
14 if the costs of the measures are included in rates under this section.<sup>45</sup>

15 The current interpretation of that law is to maintain industrial programs at the  
16 same percentage of funding as they were before SB 1149. An ETO Briefing Paper states  
17 as follows:

18 Passed in 2007, Oregon's Renewable Energy Act, SB 838, authorized the  
19 OPUC to approve the collection of additional electric efficiency funds  
20 from PGE and Pacific Power customers using less than one aMW per  
21 year. Customers using more than 1 aMW do not pay these supplemental  
22 charges and may not benefit from this funding. SB 838 does not address  
23 voluntary payment of supplemental efficiency charges.

24 Energy Trust efficiency programs are not funded on a strict funds-in,  
25 funds-out basis, yet the SB 838 limitation implies such a logic. To ensure  
26 compliance with the limitation, after 2007, Energy Trust, the OPUC, PGE,  
27 Pacific Power and stakeholder organizations including the Citizens' Utility  
28 Board of Oregon, CUB, and the Industrial Customers of Northwest  
29 Utilities, ICNU, informally agreed that Energy Trust will keep funding for  
30 large customer incentives to the historic proportion of SB 1149. If large  
31 customer incentives exceed the pre-2007 percentage of SB 1149 funding,  
32 Energy Trust would have two years to align these incentives with the  
33 historic allocation.

34 Due to success of the programs in delivering high volume and low-cost  
35 savings to large customers, incentives to these customers have grown.  
36 Given current trends in program investment, spending for large customers  
37 in PGE's service territory will need to be curtailed in approximately 2015

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<sup>45</sup> SB 838, 2007 Legislature; ORS 757.689(2)(b).

1 or sooner. This funding limitation means that Energy Trust may not be  
2 able to secure all cost-effective efficiency from these customers.<sup>46</sup>

3 While EE funded as part of SB 1149 was more heavily weighted towards  
4 residential and small commercial customers than generation costs, EE funded by SB 838  
5 is even more one-sided in its funding. SB 838 funding comes only from customers who  
6 are below 1aMW. While this law prohibits large customers from receiving any direct  
7 benefit<sup>47</sup> from the additional funding contained within the law, as CUB will show below,  
8 the current interpretation of the law nonetheless allows large customers to receive a huge  
9 direct benefit in the form of lower rates due to less expensive resources, which is the  
10 primary benefit to investing in EE.

11 ***iii. Residential Customers Buy Half Of All Efficiency: Without Reflection Of This***  
12 ***Fact In The Marginal Cost Of Service Study, Residential Customers Are***  
13 ***Effectively Buying System Resources.***

14 The Company reports that residential customers (Schedule 7) funded more than  
15 half of all energy efficiency in 2013<sup>48</sup> but residential customers are less than 40% of  
16 system load.<sup>49</sup> However, the ETO reports an ever declining portion of energy efficient  
17 programs targeted at residential ratepayers. ETO projects 2014 to be an all time low for  
18 the proportion of EE programs aimed at acquiring EE from residential ratepayers, while  
19 at the same time residential customers are funding more EE than all the other groups  
20 combined.

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<sup>46</sup> Briefing Paper: Energy Trust of Oregon Energy Efficiency Programs, June 7, 2013, p 25-26

<sup>47</sup> SB 838 Section 46 (2)(b); ORS 757.689(2)(b).

<sup>48</sup> CUB Exhibit 104.

<sup>49</sup> UE 283 PGE/1402/Cody/ 4.

1

**Table 4: EE Programs Targeting Customer Classes<sup>50</sup>**

year	Commercial mWa savings	Industrial mWa savings	Residential mWa savings
2008	28.92%	23.34%	47.74%
2009	37.36%	28.57%	34.07%
2010	38.31%	33.85%	27.84%
2011	38.90%	31.29%	29.81%
2012	41.78%	27.79%	30.43%
2013	42.01%	30.34%	27.65%
2014	41.19%	32.98%	25.83%

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Notice how EE programs targeting Commercial customers have gone from a low of 28.92% in 2008, to the lion's share in 2014 at 41%. Industrial EE programs have followed a similar pattern. On the other hand, residential customers, the class that funds over half of all ETO EE, have seen a decline in programs targeting the residential class. Today, residential programs make up ¼ of ETO EE acquisition, down from almost half of acquired EE the year after SB 838 was passed. The reason for this change is that the class of customers which receives the bulk of the EE programs is not the same class from which those funds are collected.

10

The Energy Trust has stated:

11

12

13

14

15

16

The mix of electric energy savings across programs was approximately the same as in previous years. In 2013, commercial and industrial energy efficiency programs account for 72.4 percent of total electric energy savings (compared to 70.4 percent in 2012). Residential energy efficiency programs account for 27.6 percent of total electric energy savings in 2013 (compared to 29.6 percent in 2012)<sup>51</sup>

17

18

19

The economic rationale behind this decision is reasonable: EE is a resource. The ETO approaches acquiring EE from a least cost perspective and allocates program funding where it will have the most bang for its buck, where the most energy

<sup>50</sup> Exhibit 103 tab ETO tables.

<sup>51</sup> [http://energytrust.org/library/reports/2013\\_Economic\\_Impacts\\_Report.pdf](http://energytrust.org/library/reports/2013_Economic_Impacts_Report.pdf), pg 2.

1 reduction can be earned with each dollar spent, regardless of the source of those  
2 funding dollars. The ETO takes aim at least cost acquisition of a resource called  
3 conservation, which leads to lower system costs.

4 Therefore, in alignment with the ETO mission, to meet EE goals in the most cost  
5 effective manner possible, it may make sense to offer more commercial and industrial  
6 programs than residential programs. The problem, however, is that under the current  
7 structure such funding is not possible.

8 Although CUB understands the economic rationale of the ETO approach, both  
9 CUB and the ETO recognize that the current system is, in fact, broken. Within the next  
10 12-24 months, the ETO predicts that there will still be EE programs, available, in theory,  
11 to industrial customers, but in reality, they will be unattainable. In essence, the ETO will  
12 finally bump up against the industrial "direct benefit" cap and there will be EE left on the  
13 table, EE that Oregon is touted nationally for striving to achieve. However, the EE that is  
14 forecast in the IRP is based on the potential EE and is not adjusted for the artificial cap  
15 placed on industrial programs by the current interpretation of the law. Because this cheap  
16 resource will not be available to the extent planned for in the IRP, PGE will be forced to  
17 find more expensive resources to meet the additional load that could have been avoided  
18 with more up-take of the industrial EE programs. Most important of all, all PGE  
19 ratepayers will pay higher costs because of this failure to gain all cost-effective EE.

20 *iv. By Reflecting EE In The Marginal Cost Of Service Study, All Customers Get What*  
21 *They Are Funding.*

22 Including EE as a marginal resource, and allowing customers to get credit for the  
23 EE that they are funding will, (1) improve accuracy (2) provide the proper economic

1 incentives to invest and (3) fix the broken system, allowing all available energy  
2 efficiency to be achieved.

3 In the following section, CUB will demonstrate its new methodology and the  
4 results obtained there from and will then demonstrate how this new approach to the  
5 marginal cost study improves accuracy, provides proper economic incentives and fixes  
6 the broken system as noted above.

### 7 **C. Including EE In The Marginal Cost Of Service Study**

#### 8 *i. Methodology*

9 The first step to creating a new marginal cost methodology is to identify the  
10 failures of the original model, and how those failures created inaccuracies and  
11 inconsistencies. CUB recognizes that PGE serves customers with embedded resources,  
12 not marginal resources, and that the marginal cost study is a theoretical approach  
13 designed to properly align the incentives of the Company while efficiently serving  
14 ratepayers. That said, CUB also understands that the marginal cost study is intended to  
15 be long run in nature<sup>52</sup>- in line with the IRP- and believes that it should be as accurate as  
16 practicable.

17 The Company models marginal costs from a mix of only traditional resources  
18 (SCCT and CCCT). However, both the Oregon RPS standards require the company to  
19 produce a minimum of 25% of its energy with renewable resources. Moreover, the PGE  
20 IRP clearly identifies EE as an integral resource.<sup>53</sup> CUB finds this approach inconsistent,  
21 and detrimental to implementing accurate EE investment price signals.

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<sup>52</sup> UE 283 PGE/1400/Cody/3, lines 1-4.

<sup>53</sup> PGE 2013 IRP pg 57, table 4 and IRP appendix B.



