

TO: State Energy Conservation Office (SECO)

FROM: Bluebonnet Electric Cooperative

RE: SB-924 Energy Efficiency Report

Cooperative Energy Efficiency Goals:

Through the cooperative's Sustainable Grid initiative, an emphasis has been placed on engaging our membership to participate in active conservation and new technologies that have been implemented. The Net Energy Market web portal allows our membership to actively manage their account, and see all the information that the cooperative has concerning their electric usage. All members with online accounts can view their hourly usage and costs daily. The information included shows both daily and hourly usage data, that the member can then use to audit their behavior and become more efficient with how and when they are using energy. Currently, around 32,613 of the cooperative's members have signed up and are actively participating in the portal.

In mid-2012, Bluebonnet Electric added a new communication avenue for its members to better understand their usage by unveiling its mobile app for the iPhone and Android platforms. The mobile app allows members to track their hourly usage and cost from their smartphone, as well as engage in conservation tips that increase the 15,357 participating member's knowledge and capability.

In an effort to expand our largest consuming member's knowledge of conservation, we began a program offering energy audits to our largest commercial members. The first year of the program had six of Bluebonnet's largest consumers receiving an energy audit and taking proactive steps to control and reduce their energy consumption.

As part of the cooperative's employee performance incentive plan, Bluebonnet tracks and reports monthly on its own set of energy conservation goals. If levels of these goals are achieved, the employees can potentially see that directly reflected in their annual pay bonus. A spreadsheet of what is tracked is attached to this filing. Additionally, concerning its own conservation goals, Bluebonnet retires wind Renewable Energy Credits (RECs) to cover the usage of its own facilities. In total, 7,016 RECs were voluntarily retired, and 129 members took advantage of our

green rate program that allows them to designate their preference to receive electricity from a renewable source.

In 2014 Bluebonnet experienced explosive growth of our Distributed Generation tariff class with a growth of 155% in solar and 6% in wind. Bluebonnet's Distributed Generation tariff for electric service is currently being used by 115 of its members. These generation installations vary in capacity.

Also in 2013 Bluebonnet continued to expand its Eco Home to the public. The 1,284-square-foot house on Bluebonnet's 21-acre Brenham service-center campus hosts builders, those in the construction trade, school children, college students, homeowners, realtors and Bluebonnet members who want to learn more about creating an energy-saving home and enjoy a unique learning experience.

The home is built with state-of-the-art energy-smart construction materials, a heat-reflecting roof, high-efficiency windows and other conservation features. A 45-foot-tall wind turbine can provide 2.4 kilowatts of energy. Five-kilowatt solar panels are closely monitored online to track the energy they produce and how it is used. Massive nearby rain cisterns store thousands of gallons of precious Texas rainwater. A two-ton geothermal system, with pipes that descend 250 feet underground, help heat the house in winter and cool it in summer.

In the home, visitors see the latest energy-smart technology, including home automation systems, low-flow plumbing and energy-smart appliances.

Since its beginning (in 2012) the Eco Home has provided 217 tours of varying sizes (1 person to 403 people) and organizations.



2014 Bluebonnet Electric Employee Energy Conservation

Weights	12.5%	25%	50%	12.5%	
	Water Usage	Mileage	Electric Usage	Printer Usage	Total %
Jan-14	5%	10%	11%	3.61%	9%
Feb-14	17%	0%	20%	2.49%	12%
Mar-14	-14%	-6%	18%	5.22%	6%
Apr-14	-28%	-2%	11%	1.48%	2%
May-14	-27%	0%	7%	5.52%	1%
Jun-14	-26%	-1%	5%	2.16%	-1%
Jul-14	-24%	-4%	4%	0.69%	-2%
Aug-14	-23%	-6%	4%	-0.70%	-2%
Sep-14	-24%	-7%	4%	-0.38%	-3%
Oct-14	-24%	-6%	3%	1.22%	-3%
Nov-14	-22%	-6%	3%	3.70%	-2%
Dec-14	-25%	-8%	2%	2.02%	-4%

Water Usage		Gallons		Month		Year	
Month	Year			Month	Year		
JAN	2013	222,941		JAN	2014	234,410	
FEB	2013	214,328		FEB	2014	275,913	
MAR	2013	377,292		MAR	2014	193,713	
APR	2013	629,346		APR	2014	339,525	
MAY	2013	735,256		MAY	2014	547,602	
JUN	2013	757,346		JUN	2014	568,043	
JUL	2013	785,311		JUL	2014	687,301	
AUG	2013	892,568		AUG	2014	720,884	
SEPT	2013	875,295		SEPT	2014	632,005	
OCT	2013	569,621		OCT	2014	429,113	
NOV	2013	476,709		NOV	2014	439,074	
DEC	2013	552,640		DEC	2014	278,957	

YTD Difference	% diff from 2013
11,469	5.14%
73,054	16.71%
(110,525)	-13.57%
(400,346)	-27.73%
(588,000)	-26.98%
(777,303)	-26.47%
(875,313)	-23.52%
(1,046,997)	-22.69%
(1,290,287)	-23.50%
(1,430,795)	-23.61%
(1,468,430)	-22.47%
(1,742,113)	-24.58%

Due to bill timing, not all invoices may have been received at time of formulation. Any invoices not received were placed at 2013 levels and are trued up.

