

MEMO

Date: June 5, 2012

From: Ted Light, Planning Project Manager

Subject: Update to NEEA gas savings report (12/21/11)

In 2011, Energy Trust contracted with Fluid Market Strategies—now owned by CLEAResult—to reassess the commercial and industrial gas savings occurring as a result of the Northwest Energy Efficiency Alliance’s (NEEA) work in Energy Trust’s service territory.

These savings were originally analyzed in a report dated October 5, 2010 by Fluid Market Strategies, but further work was required to identify which sites were not transport gas customers, and could therefore be claimed by Energy Trust. Energy Trust does not serve and therefore cannot claim savings from work with transport gas customers of Northwest Natural or Cascade Natural gas.

The results of that reassessment are detailed in the following report, but further work after its completion changed the ultimate findings. This memo is intended to document those changes, as well as to describe Energy Trust’s ultimate conclusions.

In the follow up report, a commercial building coded as OR-7 in NEEA’s evaluation reports was omitted at the time due to uncertainty as to whether the building had been engaged in NEEA’s Better Bricks initiative. Further dialogue with NEEA confirmed that the building had indeed been involved, but it was also discovered that this building and others included in the report had simultaneously participated in Energy Trust’s New Buildings program.

In reviewing NEEA’s documentation for the savings of OR-7, it was clear that the gas savings documented therein were not exclusive of the savings Energy Trust had claimed through its programs. The other buildings were likely similar. As a result, fewer than half of the 24,038 therms of identified gas savings remain to be claimed.

Since only a trivial amount of the originally-identified gas savings remain, it was decided to claim no savings from the commercial buildings listed in the attached report.

To: Energy Trust of Oregon

From: CLEARResult

Date: December 21, 2011

Re: Energy Trust of Oregon gas savings from the Northwest Energy Efficiency Alliance BetterBricks and the Industrial Efficiency Alliance

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Background

Energy Trust of Oregon (ETO) requested a re-assessment of gas savings in the ETO service territory stemming from two Northwest Energy Efficiency Alliance (NEEA) energy conservation programs: Commercial BetterBricks and the Continuous Energy Improvement (CEI) Initiative of the Industrial Efficiency Alliance (IEA). In 2010, the ETO contracted with Fluid Market Strategies to estimate the total gas savings that have occurred in the ETO territory. In 2011, Energy Trust of Oregon contracted again with Fluid Market Strategies to update the previous work. CLEARResult, acting as the sub-contractor to Fluid Market Strategies, performed a detailed review of previous program evaluation and project verification work to identify gas savings resulting from the NEEA energy conservation programs and occurring in the ETO territory.

Data Collection

CLEARResult collected needed data to build a complete list of the NEEA BetterBricks and Industrial CEI projects with savings potentially occurring in ETO territory. To begin, CLEARResult reviewed the following evaluation reports:

- The 2009 Cadmus BetterBricks Evaluation;
- The 2009 Cadmus Evaluation of the Industrial Efficiency Alliance;
- The 2009 Research Into Action Evaluation of Energy Savings for the BetterBricks Initiative;
- The 2010 Fluid Market Strategies Memorandum; and
- The 2011 NEEA Market Progress Evaluation Report #6: Evaluation of NEEA's Industrial Initiative.

These reports provided an initial dataset that identified projects for further investigation, but lacked sufficient detail to confirm that a project occurred within the ETO territory. CLEARResult requested additional background data from the evaluation firms, and also accessed data stored

in the NEEA commercial project tracking system (CTS) to further complete the dataset. The final dataset included 33 projects (a complete list is available in the appendix of this memo).

Data Analysis

After completing the data collection activities, CLEAResult worked with ETO to identify the rate schedules for each project in the master list. CLEAResult then analyzed the projects following the decision rules listed in Table 1.

Table 1: Decision Rules

	Question	Yes	No
1	Does the customer have an applicable rate schedule?	Include	Exclude
2	Was the project savings verified?	Include	Question 3
3	If the project has not been verified, was the project listed as complete during a qualifying period?	Include	Exclude

Commercial BetterBricks Gas Savings

Using the decision rules in Table 1, CLEAResult screened the commercial projects master list to exclude projects occurring outside ETO territory, as well as projects lacking sufficient data. Table 2 describes the gas savings associated with projects that met the required decision rules. With the exception of OR-14, associated project savings were verified by an independent evaluation firm. The total verified gas savings from these projects are 25,987 Therms; the final net savings are 24,038 Therms, or 92.5% of the gross savings.