1

**Table 6: EE Funded By Class As a Marginal Resource<sup>58</sup>**

Rate Schedule	
Schedule 7	53.94%
Schedule 15/515	0.21%
Schedule 32/532	10.54%
Schedule 38/538	0.35%
Schedule 47	0.18%
Schedule 49/549	0.48%
Schedule 83/583	15.16%
Schedule 85/485/585	14.75%
Schedule 89/489/589	1.58%
Schedule 90/490/590	1.72%
Schedule 91/95/591/595	1.07%
Schedule 92/592	0.02%
Total net 400 schedules	100.00%

2

The total amount of EE is then included in the theoretical marginal resource mix.

3

Then, instead of immediately reconciling loads with revenue requirements, CUB first

4

gives each schedule credit for the EE it individually funded and subtracts it from the total

5

scheduled load (gross of EE).

6

Note the difference from the existing practice. Currently, the Company models

7

Schedule loads from actual usage, indirectly internalizing EE applied to each schedule.

8

This means each customer class is affected by the energy efficiency programs that reduce

9

the load from its class rather than the EE that is funded by its class. In this sense,

10

customers that pay less in ETO funds receive more benefits – those customers benefit

11

doubly. They benefit by enjoying lower system costs at the expense of other ratepayers

12

who are funding their EE, they benefit by experiencing reduced loads which also means

13

they are shouldering smaller load portions of system costs.

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<sup>58</sup> CUB Exhibit 103 tab 2015 EE.

1 CUB’s approach improves the marginal cost modeling. In CUB’s marginal cost  
 2 approach, CUB models Schedule loads as the actual portion of system resources, then  
 3 accounts for conservation funded. This gives credit where credit is due, and removes  
 4 double counting. Now each individual load is net of EE, as it needs to be, to calculate  
 5 percentage load for each schedule, and reconcile revenue requirement with forecasted  
 6 load.

7 **Table 7: Calculating the Load Net of EE<sup>59</sup>**

Schedules	Energy Percent per PGE	System mWa allocation gross ETO	EE mWa	system mWa Allocation net ETO	mWa of traditional energy gen
Schedule 7	43.03%	1716.86	431.41	1,285	40.30%
Schedule 15	0.08%	3.22	1.64	2	0.05%
Schedule 32	8.83%	352.17	84.33	268	8.40%
Schedule 38	0.25%	10.17	2.82	7	0.23%
Schedule 47	0.11%	4.26	1.44	3	0.09%
Schedule 49	0.40%	15.94	3.82	12	0.38%
Schedule 83	15.64%	623.98	121.28	503	15.76%
Schedule 85	17.26%	688.46	117.95	571	17.89%
Schedule 89 GT4MW	5.99%	239.16	12.65	227	7.10%
Schedule 90	7.90%	315.01	13.77	301	9.44%
Schedule 91/95	0.49%	19.58	8.52	11	0.35%
Schedule 92	0.02%	0.72	0.13	1	0.02%
<b>TOTAL</b>	<b>100%</b>	<b>3,990</b>	<b>800</b>	<b>3,190</b>	<b>100.00%</b>

8 ***ii. Results Under CUB’s Methodology***

9 Having determined the new load ratios CUB next reconciles these new load ratios  
 10 with the Company’s revenue requirement, and calculates the revenue share of marginal  
 11 energy costs per Schedule.

<sup>59</sup> CUB Exhibit 103 tab model.

1

**Table 8: Marginal Energy Costs<sup>60</sup>**

	CUB	PGE
Schedules	Marginal Energy Costs	Marginal Energy Costs
Schedule 7	\$393,157.37	\$419,840,573
Schedule 15	\$483.64	\$787,636
Schedule 32	\$81,920.00	\$86,120,231
Schedule 38	\$2,247.14	\$2,486,765
Schedule 47	\$863.24	\$1,042,147
Schedule 49	\$3,706.28	\$3,897,406
Schedule 83	\$153,751.41	\$152,587,547
Schedule 85	\$174,492.40	\$168,355,667
Schedule 89 GT 4 MW	\$69,277.36	\$58,482,927
Schedule 90	\$92,136.62	\$77,032,786
Schedule 91/95	\$3,382.35	\$4,788,047
Schedule 92	\$180.65	\$176,735
<b>TOTAL</b>	<b>\$975,598,466</b>	<b>\$975,598,466</b>

2

3

CUB then adds the additional costs for distribution, transmission, customer

4

service and other charges,<sup>61</sup> to discover how this marginal cost methodology changed

5

PGE’s allocated costs.

<sup>60</sup> CUB Exhibit 103 tab model.

<sup>61</sup> UE 283 PGE/1404/Cody/1-2.

1

**Table 9: Change in Cost Allocation<sup>62</sup>**

Schedule	PGE Power Supply	CUB Power supply	CUB Cost Allocation	PGE Allocation	Schedule Change From PGE 2015
7	\$419,841	\$393,157	\$853,269	\$879,952	-3.03%
15	\$788	\$484	\$3,447	\$3,751	-8.11%
32	\$86,120	\$81,920	\$163,985	\$168,185	-2.50%
38	\$2,487	\$2,247	\$5,475	\$5,715	-4.20%
47	\$1,042	\$863	\$4,867	\$5,046	-3.54%
49	\$3,897	\$3,706	\$15,644	\$15,835	-1.21%
83	\$152,588	\$153,751	\$237,086	\$235,923	0.49%
85	\$168,356	\$174,492	\$244,969	\$238,833	2.57%
89	\$58,483	\$69,277	\$86,700	\$75,906	14.22%
90	\$77,033	\$92,137	\$99,351	\$84,247	17.93%
91&95	\$4,788	\$3,382	\$15,855	\$17,260	-8.14%
92	\$177	\$181	\$251	\$247	1.68%
total	\$975,598	\$975,598	\$1,730,900	\$1,730,900	0.00%

2 The results show exactly what one would expect. The customer classes that are  
3 purchasing additional EE through SB 838 show their costs going down once those classes  
4 are credited for the amount of EE they are purchasing. The classes that have avoided  
5 paying for EE find their costs going up once they no longer are getting credit for the  
6 amount of EE being purchased by other classes of customers.

#### 7 **D. Potential Variable: Apply Methodology to SB 838 Only**

8 CUB's analysis was based on accounting for EE from both SB 1149 and SB 838  
9 in the marginal cost study. From a theoretical marginal cost basis, there is no reason not  
10 to account for both of these funding sources. However, CUB recognizes that large  
11 customers are not prohibited from receiving a direct benefit from the SB 1149 programs

<sup>62</sup> CUB Exhibit 103 tab results.

1 and the requirement that these funds be collected across all charges, including  
2 distribution, is part of the law. Therefore, CUB recognizes that one variation on our  
3 approach could be to include EE in the marginal cost study but to limit that to the SB 838  
4 EE funds. This will reduce the impact of our proposed marginal cost methodology  
5 change.

#### 6 **E. Customer Impact Offset**

7 It is important to recognize that CUB is not proposing that rates be rebalanced to  
8 the full extent shown here all at one time. The imbalance shown in CUB's charts grew  
9 over time since the passage of SB 1149 and the creation of the ETO. I Given this fact, it  
10 would not, therefore, be unreasonable to spread the correction of the imbalance over an  
11 equal amount of time.

12 CUB notes that PGE's rate spread includes a Customer Impact Offset ("CIO")  
13 which PGE has designed to prevent any customer class from seeing an increase greater  
14 than 12%. The CIO could also be used to reduce the impact of implementing this change  
15 in marginal cost methodology. This could be done by adjusting the number for the  
16 overall rate hike ceiling from 12% to whatever is believed to be reasonable. Or, a second  
17 component of the CIO could be implemented that would phase in this marginal cost  
18 adjustment by only implementing a certain percentage of it (10%, 25%, 50%).

### 19 **V. Overcoming the Cap on Industrial EE**

#### 20 **A. PGE Is Reaching Its Current Cap On Industrial EE Programs And Will Soon** 21 **Be Leaving Industrial EE On The Table.**

22 Even if each schedule appropriately gets load credit for that which they funded,  
23 larger customers will continue to receive a larger portion of programmatic funds from the

1 ETO, simply because large conservation projects tend to be more cost effective. CUB's  
2 marginal cost approach does not attempt to undo or change the practices of the ETO. The  
3 ETO's programmatic decisions and their savings per dollar results speak volumes for  
4 themselves. However, without a new approach at marginal cost, the ETO is in very real  
5 danger of not being able to do its job because it will be unable to continue its industrial  
6 and commercial EE programs. And, the State of Oregon will be in very real danger of  
7 losing conservation projects at the expense of more expensive, higher carbon energy  
8 resources. And all this is because under the current legal interpretation, PGE's industrial  
9 customers will very soon be restricted from receiving additional industrial EE programs  
10 because of the "direct benefit" cap in SB 838. This will mean that PGE's system will no  
11 longer be purchasing all the cost effective EE that is in actuality available.

