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Annual Report RECEIVED
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Demand-Side Management Programs AZ CORP COMMISSION
for DOCKET CONTROL



**Sulphur Springs Valley
 Electric Cooperative, Inc.**

A Touchstone Energy® Cooperative 

**For Period January 1, 2014
 through December 31, 2014
 in compliance with
 Decision #73930
 Docket E-01575A-11-0223**

Arizona Corporation Commission

DOCKETED

MAR 03 2015

**Submitted by
 Jack Blair**

DOCKETED BY	Rtu
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**Chief Member Services Officer
 Member Services Department**

**Sulphur Springs Valley Electric Cooperative
 311 E. Wilcox Drive
 Sierra Vista, AZ 85635
 350 N. Haskell Ave
 Willcox, AZ 85643**

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Point of Contact for questions:

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Key Account Manager
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520-515-3472

Program Summary

Decision 73930 of Docket E-01575A-11-0223 approved the most current DSM/EEE program. The following pages show the status of the DSM/EEE Programs submitted by Sulphur Springs Valley Electric Cooperative (SSVEC) for the period January 1, 2014 and ending December 31, 2014.

Compliance Reporting Requirements as follows:

R14-2-2409. Reporting Requirements

- A. By March 1 of each year, an affected utility shall submit to the Commission, in a Commission-established docket for that year, a DSM progress report providing information for each of the affected utility's Commission-approved DSM programs and including at least the following:
 1. An analysis of the affected utility's progress toward meeting the annual energy efficiency standard;
 2. A list of the affected utility's current Commission-approved DSM programs and DSM measures, organized by customer segment;
 3. A description of the findings from any research projects completed during the previous year; and
 4. The following information for each Commission-approved DSM program or DSM measure:
 - a. A brief description;
 - b. Goals, objectives, and savings targets;
 - c. The level of customer participation during the previous year;
 - d. The costs incurred during the previous year, disaggregated by type of cost, such as administrative costs, rebates, and monitoring costs;
 - e. A description and the results of evaluation and monitoring activities during the previous year;
 - f. Savings realized in kW, kWh, therms, and BTUs, as appropriate;
 - g. The environmental benefits realized, including reduced emissions and water savings;
 - h. Incremental benefits and net benefits, in dollars;
 - i. Performance-incentive calculations for the previous year;
 - j. Problems encountered during the previous year and proposed solutions;
 - k. A description of any modifications proposed for the following year; and
 - l. Whether the affected utility proposes to terminate the DSM program or DSM measure and the proposed date of termination.
- B. By September 1 of each year, an affected utility shall file a status report including a tabular summary showing the following for each current Commission-approved DSM program and DSM measure of the affected utility:
 1. Semi-annual expenditures compared to annual budget, and
 2. Participation rates.
- C. An affected utility shall file each report required by this Section with Docket Control, where it will be available to the public, and shall make each such report available to the public upon request.
- D. An affected utility may request within its implementation plan that these reporting requirements supersede specific existing DSM reporting requirements.

DSM Budget, Income, and Expense Statement

Sulphur Springs Valley Electric Cooperative, Inc.

Demand Side Management Report

January to December 2014

Programs	Budget
Touchstone EE Homes Inspections	\$ 500
Residential - audits	\$ 52,500
C&I - audits	\$ 12,000
DSM - Admin	\$ 14,500
DSM - Program Development	\$ 15,000
Expenses	
Advertising	\$ 35,000
Vehicle Mileage	\$ 2,000
Communication & Notices	\$ 5,000
Misc	\$ 3,157
Rebates	
Water Heater	\$ 25,000
Heat Pump	\$ 20,000
Loan Programs	
Residential Loans	\$ 215,000
Commercial Loans	\$ 150,000
Budget Totals	\$ 549,657

Income

Carry over from 2013	\$ 792,515
Collections in 2014	\$ 215,575
Loan Repayments in 2014	\$ 255,097
YTD Total	\$ 1,263,187

DSM Expenses

Programs	
Touchstone EE Homes	\$ 209
Residential Audits	\$ 28,563
C&I Audits	\$ 79,882
DSM - Admin	\$ 72,555
DSM - Program Development	\$ 156,830
Expenses	
Advertising	\$ 17,346
Misc	\$ 8,094
Vehicle Mileage	\$ -
Communication & Notices	\$ 3,163
Rebates	
Water Heater	\$ 700
Heat Pump	\$ 18,700
Loan Programs	
Residential Loans	\$ 77,604
Commercial Loans	\$ 2,000

YTD Expense Total \$ **465,645**

DSM Program Ending Balance = \$ 797,542

Energy Efficient New Home Program (Touchstone Energy Home Program)

The Touchstone Energy Home Program replaced the Goodcents Program we were previously using until 2002. The new home program promotes new home thermal performance standards that meet or exceed HUD/AzHERS guidelines for energy efficient mortgages. *This program has reached the end of life as shown in the minimal budget to pick up program "stragglers"*

Touchstone Energy Efficient Home Program

	(i) Number of Homes Certified	Estimated kWh \$ saved	Estimated Fossil Fuel \$ Saved	(iii) Total Estimated \$ Savings	Estimated kWh Savings per Year	(vi) Program Costs
Jan		\$ -	\$ -	\$ -	-	\$ -
Feb		\$ -	\$ -	\$ -	-	\$ -
Mar		\$ -	\$ -	\$ -	-	\$ -
Apr		\$ -	\$ -	\$ -	-	\$ -
May		\$ -	\$ -	\$ -	-	\$ -
Jun		\$ -	\$ -	\$ -	-	\$ -
Jul		\$ -	\$ -	\$ -	-	\$ -
Aug	1	\$ 311.19	\$ 660.66	\$ 971.85	1,859	\$ 209.00
Sep		\$ -	\$ -	\$ -	-	\$ -
Oct		\$ -	\$ -	\$ -	-	\$ -
Nov		\$ -	\$ -	\$ -	-	\$ -
Dec		\$ -	\$ -	\$ -	-	\$ -
YTD total =	1	\$ 311.19	\$ 660.66	\$ 971.85	1,859	\$ 209.00

(v) Estimated Environmental Impact

CO2 (1.844 lb. Per kWh)	3,427	pounds of CO2 emissions reduced
SO2 (.00342lb Per kWh)	6	pounds of SO2 emissions reduced
NOx (.0052 lb. per kWh)	10	pounds of NOx emissions reduced

Budget Impact

2014 Budget	\$ 500.00
2014 YTD Budget	\$ 500.00
2014 YTD Spent	\$ 209.00
2014 Budget Balance	\$ 291.00

Program Costs (since beginning of program)

Cost prior to 2014	\$ 94,919.00	estimated
Cost in 2014	\$ 209.00	
Total Program Costs =	\$ 95,128.00	

(vii) Significant impacts on program Cost Effectiveness

Program at end of life.

(ix) Problems and Solutions:

Program no longer active

(x) Any major changes to the Program

Program no longer active.

Note: The kWh and Energy savings for this program have a useful life of 30+ years.

Energy Efficient Existing Home Program

Under this program SSVEC pays \$500 per unit to a homeowner for the installation of air-to-air heat pumps with at least a SEER of 15 and \$200 for dual fuel. This program was approved in 1995.