Table 2: Energy Trust of Oregon
BetterBricks Projects - Verified Gas Savings

Project ID	Analysis Notes	Year	Program	Total Gas Savings (Therms)	Net Gas Savings (Therms)
OR-06	Qualifying Rate, Verified, Qualifying Period	2004	BetterBricks	4,082	3,776
RIA – 720	Qualifying Rate, Verified, Qualifying Period	2004	BetterBricks	5,468	5,058
OR-15	Qualifying Rate, Verified Savings, Qualifying Period	2005	BetterBricks	2,635	2,437
OR-08	Qualifying Rate, Verified, Qualifying Period	2006	BetterBricks	7,686	7,110
OR-14	Qualifying Rate, Qualifying Period	2007	BetterBricks	6,116	5,657

The gas savings reported in this memo differ from those reported in the 2010 memo due to new data on project year and qualifying rates. Table 3 describes how these savings differ from the previous list.

**Table 3: BetterBricks Gas Savings
Changes from 2010 Memo**

Site/Project ID	Claimed in 2010 Memo	Claimed in 2011 Memo	Description of Change	Year	Program
OR-01	Yes	No	Disqualified - not a qualifying period	2001	BetterBricks
OR-02	Yes	No	Disqualified - not a qualifying period	2002	BetterBricks
OR-04	Yes	No	Disqualified - not a qualifying period	2002	BetterBricks
OR-06	Yes	Yes	No Change	2004	BetterBricks
RIA-720	No	Yes	New Claim: Qualifying Rate & Period, Verified	2004	BetterBricks
OR-03	Yes	No	Disqualified – not a qualifying rate at project date	2005	BetterBricks
OR-15	Yes	Yes	No Change	2005	BetterBricks
OR-05	Yes	No	Disqualified: no qualifying rate	2006	BetterBricks
OR-08	No	Yes	New Claim: Qualifying Rate & Period, Verified	2006	BetterBricks
OR-14	Yes	Yes	No Change	2007	BetterBricks
RIA-78	No	No	No Change	2007	BetterBricks
OR-10-01	No	No	No Change	2008	BetterBricks
OR-10-02	No	No	No Change	2008	BetterBricks
OR-12	No	No	No Change	2008	BetterBricks
OR-13	No	No	No Change	2008	BetterBricks
OR-18	Yes	No	Disqualified: No Qualifying Rate	2008	BetterBricks
OR-19-01	No	No	No Change	2008	BetterBricks
OR-19-02	No	No	No Change	2008	BetterBricks
OR-19-03	No	No	No Change	2008	BetterBricks
HMG-OR-04	No	No	No Change	2009	BetterBricks
OR-09	No	No	No Change	2009	BetterBricks
OR-10-03	No	No	No Change	2009	BetterBricks
OR-16	Yes	No	Disqualified - Project active in NEEA database	2010	BetterBricks
OR-17	Yes	No	Disqualified: No Qualifying Rate	2010	BetterBricks
HMG-OR-01	No	No	No Change	Unk	BetterBricks
HMG-OR-02	Yes	No	Disqualified: No Qualifying Rate	Unk	BetterBricks

CLEAResult has also confirmed “planned savings” through several independently evaluated projects occurring within the Energy Trust of Oregon service territory. Once verified, the associated savings can be attributed to the Energy Trust of Oregon territory.

**Table 4: BetterBricks Projects
Qualifying Projects Not Yet Claimed***

Project ID	Analysis Notes	Year	Program
OR-19-01	Qualifying Rate, Planned Savings	2008	BetterBricks
OR-19-02	Qualifying Rate, Planned Savings	2008	BetterBricks
OR-19-03	Qualifying Rate, Planned Savings	2008	BetterBricks

*Savings from these projects are included in the appendix of this memo.

Industrial CEI Gas Savings

Using the decision rules in Table 1, CLEAResult screened the industrial projects master list to exclude projects occurring outside ETO territory, as well as projects lacking sufficient data. There were no qualifying gas projects identified by the analysis.

The gas savings reported in this memo differ from the savings reported in the 2010 memo due to new data on project year and qualifying rates; Table 5 describes these differences.

**Table 5: Energy Trust of Oregon
Industrial CEI Projects - Changes from 2010 Memo**

Project ID	Claimed in 2010 Memo	Claimed in 2011 Memo	Analysis Notes	Year	Program
O-005	Yes	No	Disqualified: No Qualifying Rate	2006	Industrial CEI
O-003-01	Yes	No	Disqualified: No Qualifying Rate	2007	Industrial CEI
O-006-01	Yes	No	Disqualified: No Qualifying Rate	2008	Industrial CEI
O-007-01	No	No	Disqualified: No qualifying Rate	2008	Industrial CEI
O-006-02	No	No	No Change	2009	Industrial CEI
O-003-02	No	No	No Change	2010	Industrial CEI
O-007-02	No	No	No Change	2010	Industrial CEI

Summary

Based on available data, CLEAResult has confirmed that projects completed through the NEEA BetterBricks and Industrial CEI programs are occurring within the Energy Trust of Oregon service territory. Many of these projects are occurring at customer sites operating under qualifying rates with verified project savings. CLEAResult analyzed the projects occurring within the Energy Trust of Oregon service territory to identify gas savings from qualified projects. The total net energy savings associated with these projects is 24,038 Therms, with all of the savings coming from the Commercial BetterBricks program.