12 **B. The Direct Benefit Test Is Misplaced.**

13 The primary benefit of EE programs is not the receiving of incentives to  
14 implement cost effective measures, but the benefits brought by the lower costs associated  
15 with the purchase of EE as opposed to other sources of power. The reason we purchase  
16 EE is because it is the least cost/least risk resource and because it reduces costs to the  
17 system. Not only is it less expensive than supply-side resources, by reducing loads, EE  
18 stretches out our hydro base over a wider percentage of load. EE does not need  
19 transmission and EE is not subject to line losses. The direct benefit to all customers  
20 (industrial and non-industrial alike) is the lower cost associated with energy efficiency.  
21 For this reason, it is CUB's position that if the Commission recognized that the direct  
22 benefit of EE is lower power costs, and not the receiving of incentive payments, then the  
23 proper way to implement the SB 838 cap would be to place the cap on the receipt of

1 direct benefits and not on the receipt of incentive payments through EE programs aimed  
2 at a customer class. This could be done by implementing the marginal cost/cost  
3 allocation approach advocated for by CUB. A marginal cost study that takes into account  
4 the source of the EE funding that is paying for the direct EE benefits and then directs the  
5 allocation of those direct benefits to the funding source. So if residential customers were  
6 to purchase all the EE including industrial EE but the benefits of this lower cost resource  
7 were also to flow to residential customers and not to the industrial customers, then  
8 everyone would be operating within the spirit and letter of the law and EE could still be  
9 purchased to its fullest extent.

10 In summary, residential and small commercial ratepayers do not need to be  
11 protected from other customer classes receiving EE programs so long as all EE that  
12 residential and small commercial customers are purchasing (whether residential,  
13 industrial or commercial) is credited directly to the residential and small commercial  
14 customers and not to the other classes. This fulfills the purpose behind the protections  
15 intended to be provided by SB 838 to small customers when it said that while industrial  
16 customers would not be paying for more EE, they could not receive any direct benefits.  
17 And under this approach, there is no reason for residential, small commercial, or any  
18 other class of customers to oppose the funding of industrial energy efficiency programs  
19 with their dollars because those classes will be obtaining credit for all the EE they  
20 purchase.

1 **C. PGE Has Known Of The EE CAP Problem, But Has Not Made Any Proposal**  
2 **To Solve It**

3 It is not just CUB and the ETO who recognize that the limitation of large  
4 customer EE may lead to not acquiring all cost effective EE. PGE itself has also  
5 recognized this:

6 PGE does foresee potential barriers within the next five years to achieving  
7 all cost-effective energy efficiency (EE) in the IRP. To highlight one such  
8 barrier and as discussed in PGE’s Response to CUB Data Request No.  
9 026, large-user funding limitations could become a barrier to achieving all  
10 cost-effective EE savings in that business sector. Project interest for this  
11 customer group has been much higher in the past three years than the  
12 years against which the funding cap is measured. We expect this trend of  
13 interest to remain steady or increase, largely in the semiconductor  
14 industry, hospitals, and colleges and universities with a range of cost-  
15 effective projects.<sup>63</sup>

16 In fact, PGE has been aware of this problem since 2012, but has done little to try to  
17 remove the barriers to achieving all cost-effective EE that is in its IRP.<sup>64</sup> CUB asked  
18 PGE what actions it had taken each year since the Company was made aware of the  
19 problem and the answer really came down to “not much.”

20 **Actions Taken By PGE To Address Industrial EE Barrier<sup>65</sup>**

21 **2012:** PGE learned of the issue from Energy Trust and observed the Energy Trust  
22 Board Retreat in June 2012 where the issue was raised. The issue was discussed  
23 internally by PGE management. No actions were specifically taken to address the  
24 barrier to large-user funding in 2012, since PGE had just become aware of the  
25 possible limitation.

26  
27 **2013:** PGE observed Energy Trust’s Board Retreat in June 2013, where the cap  
28 was discussed in detail, and PGE’s management was alerted to the issue and  
29 reviewed the Energy Trust’s Board Packet materials on the subject.

30  
31 **2014:** PGE has been working closely with Energy Trust to compare compliance  
32 analyses and is in agreement that we are approaching the funding cap. In addition,

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<sup>63</sup> CUB Exhibit 105.

<sup>64</sup> CUB Exhibit 106.

<sup>65</sup> CUB Exhibit 106.

1 PGE attended a multi-stakeholder meeting January 31, 2014 on the topic and will  
2 continue to support Energy Trust in any data related matters and provide feedback  
3 on any program design changes needed if the cap is reached.

4 **D. Implementing CUB’s Proposed Marginal Cost Study In This Case Will Remove**  
5 **The Improper Benefit Industrial Customers Are Receiving.**

6 CUB believes that it is the policy of this Commission that utilities fund all cost  
7 effective EE. Unfortunately, that is coming to an end. According to ETO estimates,  
8 based on the current interpretation of the direct benefit provision of SB 838, these  
9 benefits will end in 2015.<sup>66</sup> CUB believes that the current interpretation of direct benefit  
10 clause is incorrect. The direct benefit of any EE investment is the benefit of a system that  
11 functions at a lower cost and functions more efficiently. Customers benefit from EE  
12 because it lowers the costs of the utility and puts downward pressure on rates. Large  
13 customers benefit for the same reason as all customers. And large customers are  
14 benefiting from SB 838 dollars because those dollars are directly leading to lower costs to  
15 PGE to meet its load. The only way to prevent large customers from receiving this direct  
16 benefit is to ensure that the direct benefit flows to the classes of customers who funded  
17 the purchase of that EE.

18 **E. Implementing CUB’s Proposed Marginal Cost Study Will Allow Residential**  
19 **And Small Business Customers To Purchase All The Cheap EE Available From**  
20 **Industrial Customers Because Residential And Small Business Customers Will**  
21 **Get Credit For That Purchase.**

22 CUB's marginal cost approach does not propose to re-legislate or remove the cap.  
23 The law still clearly states that large customers should not receive any direct benefit from

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<sup>66</sup> SB 838 Section 46; ORS 757.689(2)(b).

1 the additional funding provided by SB 838.<sup>67</sup> CUB’s proposal is consistent with that  
2 principle. CUB’s marginal cost approach directs the benefits of conservation funding to  
3 the purchaser of the conservation, not to the vendor selling the product. This accounting  
4 removes this subsidy from the system. Residential customers can continue to fund the  
5 majority of EE, essentially buying system resources for customers of PGE at 2.7  
6 cents/kwh; the ETO can continue to direct large shares of those programmatic dollars to  
7 large customers; and PGE can give credit to those who pay for EE programs – for  
8 example, the residential ratepayers and small commercial customers of PGE. Since the  
9 direct benefit, which is lower system costs, will go to those who funded the EE, then  
10 those customers will not need to purchase such a large share of the next-best resources,  
11 which are invariably more expensive. In this way, the direct benefit will always go to the  
12 funders of the EE programs, and the direct benefit cap will remain untouched.

13 **F. The Alternative: Removing the Cap on Industrial Funding of EE**

14 Much of this problem is caused because SB 838 allowed additional funding for  
15 EE, but put a cap on the amount of funding that a utility could receive from customers  
16 with loads of more than 1aMW. An alternative to CUB’s approach would be to amend  
17 the law and remove this artificial cap. This would allow all classes of customers the  
18 ability to fund EE least cost/least risk resources.

19 When revisions to SB 838 were being negotiated before this year’s legislative  
20 session, CUB suggested that this is an area where SB 838 should be fixed. CUB found  
21 little support from utilities or from industrial customers for such a change. Removing the  
22 cap would still leave in place a system where small customers fund EE at a greater rate

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<sup>67</sup> ORS 757.689(2)(b).

1 than supply-side resources because EE is being purchased as a charge to all revenues  
2 including distribution, rather than an energy charge.

3 Without the ability to remove the cap on funding of EE, CUB believes the best  
4 mechanism is to give funders of EE credit for that which they are funding.