Heat Pump Rebate Program

	(i) Number of Rebates	(vi) Rebates Paid	(iii) Total Estimated \$ Savings	(iv) kWh Savings per Year
Jan	2	\$ 1,000.00	\$ 166.73	1,370
Feb	3	\$ 1,500.00	\$ 250.09	2,055
Mar	1	\$ 500.00	\$ 83.36	685
Apr	1	\$ 500.00	\$ 83.36	685
May	5	\$ 2,200.00	\$ 416.82	3,425
Jun	2	\$ 700.00	\$ 166.73	1,370
Jul	1	\$ 500.00	\$ 83.36	685
Aug	9	\$ 4,500.00	\$ 750.28	6,165
Sep	10	\$ 4,100.00	\$ 833.65	6,850
Oct	2	\$ 700.00	\$ 166.73	1,370
Nov	1	\$ 500.00	\$ 83.36	685
Dec	4	\$ 2,000.00	\$ 333.46	2,740
YTD Totals =	41	\$ 18,700.00	\$ 3,417.94	28,085

(v) Estimated Environmental Impact

CO2 (1.844 lb. Per kWh)	51,789	pounds of CO2 emissions reduced
SO2 (.00342lb Per kWh)	96	pounds of SO2 emissions reduced
NOx (.0052 lb. per kWh)	146	pounds of NOx emissions reduced

(vi) Budget Impact

2014 Budget	\$ 20,000.00
2014 YTD Budget	\$ 20,000.00
2014 YTD Spent	\$ 18,700.00
2014 Budget Balance	<u>\$ 1,300.00</u>

Program Costs (since beginning of program)

Cost prior to 2014	\$ 255,200.00	Estimate
Cost in 2014	\$ 18,700.00	

Total Program Costs = \$ 273,900.00

(vii) Significant impacts on program Cost Effectiveness

None.

(ix) Problems and Solutions:

None

(x) Any major changes

None.

Benefit to Cost Ratio Test

Using an EPA Savings Calculator increasing a 3.5 ton Heat Pump SEER by 1 (using an incremental cost increase of \$1,500 per SEER) provides the following Savings.

Number of units	1	
Electric Rate (\$/kWh)	\$0.122	
City	AZ-Sierra Vista	
	ENERGY STAR Qualified Unit	Conventional Unit
Initial Cost per Unit (estimated retail price)	\$7,200	\$5,700
Heating Seasonal Performance Factor (HSPF) rating	8.2	7.7
Seasonal Energy Efficiency Ratio (SEER) rating	15	14
Heat Pump Capacity (Btu/hr)	42,000	42,000
Use with programmable thermostat (Yes/No)	Yes	No

Annual and Life Cycle Costs and Savings for 1 Air Source Heat Pump(s)

	1 ENERGY STAR Qualified Units	1 Conventional Units	Savings with ENERGY STAR
Annual Operating Costs*			
Energy cost	\$1,932	\$2,444	\$512
<i>Energy consumption (kWh)</i>	15,871	20,082	4,211
Maintenance cost	\$0	\$0	\$0
Total	\$1,932	\$2,444	\$512
Life Cycle Costs*			
Operating costs (energy and maintenance)	\$18,128	\$22,937	\$4,809
Energy costs	\$18,128	\$22,937	\$4,809
<i>Energy consumption (kWh)</i>	190,455	240,984	50,529
Maintenance costs	\$0	\$0	\$0
Purchase price for 1 unit(s)	\$7,200	\$5,700	-\$1,500
Total	\$25,328	\$28,637	\$3,309
		Simple payback of initial additional cost (years) [†]	2.9

* Annual costs exclude the initial purchase price. All costs, except initial cost, are discounted over the products' lifetime using a real discount rate of 4%. See "Assumptions" to change factors including the discount rate.

† A simple payback period of zero years means that the payback is immediate.

Summary of Benefits for 1 Air Source Heat Pump(s)

Initial cost difference	\$1,500
Life cycle savings	\$4,809
Net life cycle savings (life cycle savings - additional cost)	\$3,309
Simple payback of additional cost (years)	2.9
Life cycle energy saved (kWh)	50,529
Life cycle air pollution reduction (lbs of CO ₂)	77,815
Air pollution reduction equivalence (number of cars removed from the road for a year)	7
Savings as a percent of retail price	46%

Benefit to Cost Ratio

$$\begin{array}{l} \text{Annual Savings} \quad \$512 \\ \text{Program Cost} \quad \$500 \end{array} = 1.024 \text{ Ratio}$$

Typically our Members install a Heat Pump with more than a single digit increase so the savings are even higher which increases the ratio even higher.

Energy Efficient Water Heater Rebate Program

SSVEC offers a \$100 cash incentive for the purchase and installation of a .93+ efficient water heater.

Energy Efficient Water Heater Rebate

	(i) Number of Incentives Paid	(vi) Cost of Incentives Paid	(iii) Total Estimated Savings by Customer	(iv) Estimated kWh Savings per Year
Jan		\$ -	\$ -	-
Feb	1	\$ 100.00	\$ 125.00	1,027
Mar	1	\$ 100.00	\$ 125.00	1,027
Apr	0	\$ -	\$ -	-
May	0	\$ -	\$ -	-
Jun	0	\$ -	\$ -	-
Jul	0	\$ -	\$ -	-
Aug	1	\$ 100.00	\$ 125.00	1,027
Sep	2	\$ 200.00	\$ 250.00	2,054
Oct	1	\$ 100.00	\$ 125.00	1,027
Nov	0	\$ -	\$ -	-
Dec	1	\$ 100.00	\$ 125.00	1,027
YTD Totals =	7	\$ 700.00	\$ 875.00	7,190

(v) Estimated Environmental Impact

CO2 (1.844 lb. Per kWh)	13,258	pounds of CO2 emissions reduced
SO2 (.00342lb Per kWh)	25	pounds of SO2 emissions reduced
NOx (.0052 lb. per kWh)	37	pounds of NOx emissions reduced

(vi) Budget Impact

2013 Budget	\$ 25,000.00
2014 YTD Budget	\$ 25,000.00
2014 YTD Spent	\$ 700.00
2014 Budget Balance	\$ 24,300.00

(vii) Significant impacts on program Cost Effectiveness

None

(ix) Problems and Solutions:

None

(x) Any major changes

In our 2012/2013 DSM program we modified this to match the recommendations from ACC Staff setting the required EF based on tank size. See Decision 73930.

Benefit to Cost Ratio Test

Annual Savings = \$125 ÷ \$100 incentive = 1.25 Ratio

Residential Zero Interest Loan Program

The Residential Zero Interest Loan Program is designed to help bring the older homes in our service area up to current thermal standards. This includes adding insulation to attics to an R-38 or higher, replacing single pane or damaged older dual pane windows, replacing hollow core exterior doors with insulated steel or fiberglass doors. If the Customer makes \$2,000 of the proceeding improvements, they could also replace 60% efficient gas furnaces with a 80% efficient gas furnace or a 14 SEER or higher Heat Pump or A/C with gas under the loan program.

(i) Participation Levels:

In 2014 we issued 6 loans for a total of \$77,604.33

(ii) Marketing Materials:

See advertising section

(iii) Estimated Savings to Participants:

Using the following methodology from the Manual J Load Calculation we estimated* the savings in Gas and Electricity with these formulas.

Heating Season Requirements by building components

$$\text{Heating Season Requirement (in Btu's)} = \frac{\text{Surface Area X Heating Degree Days X 24 hrs}}{\text{U-Value of Surface}}$$

$$\text{Cost of Heating} = \text{Heating Btu's} \div \text{Efficiency of Furnace X Cost per Therm}$$

Cooling Season Requirements by building components

$$\text{Cooling Season Requirement (in Btu's)} = \frac{\text{Surface Area X Cooling Degree Days X 24 hrs}}{\text{U-Value of Surface}}$$

$$\text{Cost of Cooling} = \text{Cooling Btu's} \div \text{Efficiency of A/C X 3125 (Btu per kWh) X Cost per kWh}$$

*Lifestyle and differences in perceived comfort are not included in the estimates and HDD and CDD assume a constant temperature settings.