CLEAResult also identified additional gross savings of 225,781 Therms for which either insufficient data and/or insufficient verification exists to confirm the savings. If the savings could be verified, they could be associated with the Energy Trust of Oregon service territory.

Prior to claiming gas savings through these programs, CLEAResult recommends that Energy Trust of Oregon request development and implementation of *Savings Protocols* on BetterBricks and Industrial CEI projects. Savings protocols not only specify the savings methodologies used to determine energy savings; they also specify the documentation required to substantiate any savings claims (e.g., invoices, inspection results, photodocumentation). The project data generated from implementing the *Savings Protocols* would also be saved to the NEEA project tracking database.

Appendix A - Master Project Lists

Tables A1 and A2 represent the complete list of projects analyzed by CLEAResult.

Table A1: Energy Trust of Oregon
BetterBricks Commercial Projects Master List

Project ID	Year	Program Type	Project Type	Sector	Total Gas Savings (Therms)	Net Gas Savings (Therms)
OR-01	2001	BetterBricks	New Construction Design	Real Estate	12,071	11,166
OR-02	2002	BetterBricks	New Construction Design	Other Buildings	18,031	16,679
OR-04	2002	BetterBricks	New Construction Design	Other Buildings	10,266	9,496
OR-06	2004	BetterBricks	New Construction Design	Other Buildings	4,082	3,776
RIA-720	2004	BetterBricks	New Construction Design	Other Buildings	5,468	5,058
OR-03	2005	BetterBricks	New Construction Design	Real Estate	1,744	1,613
OR-15	2006	BetterBricks	New Construction Design	Other Buildings	2,635	2,437
OR-05	2006	BetterBricks	New Construction Design	Hospital/Healthcare	56,953	52,682
OR-08	2006	BetterBricks	New Construction Design	Other Buildings	6,116	5,657
OR-14	2007	BetterBricks	New Construction Design	Other Buildings	6,116	5,657
RIA-78	2007	BetterBricks	Building Operations	Hospital/Healthcare	-	-
OR-10-01	2008	BetterBricks	O&M/Tune-up	Hospital/Healthcare	24,800	22,940
OR-10-02	2008	BetterBricks	Retro-Commissioning	Hospital/Healthcare	37,200	34,410
OR-12	2008	BetterBricks	Capital Project ECM	Hospital/Healthcare	16,455	15,221
OR-13	2008	BetterBricks	New Construction Design	Other Buildings	968	895
OR-18	2008	BetterBricks	New Construction Design	Other Buildings	5,821	5,384
OR-19-01	2008	BetterBricks	Capital Project ECM	Hospital/Healthcare	96,306	89,083
OR-19-02	2008	BetterBricks	O&M/Tune-up	Hospital/Healthcare	34,720	32,116
OR-19-03	2008	BetterBricks	Retro-Commissioning	Hospital/Healthcare	90,642	83,844
HMG-OR-04	2009	BetterBricks	Business Operations	Grocery	(17,300)	(16,003)
OR-09	2009	BetterBricks	Capital Project ECM	Hospital/Healthcare	25,150	23,264
OR-10-03	2009	BetterBricks	Capital Project ECM	Hospital/Healthcare	5,525	5,111
OR-16	2010	BetterBricks	New Construction Design	Real Estate	4,113	3,805
OR-17	2010	BetterBricks	New Construction Design	Other Buildings	19,278	17,832
HMG-OR-01		BetterBricks	New Construction Design	Other Buildings	(8,698)	(8,046)
HMG-OR-02		BetterBricks	New Construction Design	Other Buildings	6,224	5,757

Table A2: Energy Trust of Oregon
Industrial CEI Projects Master List

Site/Project ID	Year	Program	Total Gas Savings (Therms)	Net Gas Savings (Therms)
O-005	2006	Industrial CEI	73,666	66,299
O-003-01	2007	Industrial CEI	57,712	51,941
O-006-01	2008	Industrial CEI	30,165	27,149
O-007-01	2008	Industrial CEI	225,838	203,254
O-006-01	2009	Industrial CEI	3,280	2,952
O-003-02	2010	Industrial CEI	86,400	77,760
O-007-02	2010	Industrial CEI	1,552	1,397