## 5 **VI. Conclusion**

6 In this testimony, CUB is making the following recommendations:

7 **January 1, 2015 Rate Change.** Rates should not increase on January 1, 2015,  
8 because the record in this case does not support that PGE will be earning outside of its  
9 reasonable range on that date.

10 **Port Westward 2.** CUB is concerned that Post Westward 2 is not being used to  
11 integrate intermittent resources which are a large part of its justification. If the plant is  
12 not going to be used for integration of intermittent resources, then the Commission  
13 should disallow a portion of its capital costs to reflect the difference between the flexible  
14 resource that was described in the RFP and the peaking resource that PGE actually built.

15 **Tucannon.** CUB recognizes that the capacity factor is an important element in  
16 the prudence of a wind facility. CUB believes Tucannon is prudent with the capacity  
17 factor that PGE forecast in its most recent study. However, PGE has proposed that the  
18 capacity factor be updated later after the record in this docket is closed. If PGE's  
19 approach is approved, CUB believes a prudence review must be delayed until the  
20 capacity factor study is completed.

21 **PCAM Carve Out For Renewables.** CUB was a party to the negotiations of the  
22 Renewable Portfolio Standard. The law was not intended to require dollar-for-dollar  
23 recovery of costs associated with renewables. CUB believes PGE has failed to make a

1 RAC, and CUB has to respond to what PGE is requesting. The automatic adjustment  
2 clause was controversial when the RPS was before the legislature due in part to concern  
3 that it would be utilized to allow a utility to recover costs that it could not recover under  
4 other existing ratemaking mechanisms. This is precisely what PGE is now proposing.  
5 CUB and others supporters of the RPS argued that the automatic adjustment clause was  
6 narrowly intended to deal with regulatory lag. PGE's proposal should be rejected  
7 because it is not consistent with the purpose of the automatic adjustment clause.

#### 8 **IV. CUB's Proposal to Include Energy Efficiency in the Marginal Cost** 9 **of Service Study**

10 In our Response Testimony, CUB proposed including energy efficiency in the  
11 marginal cost of service study as an energy resource based on the Company's Integrated  
12 Resource Plan (IRP). Doing so would recognize that different classes of customers are  
13 purchasing these IRP resources in different bundles. Residential and small commercial  
14 customers would purchase more low-cost energy efficiency and less, higher cost gas and  
15 wind; customers above one average Megawatt (1aMW) would purchase less of the  
16 efficiency resource and more gas and more wind. By recognizing who pays for energy  
17 efficiency and by recognizing that the benefit of energy efficiency funding is lowered  
18 system costs, CUB's proposal would remove a barrier to acquiring all cost-effective  
19 energy efficiency.

##### 20 **A. CUB's Modified Proposal to Phase-In Our Marginal Cost Approach.**

21 In Response Testimony, CUB noted that the Commission could use the customer  
22 impact offset (CIO) to phase in our marginal cost approach. Phasing in effects of  
23 marginal cost studies is a traditional tool the PUC uses to avoid rate shock. Therefore,

1 the recognition of potential rate shock, absent the CIO, is not a legitimate argument  
2 against including conservation in the marginal cost study. Because energy efficiency is a  
3 cumulative resource (see below for more discussion of this), this problem has grown to  
4 its current size over time. For this reason, it is reasonable to resolve it over time.  
5 However, as a cumulative resource, this problem will grow worse if not resolved so there  
6 is an urgency to begin making progress.

7 CUB also believes that a legislative solution could be enacted that would remove  
8 the cap on large customers funding energy efficiency. However, PGE has yet to actively  
9 seek a legislative resolution or even propose a legislative concept. This means that for  
10 the time being, the solution must come from the regulatory powers of this Commission.  
11 This Commission does not have the power to require that customers above 1aMW pay  
12 more for energy efficiency, but it does have the power to ensure that customers who pay  
13 for efficiency programs receive the benefits of those programs. And it has the  
14 responsibility to ensure that customers above 1aMW are not improperly benefitting from  
15 SB 838 energy efficiency.

16 For these reasons CUB now proposes that the PUC:

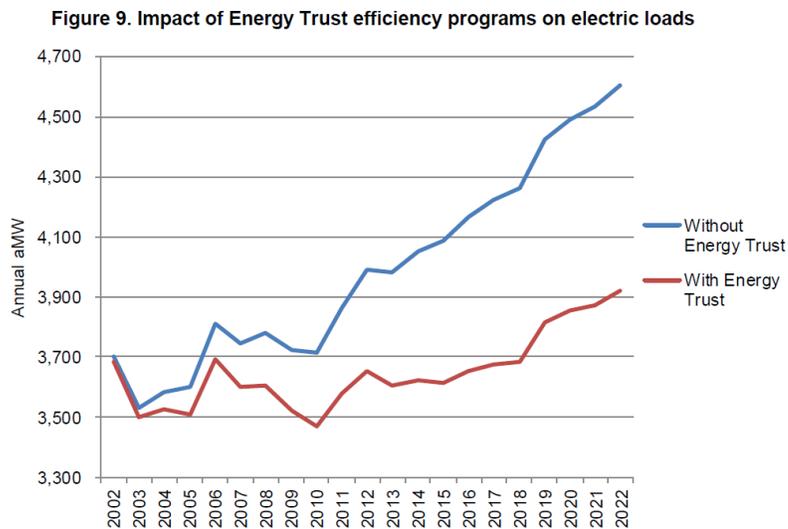
- 17 • Implement CUB’s proposal to add energy efficiency to the marginal cost  
18 of service study.
- 19 • Find that the direct benefit of energy efficiency funding by the utility is  
20 defined as "lower system costs, not customer incentives." This will then  
21 allow additional programs for industrial customers.
- 22 • Offset 90% of the impact of this to each customer class by adjusting the  
23 CIO, as part of a phased approach, with the offset to be reviewed in the  
24 next general rate case.

1 By phasing this in using the CIO, the PUC also allows for legislative solutions as an  
2 alternative approach.

3 **B. Energy Efficiency Resources Are Cumulative and Benefit Customers.**

4 The graph below<sup>10</sup> shows electric loads with and without energy efficiency  
5 programs. We can see the divergence grow over time because energy efficiency is  
6 cumulative.

Brief: Energy Trust of Oregon Energy Efficiency Programs June 7, 2013



7  
8 The measures that are installed this year will continue to reduce loads next year,  
9 but next year we will add another year of energy efficiency programs. Each year, the  
10 difference between what loads would be with and without energy efficiency gets larger.

11 According to the graph above, in 2014, approximately 400 annual aMWs have  
12 been avoided because of ETO programs.<sup>11</sup> At 6 cents/kWh, the cost of meeting this load  
13 would be \$210 million. While this includes both PGE and PacifiCorp customers, there is  
14 no doubt that PGE’s rates would increase significantly if it were not for the ETO

<sup>10</sup> [http://energytrust.org/library/reports/Brief-Energy\\_Efficiency\\_Programs.pdf](http://energytrust.org/library/reports/Brief-Energy_Efficiency_Programs.pdf)

<sup>11</sup> [http://energytrust.org/library/reports/Brief-Energy\\_Efficiency\\_Programs.pdf](http://energytrust.org/library/reports/Brief-Energy_Efficiency_Programs.pdf)

1 programs, including the SB 838 programs. PGE is approximately 60% of ETO’s electric  
2 utility load,<sup>12</sup> which means that PGE customers will save about \$126 million in 2014 due  
3 to energy efficiency programs. While the above graph includes both SB 838 and SB  
4 1149 funds, it needs to be recognized that much of this gap is being funded only by  
5 customers with loads below 1aMW. And that gap is growing. If this issue is not  
6 addressed now, the problem will only grow worse as the benefits of energy efficiency  
7 accumulate.

8 **C. CUB’s Proposal is Consistent With the Language of SB 838.**

9 PGE claims that CUB’s proposal may draw “legal challenges.”<sup>13</sup> A plain reading  
10 of SB 838, however, makes clear that CUB’s proposal is consistent with its provisions.  
11 CUB and PGE are in agreement that SB 838 prohibits industrial customers from paying  
12 for SB 838 energy efficiency programs and prohibits them from receiving a direct benefit  
13 from SB 838 funded energy efficiency.<sup>14</sup>

14 CUB's proposal, however, follows directly from section (2)(a) of SB 838, quoted  
15 below:

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<sup>12</sup> 2012 Utility Statistics, OPUC.

<sup>13</sup> UE 283 PGE/1600/Tinker-Liddle/26.