The following Assumptions were used:

Heating Degree Days	2486	There are 3125 Btu's per kWh of electricity
Cooling Degree Days	2174	Old Furnace is 60% efficient
Heating hours	1261	New Furnace is 80% efficient
Cooling hours	1842	Old Windows U-Value of 1.1
Cost of Natural Gas	\$1.13776 per therm	New Windows U-Value of at least .58
Cost of Electricity	\$ 0.1217 per kWh	Old Doors R1.79
A/C Coefficient of Performance	2.5	New Doors R5 or better

Using the above formulas we estimate* the 15 completed project will:

(iii) Estimated Cost Savings to Participates

Btu Reduction =	141,051,357
Heating Cost Reduction =	\$ 1,331
Cooling Cost Reduction =	\$ 1,038

Improvements to the homes by sealing cracks and openings in the walls and ceilings will also lower the costs above but there is not a reliable method to calculate them other than an estimated 10-20% improvement in heating and cooling cost. Infiltration improvements are not included in the cost savings listed above.

*Variables such as the customer's choice of set temperatures for their comfort cannot be defined.

(iv) Gas and Electric Savings:

Estimated Reduction in Gas Purchases =	930.6	therms
Estimated Reduction in kWh Purchases =	8,525.5	

(v) Estimated Environmental Savings (electric only)

CO2 (1.844 lb. Per kWh)	15,721	pounds of CO2 emissions reduced
SO2 (.00342lb Per kWh)	29	pounds of SO2 emissions reduced
NOx (.0052 lb. per kWh)	44	pounds of NOx emissions reduced

(vi) Program Expenditures:

Total amount of money Loaned:	\$ 77,604
Loan payments received:	\$155,097

(vii) Significant impacts on program Cost Effectiveness

This program is almost self-sustaining as prior loans are paid back. This provides a growing DSM fund without having to increase the collections from Customers. This funding increase allows us to expand the overall DSM program with no financial impact on Customers.

(ix) Problems and Solutions:

The current economy still has people hesitate to increase debt even at 0% interest. Interest in this program is tied directly to the number of home audits which have declined due to the aged of the program.

(x) Any major changes to program

None.

Benefit to Cost Ratio Test

Because this is a "revolving" loan program all incentives come back to the Cooperative to support the DSM program so typical ratio and program tests don't reflect the value of the program.

C&I Energy Efficiency Zero Interest Loan Program

The C&I Zero Interest Loan Program is unique in that it rather than promoting a single technology such as lighting (via fixture rebates) or HVAC upgrades, which we expect to be the most common upgrades, it allows for technology that might be specific to a single business sector.

(i) Number of participates: 5

(ii) Copies of Marketing Material

In 2013 we presented the load program as part of the Irrigation Pump Test program which these irrigation customers participated.

(iii) Estimated Cost Savings to Participants

Customer Name	Measures	(iii) Estimated Annual Savings (\$)	(iv) Estimated Annual kWh Savings
Asmundson	VFD Installed	\$ 2,066.40	34,440

(iv) Gas and Electric Savings as determined by M&V process

VFD Project

Using the consumption history from 2009 to 2011 to produce a “baseline” the savings to date re as follow;

Savings	kWh	Cost Reduction
May	1,333	\$125
June	6,827	\$578

(v) Estimated Environmental Savings (total program)

(vi) Program Expenditures:

YTD Total amount of money Loaned: \$ 2,000
 YTD Loan payments received: \$100,000

Emissions Reductions		
CO2	316,995	lbs per year
SO2	588	lbs per year
Nox	894	lbs per year

Source: Arizona Electric Power Cooperative, 1993 & 1994 emissions compliance test results.

(vii) Significant impacts on program Cost Effectiveness

None

(ix) Problems and Solutions:

The current economy still has people hesitate to increase debt even at 0% interest.

(x) Any major changes to program

We are working on a plan to increase the number of C&I audits to hopefully generate more interest in the loan program.

Benefit to Cost Ratio Test

Because this is a “revolving” loan program all incentives come back to the Cooperative to support the DSM program so typical ratio and program tests don’t reflect the value of the program.

2015 Operating Budget

At the direction of the Commission, SSVEC was told to keep using the 2013 DSM program until further notice. As part of the order of the Commission, SSVEC was given permission to modify the program and budget to keep the program as efficient as possible, but not allowed to add any additional programs or expenses.

Therefore, SSVEC proposes the following DSM Budget for 2015. No changes to the approved DSM adder are requested at this time.

Income and Expense Summary	
Program Costs	Budget
Touchstone EE Homes	\$ 500
Residential Audits	\$ 25,000
C&I Audits	\$ 26,500
DSM - Admin	\$ 26,500
DSM - Program Development	\$ 15,000
Expenses	
Advertising	\$ 35,000
Vehicle Mileage	\$ 2,000
Communication & Notices	\$ 5,000
Misc	\$ 4,157
Rebates	
Water Heater	\$ 25,000
Heat Pump	\$ 20,000
Loan Programs	
Residential Loans	\$ 215,000
Commercial Loans	\$ 150,000
totals	\$ 549,657

This proposed Budget was used to proportionally distribute the \$797,542 carry-over from 2014 and to distribute the DSM funds collected from the DSM adder.

The changes in the Budget were based on the actual expenses accrued in 2014 and projected expenses for 2015. The changes from 2014 are lowering the budget for residential audits (as that program has reached a saturation point and requests for audits have dropped) and allocated those funds to C&I audits which are projected to increase. The DSM Admin was increased slightly to reflect underfunding in 2014.

We are planning to submit a 2016 DSM plan in June.

Advertising Report

Marketing expense and supporting data for item (ii) as outlined on page 46 of Docket No. E-01575A-08-0328, Decision No. 71274.

Demand Side (Energy Management) articles in the SSVEC Bill Insert *Co-op Connections*

January 2014

**“Saving Energy in the New Year with Together We Save –
And Saving Energy Means Saving Money!”**

2/3rds of a page of 2 pages

February 2014

“Free home energy audits are still available from SSVEC”

1/4 of a page of 2 pages

March 2014

“Free home energy audits are still available”

1/4 of a page of 2 pages

April 2014

“Free home energy audits are still available from SSVEC”

1/3 of a page of 2 pages

May 2014

None

June 2014

None

July 2014

“Vacation Time – “Turn off” and “Unplug” before you leave”

2/3 of a page of 2 pages

August 2014

“Check out energy usage of your home appliances”

2/3 of a page of 2 pages

September 2014

None

October 2014

None

November 2014

None

December 2014

“Prepaid Metering May be an Option for You”

2/3 of a page of 2 pages

“SmartHub provides convenience and info”

1/4 of a page of 2 pages

Demand Side (Energy Management) articles in the SSVEC Member Magazine *Currents*

January – February 2014

“Cutting Your Killowatt Hours” page 8-10 1 3/4 of a page(s)

“Energy Audits” page 10 .1/4 of a page

2 pages of 16 pages

March - April 2014

None

May - June 2014

None

July - August 2014

“Prepaid Metering Now Available to Residential Members” page 9 1/4 of a page

1/4 pages of 20 pages

September – October 2014

“Is Pre-Paid Service The Right Choice For Me?” page 8 1/3 of a page

“New app, billing service powerful new tools” pages 8-9 2/3 of page 8 & .5 of page 9

1 1/2 pages of 20 pages

November - December 2014

None

Ad copy for January 2014 through Dec 2014

January 2014

February 2014

GO-OPCONNECTION

News and Information from SSVEC

January 2014

Calendar

January 20
SSVEC will be closed for the day. Please call the office if you have any questions. Call to members at 925-833-3375.

January 23
SSVEC Board of Directors Meeting 9:30 am. SSVET Corporate Meeting. Call to members at 925-833-3375.