Brenham meter and Giddings meter normalized for broken pipe leak in May

Fuel Usage

Reimbursed Mileage		Monthly		Month		Year		Miles	
Month	Year			Month	Year			Month	Year
JAN	2013	21,038		JAN	2014	23,072		JAN	2014
FEB	2013	21,182		FEB	2014	19,019		FEB	2014
MAR	2013	23,939		MAR	2014	20,320		MAR	2014
APR	2013	24,525		APR	2014	26,840		APR	2014
MAY	2013	24,328		MAY	2014	25,431		MAY	2014
JUN	2013	21,821		JUN	2014	20,353		JUN	2014
JUL	2013	34,795		JUL	2014	30,372		JUL	2014
AUG	2013	26,961		AUG	2014	20,868		AUG	2014
SEPT	2013	25,484		SEPT	2014	21,281		SEPT	2014
OCT	2013	29,647		OCT	2014	30,314		OCT	2014
NOV	2013	18,048		NOV	2014	17,315		NOV	2014
DEC	2013	13,994		DEC	2014	8,312		DEC	2014

YTD Difference	% diff from 2013
2,034	9.67%
(129)	-0.31%
(3,748)	-5.67%
(1,433)	-1.58%
(330)	-0.29%
(1,798)	-1.31%
(6,221)	-3.62%
(12,314)	-6.20%
(16,517)	-7.37%
(15,850)	-6.25%
(16,583)	-6.10%
(22,265)	-7.79%

Energy Consumption		kWh Usage		Month		Year		kWh Usage	
Month	Year			Month	Year			Month	Year
JAN	2013	306,479		JAN	2014	340,461		JAN	2014
FEB	2013	229,686		FEB	2014	303,384		FEB	2014
MAR	2013	261,185		MAR	2014	295,551		MAR	2014
APR	2013	259,892		APR	2014	234,154		APR	2014
MAY	2013	264,180		MAY	2014	240,347		MAY	2014
JUN	2013	273,178		JUN	2014	259,431		JUN	2014
JUL	2013	273,056		JUL	2014	277,567		JUL	2014
AUG	2013	278,061		AUG	2014	290,521		AUG	2014
SEPT	2013	260,527		SEPT	2014	263,475		SEPT	2014
OCT	2013	266,302		OCT	2014	257,501		OCT	2014
NOV	2013	269,462		NOV	2014	280,094		NOV	2014
DEC	2013	341,599		DEC	2014	297,510		DEC	2014

YTD Difference	kWh Usage % diff from 2013
33,982	11.09%
107,680	20.08%
142,046	17.81%
116,308	11.00%
92,475	7.00%
78,728	4.94%
83,239	4.46%
95,699	4.46%
98,647	4.10%
89,846	3.36%
100,478	3.42%
56,389	1.72%

*2013 Back Up Control Center electric historic usage given an average consumption until its full occupancy in May 2013 (this is shown in the formula for the total for 2013)

Printer Usage		Printer Usage		Month		Year		Printer Usage	
Month	Year			Month	Year			Month	Year
JAN	2013	76,165		JAN	2014	78,918		JAN	2014
FEB	2013	70,220		FEB	2014	71,111		FEB	2014
MAR	2013	65,598		MAR	2014	73,021		MAR	2014
APR	2013	74,244		APR	2014	67,416		APR	2014
MAY	2013	99,250		MAY	2014	116,307		MAY	2014
JUN	2013	83,357		JUN	2014	72,172		JUN	2014
JUL	2013	72,224		JUL	2014	65,860		JUL	2014
AUG	2013	78,621		AUG	2014	70,514		AUG	2014
SEPT	2013	69,742		SEPT	2014	71,511		SEPT	2014
OCT	2013	79,695		OCT	2014	91,674		OCT	2014
NOV	2013	58,976		NOV	2014	80,236		NOV	2014
DEC	2013	70,349		DEC	2014	57,857		DEC	2014

YTD Difference	Printer Usage % diff from 2013
2,753	3.61%
3,644	2.49%
11,067	5.22%
4,239	1.48%
21,296	5.52%
10,111	2.16%
3,747	0.69%
(4,360)	-0.70%
(2,591)	-0.38%
9,388	1.22%
30,648	3.70%
18,156	2.02%