<sup>14</sup> See UE 283 PGE/1600/Tinker-Liddle/24 and 26.

1 (1) In addition to the public purpose charge established by ORS 757.612,  
2 the

3 Public Utility Commission may authorize an electric company to include  
4 in its rates the costs of funding or implementing cost-effective energy  
5 conservation measures implemented on or after the effective date of this  
6 2007 Act. The costs may include amounts for weatherization programs  
7 that conserve energy.

8 (2) The commission shall ensure that a retail electricity consumer with a  
9 load greater than one average megawatt:

10 (a) Is not required to pay an amount that is more than three percent of the  
11 consumer's total cost of electricity service for the public purpose charge  
12 under ORS 757.612 and any amounts included in rates under this section;  
13 and

14 (b) Does not receive any direct benefit from energy conservation measures  
15 if the costs of the measures are included in rates under this section.<sup>15</sup>

16 As stated above, CUB's proposal is entirely consistent with SB 838. CUB's  
17 proposal is built around removing the direct benefit that industrial customers receive from  
18 SB 838 funded efficiency. CUB is not proposing a supplemental public purpose charge  
19 in addition to the 3% mandated in SB 1149 for customers above 1 aMW. Any suggestion  
20 that CUB's proposal is a roundabout way to indirectly implement a large customer public  
21 purpose charge proxy is unfounded. CUB is simply proposing to more accurately  
22 allocate marginal costs in accordance with the resources secured by each customer class.

23 CUB's approach does not impact the funding of energy efficiency, except to  
24 remove a barrier to increasing the funding provided by customers below 1 aMW. This is  
25 quite easy to demonstrate because SB 838 funding is allocated to customers outside of the  
26 revenue requirement as a surcharge on customers' bills. The marginal cost of service  
27 study is used to allocate the revenue requirement, which does not include energy  
28 efficiency funding. Changing the marginal cost of service study changes the allocation of

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<sup>15</sup> SB 838, Section 46 (codified as ORS 757.689).

1 the revenue requirement, but does not increase the energy efficiency tariffs. This makes  
2 sense because CUB's approach is to reallocate the costs of the resources contained within  
3 revenue requirement. The public purpose charge and supplemental public purpose  
4 charges are charges outside of revenue requirement. Recognizing that residential and  
5 small commercial customers meet a great deal of their load with the energy efficiency  
6 resources means that these customers do not need to purchase as much from higher cost  
7 resources. Conversely, customers with loads that are greater than 1 aMW are meeting  
8 less of their resource needs with energy efficiency, so need to purchase more, higher cost  
9 resources. CUB's approach does reallocate costs, but they are the costs of the non-energy  
10 efficiency resources. This is certainly consistent with the language of SB 838.

11 **D. The Current Approach Violates SB 838 by Providing a Significant Direct**  
12 **Benefit to Large Customers.**

13 SB 838 prohibits large customers from receiving a direct benefit from the  
14 additional measures purchased from SB 838 dollars.<sup>16</sup> Currently, this prohibition is being  
15 violated. To see that customers with loads that are greater than 1aMW are receiving  
16 benefits in violation of the law, one must recognize two facts:

17 **(1) Energy Efficiency is Purchased By the System for the System:**

18 When energy efficiency is purchased by the Company (System), in this case via  
19 the Energy Trust, with funds collected by customers, the direct benefit of energy  
20 efficiency measures are lower cost resources for the System. That is the rationale and  
21 legitimate reason for a utility to purchase energy efficiency.

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<sup>16</sup> SB 838, Section 46(2)(b).



1 cost/kWh of energy efficiency, the ETO does not include costs borne by individual  
2 customers of the utility. That is because the ETO provides resources to the utility's  
3 system at a system cost that is funded by SB 838 and SB 1149 dollars, not customer out-  
4 of-pocket dollars.

5 Second, defining the incentive payment itself as the benefit secured by energy  
6 efficiency programs directly contradicts ratemaking practices. Nowhere in cost-  
7 effectiveness research, OPUC ratemaking, or ETO literature can CUB find reference to  
8 the incentive payment being interpreted as a benefit. In fact, the payment itself is a main  
9 component of the cost of conservation programs.<sup>17</sup>

10 Because it is clear that the direct benefit is not individual load reduction and/or  
11 incentive payments, let us look at the real direct benefit: the avoided investment in  
12 generational resources designed to meet load, resulting in a portfolio of more cost-  
13 effective resources and therefore lower system costs.

14 The Cadmus Group, in determining the benefit of energy efficiency, names only  
15 two benefits: (1) utility avoided supply cost in the UCT and (2) utility avoided supply  
16 cost in the UCT coupled with tax benefits in the TRC.<sup>18</sup> The ETO, in its development of  
17 cost-effectiveness, lists out the five benefits that it considers: avoided costs, reduced  
18 transmission, risk, fuel costs, and non-energy benefits.<sup>19</sup>

19 PGE has identified energy efficiency as a low-risk, least-cost resource:<sup>20</sup>

20 1. The value of the electrical and/or gas energy saved based on the  
21 avoided cost forecasts of the utilities whose customers are served by the  
22 Energy Trust, as reviewed and approved by the PUC. Periodically,  
23 Energy Trust will work with the utilities and PUC to develop an average,

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<sup>17</sup> [http://www.cadmusgroup.com/wp-content/uploads/2012/11/TRC\\_UCT-Paper\\_12DEC11.pdf](http://www.cadmusgroup.com/wp-content/uploads/2012/11/TRC_UCT-Paper_12DEC11.pdf)

<sup>18</sup> *Id.* at pg 2, Table 2.

<sup>19</sup> <http://energytrust.org/library/policies/4.06.000.pdf>

<sup>20</sup> UE 283 CUB/202/Jenks-McGovern/10.

1 or merged cost forecast. This will be done separately for the electric  
2 utilities and gas utilities, so that Energy Trust program decisions are based  
3 on a single set of price forecasts for each fuel. Energy Trust may include  
4 factors such as hedge value, if not considered in the utility forecasts, based  
5 on agreement with the utilities and PUC.

6 2. Non-energy benefits will be quantified by a reasonable and practical  
7 method. Unless and until the OPUC develops an alternative approach,  
8 Energy Trust may use proxies for these benefits where research shows that  
9 the benefits are large, they cannot be practically quantified, and they  
10 clearly influence consumer decisions.

11 3. For electricity, both line losses and avoided Transmission and  
12 Distribution construction.

13 4. Natural gas capacity benefits and benefits from reduced transmission  
14 and delivery losses will be included where significant and quantifiable.

15 5. In addition, the Energy Trust will apply in its analysis the 10% credit  
16 for energy efficiency as required under the Northwest Power Act and  
17 OPUC docket no. UM-551. This credit recognizes the benefits of  
18 conservation in addressing risk and uncertainty.

19 Each of these benefits is a quantifiable measure by which conservation measures  
20 purchased by the system reduce costs for the system. In its testimony, CUB has focused  
21 on how conservation resources have relieved pressure on the generation system.<sup>21</sup> The  
22 system savings solely from an energy perspective are massive:

23 Since 1980, Oregon households and businesses have realized energy  
24 efficiency and conservation savings equivalent to eight to ten power  
25 plants.<sup>22</sup>

26 It should be noted, however, that the energy efficiency benefits to the system  
27 associated with distribution and transmission, capacity and reduced risk were not  
28 captured by CUB's proposal in this case. To that effect, our statements of the magnitude  
29 of savings secured by low cost resources, and consequently disproportionately shared  
30 with large customers, has been conservative.