February 17
SSVEC will be closed for the day. Please call the office if you have any questions. Call to members at 925-833-3375.

February 20
SSVEC Board of Directors Meeting 9:30 am. SSVET Corporate Meeting. Call to members at 925-833-3375.

March 13
SSVEC Board of Directors Meeting 9:30 am. SSVET Corporate Meeting. Call to members at 925-833-3375.

Check out our website www.ssvet.com and "like" us on www.facebook.com/SSVEC

Saving Energy in the New Year with Together We Save And Saving Energy Means Saving Money!

By "lighting the way" together we can save energy in your home. It's time to take a "light" step at an energy audit to highlight areas of energy waste.

What else does the title mean? Well, it's not just about the "light" but also about the "together" part. It's about working together to save energy. We'll provide you with a list of energy-saving tips and a checklist to help you get started. We'll also provide you with a list of energy-saving products and services that can help you save money on your energy bills.



What if I don't have internet access? If you don't have internet access, we'll get back to you with a printed copy of the energy audit report.

Call (888) 513-3467 for more information or to schedule your energy audit. We'll be happy to help you save energy and money.

Facebook is one more way for SSVEC to announce planned power outages

SSVEC is announcing that it will be using Facebook to announce planned power outages. This is a new way for us to reach our members and let them know when there will be a power outage. We'll post the dates and times of the outages on our Facebook page. We'll also post any information we have about the outages. We'll be happy to answer any questions you have about the outages.

Free home energy audits are still available from SSVEC

SSVEC is continuing to offer free residential energy audits to cooperative members. Just call (888) 513-3467 to have a message. A representative will contact you and set up an appointment for your energy audit. For an energy audit to visit your home and make recommendations for improved energy efficiency and savings.

Mark your calendar for SSVEC's 76th Annual Meeting

SSVEC's 76th annual meeting will be held in Benson High School on Thursday evening, April 24. The business meeting will begin at 7:00 p.m. and adjourns at another location at 8:00 p.m.

More information will be found in the next 60 issues and in the March edition of *Together We Save*.

SSVEC Phone Numbers

Benson 896-2228
Casa Grande 212-6001
Palm Springs 394-2851
San Jacinto 848-6900
Burlington 824-6000

Bonita 847-6016
Eureka 643-1475
Pacoima 628-4006
Sierra Vista 498-4495
Whittier 384-2221

Emergency after hours (909) 432-3375

Wynn F. Carr, SSVET
300 E. 10th Street
Burlington, CA 92501
P.O. Box 100000

United Springs Valley
Electric Cooperative, Inc.

"I read here, you save an internet and phone company that keeps you connected to what's important."

We Hear You!

Wi-Power is the only company that offers a free home energy audit. We'll help you save money on your energy bills. Call (888) 513-3467 for more information.

888-513-3467 · www.wi-power.com

March 2014

April 2014

GO-OPCONNECTION

News and Information from your electric cooperative

March 2014

Calendar

March 13
SSVEC Board of Directors Meeting 9:30 am. SSVET Corporate Meeting. Call to members at 925-833-3375.

March 20
SSVEC Board of Directors Meeting 9:30 am. SSVET Corporate Meeting. Call to members at 925-833-3375.

April 23
SSVEC Board of Directors Meeting 9:30 am. SSVET Corporate Meeting. Call to members at 925-833-3375.

April 26
SSVEC Annual Meeting 9:30 am. SSVET Corporate Meeting. Call to members at 925-833-3375.

May 31
SSVEC Board of Directors Meeting 9:30 am. SSVET Corporate Meeting. Call to members at 925-833-3375.

Check out our website www.ssvet.com and "like" us on www.facebook.com/SSVEC

SSVEC's 76th Annual Meeting is April 24 in Benson

SSVEC's 76th annual meeting will be held in Benson High School on Thursday evening, April 24. The business meeting will begin at 7:00 p.m. and adjourns at another location at 8:00 p.m.

Information about the meeting will be found in the next 60 issues and in the March edition of *Together We Save*.

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Call (888) 513-3467 for more information or to schedule your energy audit. We'll be happy to help you save energy and money.

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Members must be returned by April 23 in order to be eligible

This year's election will be held in person at the Benson High School on Thursday evening, April 24. Members must be returned to the office by April 23 in order to be eligible to vote.

All ballots must be returned not later than April 23 to the office in the Benson High School at 7:00 a.m. or they can be returned by a designated representative.

Members of those districts will be contacted by the SSVET staff in order to be returned to the office by April 23.

Free home energy audits are still available from SSVEC

SSVEC is continuing to offer free residential energy audits to cooperative members. Just call (888) 513-3467 to have a message. A representative will contact you and set up an appointment for your energy audit.

Call (888) 513-3467 for more information or to schedule your energy audit. We'll be happy to help you save energy and money.

SSVEC Phone Numbers

Benson 896-2228
Casa Grande 212-6001
Palm Springs 394-2851
San Jacinto 848-6900
Burlington 824-6000

Bonita 847-6016
Eureka 643-1475
Pacoima 628-4006
Sierra Vista 498-4495
Whittier 384-2221

Emergency after hours (909) 432-3375

Concessions Events and Fundraisers Are Now Listed in Correct

Members of those districts will be contacted by the SSVET staff in order to be returned to the office by April 23.

Free home energy audits are still available from SSVEC. Call (888) 513-3467 for more information.

Wi-Power is the only company that offers a free home energy audit. We'll help you save money on your energy bills. Call (888) 513-3467 for more information.

888-513-3467 · www.wi-power.com

75053V

Go-op CONNECTION

News and Information from SSVEC

July 2014

Calendar

July 4
SSVEC offices closed for Independence Day Holiday
To report an outage or other electrical emergencies, call 1-800-422-3275.

July 16
SSVEC Board of Directors Meeting
8:30 a.m. at 2501 N. Haskell Avenue, Wilcox, Arizona. Call to members is at 9:35 a.m.

August 20
SSVEC Board of Directors Meeting
9:30 a.m. at 311 E. Wilcox Ave., Sierra Vista, Arizona. Call to members is at 9:35 a.m.

September 1
SSVEC offices closed for Labor Day Holiday
To report an outage or other electrical emergencies, call 1-800-422-3275.

September 17
SSVEC Board of Directors Meeting
9:30 a.m. at 1552 Cooperative Way, Benson, Arizona. Call to members is at 9:35 a.m.

Check out our website www.ssvcc.org and "like" us at www.facebook.com/SSVECAZ

Vacation Time

"Turn off" and "unplug" before you leave

Vacation time is a great opportunity to relax and enjoy being away from home. But remember, if you're not careful, you could be using electricity unnecessarily while you're gone.

Decide what you can turn off. Fine, decide what doesn't have to be left "on" while you're away. For example, even though you're not at home, the water heater will automatically operate as the water in the tank cools.

Turn off the water heater! A refrigerator operating in a house that is "closed up" in warm weather will be forced to run longer and more often, using more energy than a refrigerator would.

If you're going to be gone for two weeks or

more, consider emptying, defrosting and unplugging your refrigerator. (Be sure to keep the door open to allow air to circulate in the refrigerator cabinet.) You may save enough on your electricity costs to rent a truck with fresh towels when you return.



What you should leave on

Turn your air conditioner off and you can be assured it was not electrically. However, if you have in-air quality devices

suffer from the heat, or if someone will be checking on your house from time to time, you may want to leave your cooling system on. If so, adjust the thermostat to a higher setting than usual. You may also want to leave a lamp or two on a timer to give the impression that someone is at home.

Other ways to save
You can turn off the heater on a pool or spa and reduce the filter time to a minimum.

Many appliances such as microwaves, computers or televisions have "standby" modes that draw some power at all times. Unplug these appliances and you'll save energy as well as prevent possible damage related to surges or power swings.

Paying Your Electric Bill When You're Out of Town

If you're going on vacation for an extended period of time, you have several options to help assure your bill is paid on time and your electric service is not interrupted.

- Come in to an SSVEC office prior to your vacation and prepay your monthly electric bill.
- Check the amount of your bill on-line and use a credit card to pay your bill by phone from your vacation destination.
- Sign up for Automatic Payment. That way your electric bill will be paid from your checking or savings account or from your debit or credit card each month.

For more information, contact your local SSVEC office.

"Check out" energy usage of your home appliances

Understanding just how much a household appliance costs to operate is key to making a home owner's monthly electric bill. The first step in determining what an appliance costs to operate is knowing how much electricity it uses.

SSVEC is making it easier for members to check the usage with a metering device called a "Kilowatt Hour" (KWH) meter. The cooperative has made these devices available for check-out at branches throughout the cooperative's service area.

The KWH meter digital unit plugs into an ordinary wall outlet. The appliance cord is then plugged into the unit that measures the electric energy used to operate the appliance. The device provides a digital read-out of the work used and can monitor the continued use of the most hours (MWH).

The home owner can calculate the cost to operate a refrigerator, television, computer or any other electric item by simply multiplying the usage by the cost per kWh.

Co-op members can check out a KWH meter unit at these libraries: Benson, Patagonia, Sierra Vista, Sanita, Tempe and Wilcox. Members can request a unit for loan through the Cochise County Library at one of these community libraries: Bowie, Akita, Santsana or Santsana.

If you have questions or need more information, please call (520) 511-2477.

SSVEC Phone Numbers

- Benson 526-2238
- Casa Grande 242-5001
- Patagonia 384-3051
- San Simon 824-3000
- Sunizona 824-4000
- Bowie 847-5800
- Elfrida 842-3475
- Penona 826-8006
- Sierra Vista 458-4691
- Wilcox 384-2221

Emergency after hours (800) 422-3275

Community Events and Fundraisers Are Now Listed in Contents

Your non-profit club or organization can get a free listing of an upcoming event or fundraiser in SSVEC's member magazine *Contents*. Simply email the information to webmaster@ssvec.com or call (520) 384-2510.

Deadline for the September edition of *Contents* will be October and November events is August 4. Deadline for the November edition listing December and January (2015) events is October 2.

Wilcox Springs Valley Electric Cooperative, Inc. www.ssvcc.org

75053V

Go-op CONNECTION

News and Information from SSVEC

December 2014

Calendar

November 27 and 28
SSVEC offices closed for Thanksgiving Holiday
To report an outage or other electrical emergencies, call 1-800-422-3275.

December 17
SSVEC Board of Directors Meeting
9:30 a.m. at 1552 Cooperative Way, Benson, Arizona. Call to members is at 9:35 a.m.

December 24 and 25
SSVEC offices closed for Christmas Holiday
To report an outage or other electrical emergencies, call 1-800-422-3275.

January 1, 2015
SSVEC offices closed for New Year's Holiday
To report an outage or other electrical emergencies, call 1-800-422-3275.

Check out our website www.ssvcc.org and "like" us at www.facebook.com/SSVECAZ

Prepaid Metering May Be an Option for You

There are advantages for some residential members

If you have a residential account with Sulphur Springs Valley Electric Cooperative, you now have another way to purchase electricity: Prepaid Metering.

- This is a "pay-as-you-go" option.
- no deposits
 - no late fees
 - ability to monitor daily usage on SmartHub found at SSVEC's website
 - ability to make more frequent but smaller payments rather than one large monthly payment

Please note: to participate in this program you must have internet access or be able to receive low balance notifications via email, text or phone.

When you sign up for the program you can pay as little as \$100 with

\$50 going toward a credit balance. You can add to the credit balance using your credit or debit card and take advantage of SSVEC's automated pay-by-phone system, web payment portal at the cooperative's website or through the SmartHub app on your "Smart" device. You can also visit an SSVEC office during regular business hours.

When your account credit balance gets low, a notification will be sent by email or text messaging.

If you sign-up for Pre-Paid Metering, you can use the deposit from your existing account to pay any amounts that you owe to SSVEC and have any remainder applied in your credit balance.

If you would like more information on Pre-Paid Metering, call your local SSVEC office.

SmartHub provides convenience and info

SSVEC's SmartHub is a new system to make electronic bill payments and effectively monitor power usage.

With SmartHub, members can determine just how much electricity they use and compare their usage by week, month or year. It is also available as an app with Apple and Android devices.

Co-op members who want to participate in the program can create an online account through the SSVEC website (www.ssvcc.org).

Members can then view their monthly bill statement, make a payment or check their electricity usage.

Currents

SULPHUR SPRINGS VALLEY ELECTRIC CO-OP

2014

CUTTING YOUR KILOWATT HOURS
Energy audits save homes, businesses money

JANUARY & FEBRUARY

ENERGY AUDITS

Cutting Your Kilowatt Hours

ENERGY AUDITS SAVE HOMES, BUSINESSES MONEY

BY GARY HAYMON

It may not make sense for a company to have a goal of encouraging its customers to consume as little of its service as possible, but that's exactly what Sulphur Springs Valley Electric Cooperative (SSVEC) has in mind by offering its free home and business energy audits.

"Being that we're member owned, and not for profit, my salary and the salary of the executives are not based on sales goals. In an entrepreneurial ability, the more energy they use, the more money they exchange their stockholders. We don't have that mindset," said David Bone, key accounts manager for SSVEC.

Keeping its members in business is good for the health of the co-op and the community.

"If I can cut a business's electricity expense by \$100 a month, then that's \$100 that goes back into the member-owned community, and it's good for everybody," Bone said. "It's much easier to keep a business in business, than to actively recruit a business to replace one that's gone out of business."

The cooperative never purchases more electricity than the demand from its members requires. Therefore, if demand at the member level drops due to increased efficiencies, that translates to less power that needs to be purchased, and less cost to SSVEC.

Currently, SSVEC purchases 60 percent of its electricity from the Arizona Electric Power



Technician Steve Lindberg shows tips on lowering a monthly electric bill with Gary Shafanski.

Cooperative (AEPCCO) and the remaining 20 percent, it provides on the open market.

"AEPCCO acts as an agent for us. If at some reason we don't use all of our electricity in that particular moment, they throw it on the market and sell it for us. We may make money, or we just may not lose as much money."

"If I can get one person to conserve a little bit, I can use those kilowatt hours for somebody else, and I don't have to go to that 20 percent on the open market to fill in the gaps," Bone said.

All of this serves to explain why SSVEC started offering home energy audits to its members about two decades ago.

In that time, energy use audits for businesses have also been initiated. Help some of the co-op's biggest energy users find ways to minimize the impact that electricity use has on their bottom line.

"When you're talking about an audit, you're really looking at the thermal characteristics of a building. So, where's the heat going or coming in?" he said. "Once you stop the heat from coming in, then you can look at how to control it. So then you look at conditioning and cooling, things like that."

Different considerations are taken in depending on whether the audit is for a residence or a business.

"Businesses are a different animal. The thermal envelope isn't nearly as important, because in a restaurant you've got people coming and going all the time. For most restaurants, heating and cooling are their biggest cost factors. Instead, Bone said, "It's about saving the cost in their work on refrigeration, their cooking. That's the energy cost that's driving them."

Lighting can also have a substantial impact. Residential

ENERGY AUDITS

"If I can cut a business's electricity expense by \$100 a month, then that's \$100 that goes back into the member-owned community, and it's good for everybody."

David Bone, key accounts manager for SSVEC

lights are used rarely compared to that of a business, which are typically on 24 hours a day.