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<sup>21</sup> included in the Energy Trust's benefit (1)

<sup>22</sup> [http://www.oregon.gov/energy/Ten\\_Year/Ten\\_Year\\_Energy\\_Action\\_Plan\\_Final.pdf](http://www.oregon.gov/energy/Ten_Year/Ten_Year_Energy_Action_Plan_Final.pdf)

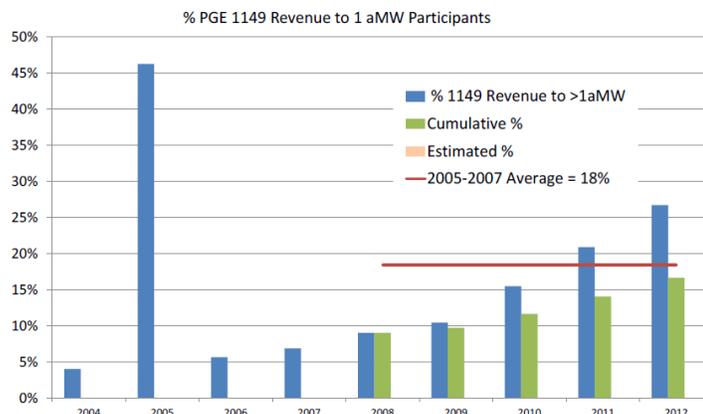
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***Equal Credit for Equal Funding***

It is clear that growing portions of Energy Trust program dollars have been directed at large customers:

Figure 19 plots incentives paid to over 1 aMW participants as a percentage of SB 1149 annual revenues by year. The cumulative post-2007 average percent of revenue after 2012 is 17 percent, compared to the baseline 2005-2007 average of 18 percent. In order to avoid exceeding the 18 percent baseline in 2013, 2013 incentives will need to be less than \$7.0 million, which is \$500,000 less than in 2012. The limit in Pacific Power territory is farther off, as the cumulative post-2007 average of 22 percent is well below the 27 percent baseline limit.

**Figure 19. PGE funding vs limits**



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Notice in the ETO figure, above, that funding for large customer incentives has exceeded 18.4% for the past several years.<sup>23</sup> CUB would like to be clear that this is not the problem. CUB supports the missions of the ETO, the Governor,<sup>24</sup> and the Commission<sup>25</sup> to acquire all cost-effective energy efficiency. CUB supports investing in low-cost conservation resources instead of high-cost generation resources, regardless of whether they are purchased from large or small customers. CUB’s proposal has the advantage of eliminating the barrier to allowing ETO to pursue the most cost-effective resource, regardless of where it is sited. The problem is that the customer classes that

<sup>23</sup> ETO points out that PacifiCorp's cap is higher, and currently ineffective. CUB will address this difference below.

<sup>24</sup> [http://www.oregon.gov/energy/Ten\\_Year/Ten\\_Year\\_Energy\\_Action\\_Plan\\_Final.pdf](http://www.oregon.gov/energy/Ten_Year/Ten_Year_Energy_Action_Plan_Final.pdf)

<sup>25</sup> [http://www.puc.state.or.us/electric\\_gas/EE%20PPA%20Report%20Final.pdf](http://www.puc.state.or.us/electric_gas/EE%20PPA%20Report%20Final.pdf) at pg 14.

1 purchase this low-cost resource for the system do not get credit within the system. If they  
2 were to receive appropriate credit for their purchases of conservation via supplemental  
3 public purpose funding, as their funded/purchased share of conservation resources  
4 increased, they would receive a corresponding share reduction of alternate resources  
5 (which in the Company's proposal is an SCCT/CCCT mix,<sup>26</sup> in Staff's proposal includes  
6 renewables<sup>27</sup>). For example, if the load for a customer class is 43% of the utility system,  
7 it does not make sense that the class should purchase 43% of generation resources, and  
8 53% of conservation resources. Ideally, that class would fund 43% of both, or less than  
9 43% of generation resources and more than 43% of conservation resources (or vice versa,  
10 in either case, so that the weighted average of all the resources that the customer class  
11 funded was equal to my burden on the system). In the current system, small customers,  
12 when accounting for conservation, are funding a larger portion of the resources than is  
13 their burden on the system planning.

14 **E. Redefining “Direct Benefit.”**

15 After SB 838 was signed, parties needed to (1) interpret the language of SB 838  
16 and (2) develop an implementation that was acceptable to all parties and that would pass  
17 OPUC muster. PGE's recollection of this process is stated in its testimony: “[t]o ensure  
18 that customers with loads less than one average megawatt were not subsidizing customers  
19 with over one average megawatt, PGE, PacifiCorp, the ETO, OPUC Staff, CUB, and  
20 ICNU reached an informal agreement that the ETO would not exceed a historical amount  
21 of energy efficiency funding for the larger customers' energy efficiency projects.”<sup>28</sup>

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<sup>26</sup> UE 283 PGE/1400/Cody/3-12.

<sup>27</sup> UE 283 Staff/700/Compton/44.

<sup>28</sup> UE 283 PGE/1600/Tinker-Liddle/24, lines 10-14.

1           However, CUB's research and recollection reveals a slightly enhanced view of  
2 this history. First, there was an agreement to limit historic (SB 1149) programs for  
3 customers above 1aMW to the percentage of those programs that existed at the time.  
4 The stakeholders believed that doing so would prevent these large customers from  
5 receiving a prohibited benefit which was defined as the benefit associated with shifting  
6 additional SB 1149 (public purpose) programs to industrial customers. It was believed,  
7 at the time, that such an action was sufficient to ensure that customers above 1aMW  
8 were not receiving a direct benefit and to prevent a subsidy of those customers from  
9 customers with smaller loads. According to PGE's first Advice Filing under SB 838, it  
10 was necessary to assure that there would be "no shift in the allocations of Public  
11 Purpose funding":<sup>29</sup>

12           Consistent with the requirements of SB 838, the proposed rate schedules are applicable  
to the customer classes that will benefit from the additional energy efficiency program  
funding. The proposed schedules thus exempt large nonresidential customers with  
loads greater than 1 MWa and Self-Directing Customers (also with loads greater than 1  
MWa at a site). The exempted class of customers is able to participate in existing,  
available ETO programs funded through the public purpose charge (Schedule 108).  
We will support the ETO as needed to assure that the incremental energy efficiency  
funding is targeted to the customer classes providing the funding and there is no shift in  
the allocations of Public Purpose funding.

13           In 2007, Fred Gordon at the ETO reached out to stakeholders and presented a  
14 very detailed plan of supplemental funding implementation that would "assure that new  
15 efficiency funds under SB 838 will go to the customers, as a group, who provide the  
16 funds."<sup>30</sup> The proposal circulated by Mr. Gordon then goes on to detail how the ETO  
17 would review the funding historically, going forward, and cumulatively for large  
18 customers to maintain compliance.<sup>31</sup> The proposal also states that the ETO would

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<sup>29</sup> PGE Advice Filing 07-25, pg 2 (Oct. 26, 2007).

<sup>30</sup> UE 283 CUB/202/Jenks-McGovern/45.

<sup>31</sup> UE 283 CUB/202/Jenks-McGovern/45-46.

1 curtail funding if post-SB 838 cumulative funding percentages exceeded historical  
2 funding percentages.<sup>32</sup> The proposal then goes on to detail procedural methods,  
3 reporting and anomalies, like new buildings.<sup>33</sup>

4 The approach specified and resulted in no difference in methodology between  
5 PGE and PacifiCorp. For both utilities, the ETO calculated the cap by taking the  
6 historical average of incentives paid to large customers as a portion of total historical  
7 SB 1149 funding. Merely because of historical differences and demographics in the  
8 territories, the two utilities ended up with different capped numbers. Moreover, as can  
9 be seen from ETO Figure 19 above, if PGE's large customers had not received such a  
10 large portion of incentives in 2005, the industrial cap would have been set at about 5%  
11 and would have been reached long ago. If the cap had been met years ago, then this  
12 issue would have been urgent then. But that was not the case, and as EPA regulation  
13 111(d) is on the horizon, the looming so-called 'industrial benefit cap' is imminent and  
14 least-cost resources are at risk, a revisit of this interpretation is appropriate. It is also  
15 necessary, as demonstrated by the ETO:

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<sup>32</sup> UE 283 CUB/202/Jenks-McGovern/45-46.

<sup>33</sup> UE 283 CUB/202/Jenks-McGovern/46.

1 Longer term, the customer funding limitation is likely to leave cost-  
2 effective energy savings on the table. Large industrial projects are often  
3 time-sensitive, built into plant capital improvement cycles and broader  
4 industrial equipment upgrades. Limitations on large customer funding may  
5 not only delay when savings are acquired, it may foreclose opportunities  
6 and reduce the cost-effective conservation resource. Energy Trust will  
7 need to develop tools to estimate this savings reduction for future IRPs  
8 and its 2015-2019 Strategic Plan.<sup>34</sup>

9 As stated above, PGE's and PacifiCorp's respective cap numbers are different.

10 PGE asserts that part of the reason for this is the different historical makeup of incentives  
11 in PacifiCorp territory:

12 PacifiCorp's cap is 27%; again based on an historical average of energy  
13 efficiency payments from the ETO to PacifiCorp's industrial customers  
14 over one average megawatt. The ETO initially found more industrial  
15 energy efficiency opportunities in PacifiCorp's territory than PGE's.<sup>35</sup>

16 Recognizing that these numbers are different, however, does not concede that  
17 they are arbitrary. They are derived from the same methodology. Although PGE points  
18 to the PacifiCorp industrial cap, it does not offer any methodology that would provide  
19 PGE a similar result. Allowing an increase in industrial programs must be tied to a  
20 finding that the current cap does not actually achieve the prohibition on customers over 1  
21 aMW receiving a direct benefit from SB 838 programs. And if that cap is not effective at  
22 achieving the prohibition on large customers benefiting from SB 838, then a different  
23 methodology has to be put in place to ensure that large customers do not benefit from SB  
24 838 funding. CUB has proposed a methodology that it believes meets these standards,  
25 discussed above, and sincerely welcomes any other methodological changes that would  
26 and resolve the issues put forth in its opening testimony.