That was what led to a recent focus on energy audits at Haymore Plaza, where co-owners Steve and Gary Haymore, the wife and son, take to make their energy use more efficient.

"Now all six of the tenants were working around the clock, so they're in here in the middle of the night any time of day," Steve Haymore said. Some of those same tenants continued to have energy audits, which also place an eye on lighting and cooling systems.

"We have a number of tenants that are working late hours, so they're in here in the building, so those things have to be monitored. They can't get over certain temperature at any time," Gary Haymore said. With approximately 45,000 square feet of leasable space and an estimated 100 light fixtures, Haymore Plaza and other businesses like it would benefit from a room-by-room lighting audit by a performance contractor, Bone said.

Typically, these contractors offer fixture packages that match the savings from proposed lighting upgrades, where, while having an upgrade cost to the client, will also generate savings in



SSVEC technician, Steve Lindberg and homeowner Gary Shafanski, discuss ways to conserve energy, during a home energy audit.

ENERGY AUDITS



Steve Lindberg, an energy auditor, works on a lighting fixture.

Steve Lindberg, an energy auditor, works on a lighting fixture. "I've been trying to figure out how I'm going to lower the bill, but like you said, I've got a lot of stuff on which way am I going to go?" he asked.

One easy and free method for homeowners like Shafanski to determine which appliances are using the most energy is to go to their local library and ask to rent a device called a Kill A Watt.



ENERGY AUDITS

SSVEC has hired and trained professional energy auditors. These energy auditors will visit your home or business and conduct an in-depth energy audit and make specific recommendations on what the home or business owner can do to decrease energy consumption. In addition, our energy auditors will, when possible, match the recommendations to existing or planned SSVEC programs. Some of the existing programs include: energy audits for doors, windows, and insulation and rebates for various products. Also included are projects that can be done for little or no cost.

If you are interested in additional information, please call (505) 515-5400 or email: Energy@aepcc.com and we will make a call to schedule an appointment.

The devices plug into a wall outlet along with an appliance and can provide residents with a reading of how much electricity that particular appliance is using. SSVEC provides these devices to most local libraries in Cochise County, Lindberg said. "You can get them from the library. You can check them out like a book," he said.

For more information on free energy audits for the home or business offered by Sulphur Springs Valley Electric Cooperative, visit www.ssvcc.org.

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SULPHUR SPRINGS

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- Low balance notifications can be sent to a third party of your choice.
- Providing you have access to the Internet or are able to receive balance related emails via email, text or phone.
- Pre-Paid Service may be for you.
- Conditions of service.
- Pre-Paid Service is only available to qualified SSVVC residential members.
- It is not available to members who are:
- involved in budget billing.
- involved in delinquency.
- on Time of Use rates.
- using 3-phase service.
- dependent on electricity for health reasons.
- Members are responsible for:
- Maintaining a credit balance on their account.
- Monitoring and updating notification settings, including keeping contact information current.

New app, billing service powerful new tools SmartHub lets you monitor energy usage, prepay for electricity

Armanda Bolles
for Currents Magazine

For decades, Sulphur Springs Valley Electric Cooperative has been delivering power to its members.

And now the co-op's members have been handed power of a different kind — the ability to take control of their daily electric use, and how they want to pay for it.

The introduction of two new programs allows those served by the cooperative to not only save energy and money, but to change the way they use electricity in their homes.

Following a successful test period in 2013, SSVVC added a section to its existing website called SmartHub. SmartHub introduced a new system for electronic bill payment, as well as additional features that allow members to monitor their power usage.

Also available as an app via Apple and Android devices, members can find out how much electricity they are using on a daily basis, as well as comparing consumption by week, month or year.

"Under the old system, we could not provide members detailed usage data. There is a big push in the industry to put more detailed information in the hands of the members to help them conserve," said Owen Geremy, Information and Communications Systems Manager. Previously, members were only able to see how much energy they used during the set period on their monthly bills. Under SmartHub, they can see when they used each day.

"I was the first member to use SmartHub, and it was nice to track how much electricity I used each day," Geremy said. "When I was not at home, I could see use drop and become very predictable. I used the app to see to turn off appliances not needed during the day, which lowered my bill."

This information gives members the ability to make some changes to lower their energy consumption, he added.

"SmartHub is a tool that people can use to adjust their habits to conserve power," he said. "For example, when I left for vacation I turned off the satellite TV system

and found I was saving around 30 cents a day. That may not sound like much, but it can add up to extra money or the price of a gallon of milk, in my pocket." SSVVC added SmartHub to its website in October 2013, replacing its former electronic billing system — members already paying electronically were successfully transferred to the new system without interruption to their monthly billing process.

To access their information, members need to create an online account (via the website or the app using their account number and email address), where they can see their bill statement and make a payment, as well as view their usage.

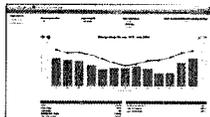
This same information also can be used by those who opt for SSVVC's new pre-paid electric service, which allows members to pay as they go.

Pre-Paid Service puts more control and responsibility into the hands of the members, according to Latate Rottner, Manager of Customer Service, Collections, Billing and Meter Reading Utility Services.

"Usually, they get to choose when they want to pay for their electricity service," she said.

Under the new system, members pay for their power before they use it, similar to filling the gas tank in their cars.

The member places an amount of his choosing into his online account (a minimum balance is required) and charges are then deducted daily according to how much energy has been used. >



Your account info looks similar to this when you view it on a computer via SmartHub.

When the account balance has less than four days' worth of the average use, a notification will be sent letting the member know funds need to be added to the account. If a payment is not made and the money in the account runs out, electric service will automatically be stopped.

Service will be restored when a payment is made, bringing the Pre-Paid credit balance to \$20 or more. "Members can access SmartHub to see when their daily usage is low and how much credit they have," Rottner said. "It makes it much easier for members to see exactly how much they are using in real time and to monitor that use."

After conducting extensive research among other utility companies across the country, SSVVC found the pay-as-you-go option to be a popular one.

The cooperative recently started rolling out the program, with more than 200 members having signed up so far.

Noting members can choose to switch from the traditional payment method to Pre-Paid Service. They must continue with the new system for a minimum of six months, but can switch back after that if it does not suit their needs.

"They also need to come in and sign an agreement first," added Customer Service Supervisor Joyce Haines. "That also gives us a chance to explain how it works. They must also have an email address so they can access their information online or via the SmartHub app."

For new members, however, there are additional benefits to choosing Pre-Paid Service. "There is no deposit to set up this service," Rottner said. "They still pay the \$5 membership fee, a \$30 service charge and they have to start with at least \$50 credit in their account. But that's it. It saves them that larger payment right up front."

Previous members who may have had service disconnected due to non-payment and who still owe money also can take advantage of Pre-Paid Service, Haines said.

"It allows us to connect members even if they owe money because a percentage of each payment will be used to pay down that debt," she said.

For more information about SmartHub visit www.ssmarthub.coop and to find out if Pre-Paid Service is for you, visit your local SSVVC business office. >

SULPHUR SPRINGS

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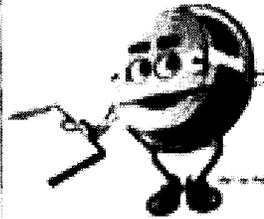
In partnership with: Spectrum by Verizon Wireless

What tells you how to fill this socket that could put money back in your pocket?

What tells you how to fill this socket that could put money back in your pocket?



What tells you how to fill this socket that could put money back in your pocket?



SSVEC's New Energy Audit
Maximize your savings!



Neighbor Springs Valley Electric Corporation, Inc.
10000 N. 10th St., Suite 100
Scottsdale, AZ 85258
480-344-1100

He's not from the \$1,000,000 sweepstakes. But he could save you hundreds.



He's not from the \$1,000,000 sweepstakes. But he could save you hundreds.

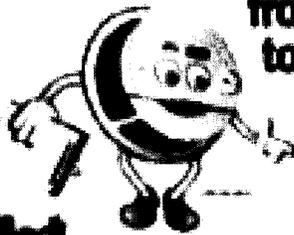


SSVEC's New Energy Audit



Neighbor Springs Valley Electric Corporation, Inc.
10000 N. 10th St., Suite 100
Scottsdale, AZ 85258
480-344-1100

What can help you save and save from the attic to the microwave?



What can help you save and save from the attic to the microwave?

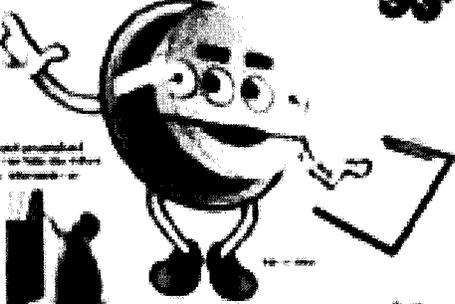


SSVEC's New Energy Audit
Maximize your savings!



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MAXimize your savings



SSVEC's New Energy Audit
For your home or business.



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Home Audit Program

Although not part of our Current DSM/EEE program it was started with the approval of an ARRA Grant on Energy Efficiency. This program is part of the proposed DSM/EEE program currently under review by Staff. SSVEC has essentially reached the point of diminishing returns regarding home energy audits. Originally targeted towards homes built in the 60's, 70's and 80's, those owners whom desire a free energy audit have had audits performed. SSVEC has reached out to landlords with limited to no response. SSVEC completed 138 audits in 2014, down from 1,363 audits in 2012.

SSVEC Energy Auditing

Sulphur Springs Valley Electric Cooperative (SSVEC) was awarded the American Recovery and Reinvestment Act matching grant funds from the Department of Energy to expand and expedite in SSVEC's smart grid modernization efforts. This effort includes an Energy Audit program to educate members on energy awareness and to improve the thermal envelope of homes, as well as improve a home's energy efficiency. The energy audits would direct members to existing SSVEC no/low interest energy efficient based loan programs.

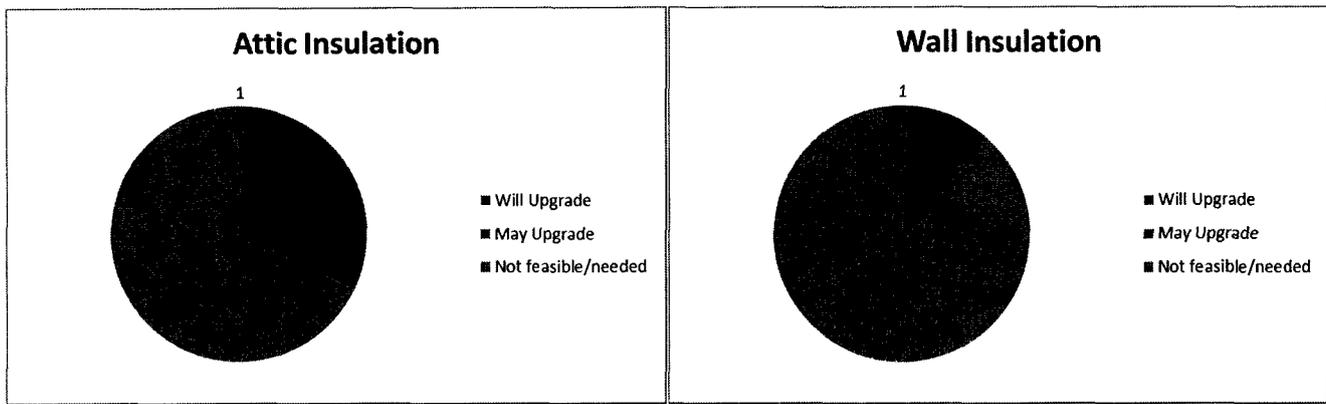
SSVEC began conducting energy audits in May 2011. These energy auditors visit a member's home upon request, conduct an in-depth analysis and make specific recommendations on what the home owner can do to decrease electric consumption. Upon completion of the energy audits, the auditors inquired how likely the members would be to implement these recommendations. Answers were limited to a) the member will implement the recommendations, b) the member may implement some or all of the recommendations or c) the member will not implement any of the recommendations. These auditors also promote SSVEC's DSM program and help the member to determine which programs will provide them with the most help.

SSVEC has essentially reached the point of diminishing returns regarding home energy audits. Originally targeted towards homes built in the 60's, 70's and 80's, those owners whom desire a free energy audit have had audits performed. SSVEC has reached out to landlords with limited to no response. SSVEC completed 138 audits in 2014. These 138 audits resulted in 9 recommendations which member indicated they will implement and 156 recommendations which member may implement. The auditors recommended several actionable items to enable members to lower their overall energy usage. The categories recommended to upgrade or improve were infiltration, windows, doors and insulation, as well as heating and cooling appliances.

SSVEC has an energy efficiency zero percent interest loan program. The goal of this program is to get members to upgrade their thermal envelope along with their heating & cooling units to more energy efficient ones.

Insulation

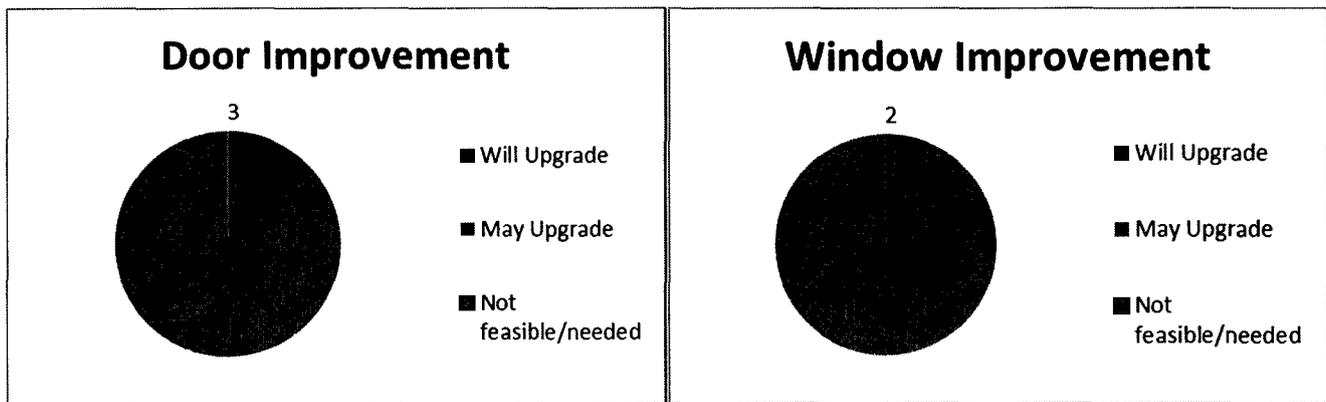
Attic and wall insulation can improve the thermal envelope of a residence. The goal of SSVEC is to improve attic insulation levels to at least R-38. Some walls are initially between R-2 and R-4; the goal is to increase wall insulation levels to between R-5 and R-10. Thirteen homes audited did not have attic space. There were 91 homeowners who indicated they will not improve their attic insulation; 52 of the homeowners had attic insulation R-values greater than or equal to R-30.



Note: Not feasible / needed means that the attic or wall meets current thermal requirements or physically cannot be upgraded to current standards.