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<sup>34</sup> [http://energytrust.org/library/reports/brief\\_energy\\_efficiency\\_programs.pdf](http://energytrust.org/library/reports/brief_energy_efficiency_programs.pdf).

<sup>35</sup> UE 283 PGE/1600/Tinker-Liddle/24, lines 18-21.

1 **F. PGE States That CUB Goes Beyond the Traditional Marginal Cost Approach**

2 PGE expresses empathy and concern with CUB's marginal cost proposal:

3 PGE understands the fairness issues being raised by CUB, including  
4 concerns that residential customers are paying disproportionately for  
5 energy efficiency. However, CUB's proposal goes beyond traditional  
6 marginal cost analysis and it may draw legal challenges. The resulting rate  
7 impacts of CUB's proposal are significant for the larger industrial  
8 customers and may create an incentive for them to choose direct access.<sup>36</sup>

9 Not only is energy efficiency an effective marginal resource to meet load, PGE  
10 considers it a "low risk, 'least cost' resource"<sup>37</sup> and the Governor's ten year action plan  
11 "calls for Oregon to meet all new electric load growth through energy efficiency and  
12 conservation."<sup>38</sup> Given that the Governor's action plan is ten years and the Company's  
13 IRP is inclusive of the RPS requirements in 2025, it is both relevant and appropriate to  
14 address long-run marginal cost (LRMC) as the marginal cost of the resources designated  
15 in the IRP as the least-cost, least-risk resources designed to meet load. Energy efficiency  
16 is the lowest cost resource in the preferred portfolio and is expected to meet a significant  
17 portion of PGE's load.

18 The fact that the Company has, to date, failed to model energy efficiency  
19 marginal costs does not mean that it is inappropriate to do so. In fact, the current method  
20 of marginal cost calculation more closely resembles the calculation of long run average  
21 incremental cost (LRAIC), which represents "the present value (PV) of the additional  
22 investment and operating costs associated with meeting a sustained incremental increase  
23 in demand."<sup>39</sup>

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<sup>36</sup> UE 283 PGE/1600/Tinker-Liddle/26, lines 6-10.

<sup>37</sup> UE 283 CUB/202/Jenks-McGovern/28.

<sup>38</sup> Cover letter from Governor Kitzhaber, pg 1, attached to 10 Year Energy Action Plan (December 14, 2012).

<sup>39</sup> [http://www.naruc.org/international/Documents/Reg%20modeling%20and%20Electric%20Distrib%20tariffs\\_ERO\\_Group%20A.pdf](http://www.naruc.org/international/Documents/Reg%20modeling%20and%20Electric%20Distrib%20tariffs_ERO_Group%20A.pdf)

1           While this may be appropriate for utilities with homogenous customer classes or  
2 homogenous investments, CUB believes that using an average incremental costs  
3 approach – a one size fits all approach – is inappropriate for PGE. CUB believes that all  
4 resources that are identified in the IRP as marginal resources should be addressed, and  
5 their marginal cost in meeting load should be evaluated. In this docket, CUB proposes  
6 that the marginal cost methodology be revised to include calculations for the go-to  
7 resource, energy efficiency. However, CUB is not alone in its suggestion that PGE's  
8 approach to marginal energy is an oversimplified model based on an SCCT/CCCT mix.  
9 Staff recommends that renewables be treated an additional marginal resource, and be  
10 valued and integrated with a wind proxy cost.<sup>40</sup>

11           While CUB can accept that its approach may not be traditional, it does not believe  
12 that this is an argument against improvement. CUB does not believe that the marginal  
13 cost of an energy resource should be defined so narrowly in the short-term that it can only  
14 mean the additional cost to the utility of generating one more kWh. Instead, in  
15 understanding the term “energy” to mean 'the energy needs of its customers,' PGE  
16 professes that it "develops an Integrated Resource Plan outlining our strategy for meeting  
17 future energy needs,"<sup>41</sup> which clearly identifies conservation as a key component in that  
18 strategy. Given this common interpretation of energy, it is vital, in a long run marginal  
19 cost approach, to avoid the pitfall of thinking incrementally, because it doesn't make  
20 sense to develop a strategy to identify the cost of producing just one more kWh in the  
21 long run. In the long run, expensive lumpy resources will need to be deployed to satisfy  
22 energy needs. Therefore, CUB feels that it is entirely appropriate, and within the realm

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<sup>40</sup> UE 283 Staff/700/Compton/2.

<sup>41</sup> [http://www.portlandgeneral.com/our\\_company/energy\\_strategy/resource\\_planning/default.aspx](http://www.portlandgeneral.com/our_company/energy_strategy/resource_planning/default.aspx)

1 of utility ratemaking, to calculate the LRMC of an energy resource by identifying the  
2 resources in the IRP through the preferred portfolio approach, and then, given that mix of  
3 resources and their respective forecasted weights of deployment, value the LRMC of  
4 energy by weighting the cost of meeting energy needs by each of the resources. This  
5 approach works with traditional resources, renewable resources and conservation  
6 resources, all resources identified in the IRP and all resources designed and forecasted to  
7 meet load in PGE's territory. In fact, CUB's approach would probably be viewed as a  
8 simple refinement to the Marginal Cost model that had the effect of lowering the  
9 marginal cost of energy, if it wasn't for the fact that different classes of customers  
10 purchase energy efficiency at different levels.

11 If the concern is that the calculation of the marginal cost of energy efficiency is  
12 nebulous, that concern is unfounded. The ETO has worked closely with the utilities, the  
13 OPUC and stakeholders to be transparent and collaborative in serving Oregonians' energy  
14 needs:

15 Forecasting the pace of introduction of these technologies and their cost  
16 has been difficult historically; yet if they are ignored, utilities may plan  
17 generation resources they do not need.<sup>42</sup>

18 **G. Small Customers Are Not Incentivizing Large Customers to Choose Direct**  
19 **Access.**

20 PGE raises a concern that a double digit rate increase for large customers will  
21 encourage them to choose direct access.<sup>43</sup> The implication of PGE's argument is that  
22 customers not eligible for direct access should subsidize the energy costs of customer  
23 who are eligible in order to prevent those customers from participating in direct access.

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<sup>42</sup> [http://energytrust.org/library/reports/Brief-Energy\\_Efficiency\\_Programs.pdf](http://energytrust.org/library/reports/Brief-Energy_Efficiency_Programs.pdf) at pg 32.

<sup>43</sup> UE 283 PGE/1600/Tinker-Liddle/27.

1 But there is no basis for such a proposal. Inherently, if customers who are less than 1  
2 aMW are buying more than their share of some resources, then they should be buying  
3 less of other resources. Otherwise, they are subsidizing the resource needs of the large  
4 customers. Directly asking for a subsidy in order to prevent direct access is  
5 inappropriate. More importantly, SB 838 makes clear that the customers whose loads are  
6 greater than 1 aMW – the ones who are eligible for direct access – are not allowed to  
7 benefit from the SB 838 funded efficiency. For PGE to admit that there is a benefit, but  
8 argue for its retention as a tool to prevent direct access, is in conflict with the language of  
9 SB 838.

#### 10 **H. PGE Is Not Acting Prudently With Regards to Energy Efficiency.**

11 PGE agrees with CUB that there is a problem -- that it will no longer be able to  
12 acquire the cost-effective energy efficiency in its IRP. When CUB requested the PUC  
13 not acknowledge PGE's IRP action item relating to energy efficiency, PGE responded by  
14 saying that it is advocating for a solution in this rate case:

15 With respect to the funding cap on industrial customers, CUB is correct;  
16 the ETO's forecast presumes that the funding limitation on industrial  
17 energy efficiency measures is removed or similarly resolved to allow  
18 unfettered ongoing large customer EE funding. Should the funding  
19 limitation not be resolved, the ETO has estimated that 1.5-2 MW a of  
20 incremental industrial EE measures will be missed annually. The ETO is  
21 likely to reach its funding limit for PGE's industrial customers this year.

22 PGE is advocating in its General Rate Case testimony for a resolution that  
23 addresses the current large customer EE funding constraint. Losing cost  
24 effective energy efficiency opportunities would ultimately require  
25 acquisition of more expensive resource alternatives to meet long term  
26 energy and capacity needs.<sup>44</sup>

27 PGE's advocacy of a resolution in this General Rate Case is not very clear:

#### 28 **Q. What does PGE propose with regard to the cap?**

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<sup>44</sup> LC 56 PGE Reply Comments, pg 20.

1 A. Given the statutory prohibition on industrial customers bearing costs  
2 associated with SB 838 energy efficiency measures, ratemaking may not  
3 be the means to address CUB's concern. The only solution may be a  
4 legislative solution. For this reason, PGE does not have a counter  
5 proposal to CUB's but offers a willingness to engage with the parties to  
6 work on a solution, legislative or otherwise.<sup>45</sup>

7 PGE has known about this problem since 2012,<sup>46</sup> and has admitted that the  
8 problem will prevent it from acquiring cost-effective efficiency, which will lead to higher  
9 system costs. There is a barrier to PGE acquiring the cost-effective resources in the IRP,  
10 and PGE has chosen to take a passive approach to dealing with that barrier. For this  
11 reason, CUB believes that PGE is not acting prudently – a prudent utility would propose  
12 solutions and work to removing such barriers.

13 PGE's approach in the IRP was to ignore this issue and continue to forecast all  
14 cost-effective efficiency, claiming that it would propose solution to this problem in its  
15 current general rate case. But if PGE believes that the solution is legislative, then it  
16 should be proposing legislative concepts that would solve this problem. PGE proposes  
17 no legislative concepts. It proposes no regulatory solutions. If it wasn't for the fact that  
18 CUB is raising the issue, CUB does not believe that PGE would have discussed it in its  
19 IRP or in this rate case.

20 PGE's testimony acknowledges that "over the next 5 years, 8-12 aMW of saving  
21 could be lost."<sup>47</sup> At 6 cents/kWh, the cost of meeting this additional load comes to  
22 between \$4 million and \$6 million. As these higher costs are incurred and PGE seeks  
23 recovery of them, PGE will need to show that it is acting prudently and trying to remove

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<sup>45</sup> UE 283 PGE/1600/Tinker-Liddle/27.

<sup>46</sup> UE 283 CUB/106/Jenks-McGovern.

<sup>47</sup> UE 283 PGE/1600/Tinker-Liddle/26.

1 the barrier to avoiding these higher costs. It would be helpful if the Company was  
2 actually engaged in trying to remove this barrier.

### 3 **V. Conclusion**

4 In conclusion, for CUB, there are three remaining issues in UE 283. The issue of  
5 the interaction between PTCs and accelerated depreciation, the use of the Renewable  
6 Adjustment Clause to true up costs associated with wind forecasting and wind integration  
7 and the issue of energy efficiency.

8 With regard to the PTCs and accelerated depreciation, CUB recommends that the  
9 Commission not award the Company a rate of return on the unused PTCs. The inability  
10 to use the PTCs is a direct result of the Company's choice to accelerate depreciation for  
11 tax purposes, a choice that the Company benefits from. Customers should not have to  
12 finance their own intertemporal rate relief

13 With regard to using the Renewable Adjustment Clause (SB 838's automatic  
14 adjustment clause) to true-up wind forecasting error costs, CUB believes this is  
15 inappropriate. The automatic adjustment clause in SB 838 was controversial and was  
16 intended to serve the narrow purpose of eliminating regulatory lag.  
17 In the case of energy efficiency and the large customer prohibition, CUB recommends  
18 that the Commission implement CUB's marginal cost methodology that incorporates  
19 conservation as a marginal resource. Moreover, CUB encourages the Commission to  
20 consider the language and spirit of SB 838 and find the "benefit" of conservation funding  
21 to be low cost conservation resources it brings to the system. This treatment is consistent  
22 with contemporary views on energy efficiency and would remove the "industrial benefit  
23 cap" that was designed as a proxy for the large customer benefit

SB 838 funds

source of public purpose dollars collected										Load > 1aMW	Load < 1aMW	System Load
<1amw				>1amw				all sources				
total \$s	annual % of \$s	cum avg %	% of load	total \$s	annual % of \$s	cum avg %	% of load	total \$s				
2007	0	#DIV/0!	#DIV/0!	0.807792866	0	#DIV/0!	#DIV/0!	0.192207134	0	3,790,311	15,929,617	19,719,928
2008	6,930,422	1	1	0.789529802	0	0	0	0.210470198	6,930,422	3,901,800	14,636,693	18,538,493
2009	13,766,914	1	1	0.817628138	0	0	0	0.182371862	13,766,914	3,541,972	15,879,732	19,421,704
2010	23,397,922	1	1	0.812754196	0	0	0	0.187245804	23,397,922	3,516,081	15,261,807	18,777,888
2011	27,775,063	1	1	0.805864381	0	0	0	0.194135619	27,775,063	3,750,696	15,569,285	19,319,981
2012	40,795,172	1	1	0.800482408	0	0	0	0.199517592	40,795,172	3,835,231	15,387,287	19,222,518
2013	49,402,929	1	1	0.802276218	0	0	0	0.197723782	49,402,929	3,801,473	15,424,706	19,226,179
2014	48,160,176	1	1	0.810368048	0	0	0	0.189631952	48,160,176	3,678,575	15,719,922	19,398,497

SB 1149 funds

source of public purpose dollars collected										Load > 1aMW	Load < 1aMW	System Load
<1amw				>1amw				all sources				
total \$s	% of \$s	cum avg %	% of load	total \$s	% of \$s	cum avg %	% of load	total \$s				
2002	27,781,231	0.953118453	0.953118453	0.782680872	1,366,490	0.046881547	0.046881547	0.217319128	29,147,721	4,079,489	14,692,395	18,771,884
2003	33,197,730	0.92035714	0.934999027	0.795533296	2,872,757	0.07964286	0.065000973	0.204466704	36,070,486	3,758,936	14,625,163	18,384,099
2004	34,311,899	0.926551348	0.931939536	0.810527149	2,719,939	0.073448652	0.068060464	0.189472851	37,031,837	3,517,110	15,045,497	18,562,607
2005	34,750,992	0.907235402	0.925207093	0.807903281	3,553,280	0.092764598	0.074792907	0.192096719	38,304,272	3,609,936	15,182,346	18,792,282
2006	36,491,933	0.896621114	0.91878829	0.805857303	4,207,458	0.103378886	0.08121171	0.194142697	40,699,391	3,769,802	15,647,882	19,417,684
2007	41,319,062	0.912845278	0.917600724	0.807792866	3,944,974	0.087154722	0.082399276	0.192207134	45,264,036	3,790,311	15,929,617	19,719,928
2008	43,097,563	0.918921989	0.917827364	0.789529802	3,802,569	0.081078011	0.082172636	0.210470198	46,900,132	3,901,800	14,636,693	18,538,493
2009	44,591,424	0.924577938	0.918839571	0.817628138	3,637,527	0.075422062	0.081160429	0.182371862	48,228,951	3,541,972	15,879,732	19,421,704
2010	42,564,330	0.895695184	0.915860318	0.812754196	4,956,669	0.104304816	0.084139682	0.187245804	47,520,999	3,516,081	15,261,807	18,777,888
2011	45,399,533	0.899139787	0.913848556	0.805864381	5,092,653	0.100860213	0.086151444	0.194135619	50,492,186	3,750,696	15,569,285	19,319,981
2012	44,219,066	0.896175244	0.911989211	0.800482408	5,122,920	0.103824756	0.088010789	0.199517592	49,341,985	3,835,231	15,387,287	19,222,518
2013	44,077,792	0.919543637	0.912689717	0.802276218	3,856,629	0.080456363	0.087310283	0.197723782	47,934,421	3,801,473	15,424,706	19,226,179
2014	47,123,614	0.920102603	0.913357946	0.810368048	4,091,994	0.079897397	0.086642054	0.189631952	51,215,607	3,678,575	15,719,922	19,398,497