Windows & Doors

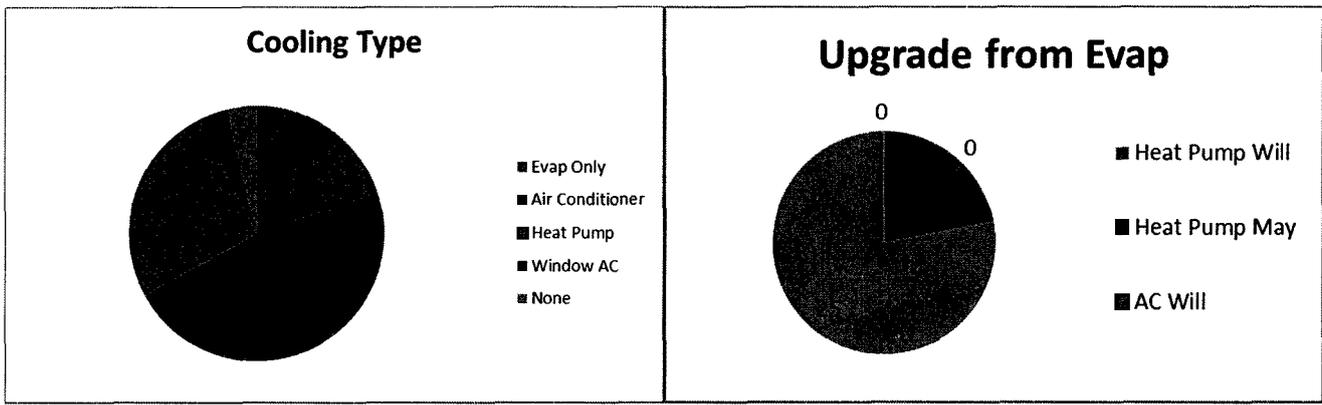
Door and window upgrades can also improve the thermal envelope of a residence. The goal of SSVEC is to replace old wooden exterior doors with insulated steel or fiberglass doors with an insulation value of R-5 or better; also replacing single pane windows with dual pane windows with an insulation value of R-1.7 or greater (a U-value of at least 0.58).



Note: Not feasible / needed means that the attic or wall meets current thermal requirements or physically cannot be upgraded to current standards.

Heat Pumps & Air Conditioning

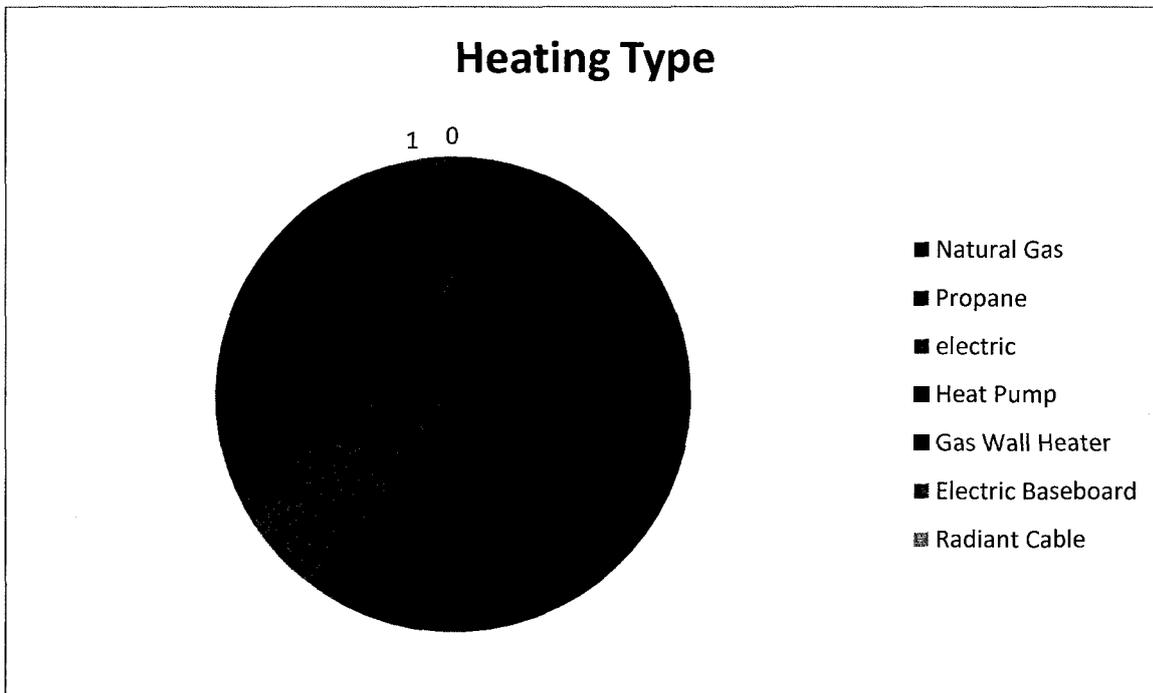
New heat pumps and air conditioning systems are more efficient than older heating and cooling systems. Upgrading to a newer unit can reduce the energy consumed by a member. The goal of SSVEC is to replace old heating and cooling units with ones meeting a minimum SEER rating of 15 (16 SEER for split system heat pumps). There are 35 members with heat pumps; five indicated they may upgrade their heat pump and zero members indicated they will upgrade to an A/C unit. There are 64 members with air conditioners; none of those members indicated they may upgrade to a heat pump, but two members may upgrade their A/C unit.



Note: Not feasible / needed means that the attic or wall meets current thermal requirements or physically cannot be upgraded to current standards.

Heating

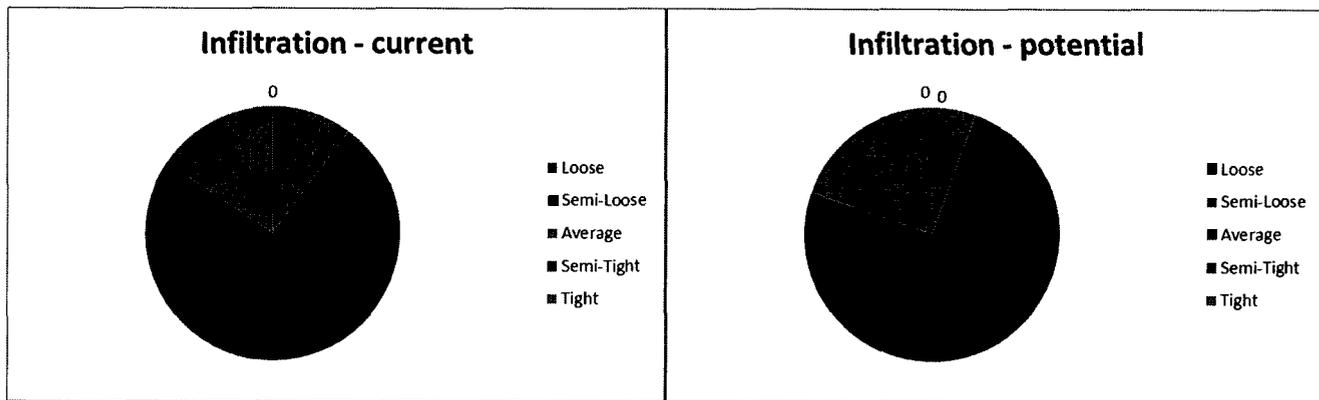
There are some SSVEC members who prefer to heat their home by gas or other means. SSVEC's energy auditors asked members if they would consider replacing an older, less efficient furnace (typically around 60% efficient) with a newer one (greater than 80% efficient, but less than 90% efficient) As a result, none of the members indicated they would, one member stated they might, and 61 did not need to upgrade.



	Qty	Will upgrade to Heat Pump	May upgrade to Heat Pump	Heat Pump Upgrade not needed or feasible	Will upgrade to Furnace	May upgrade to Furnace	Furnace Upgrade not needed or feasible
Natural Gas	62	---	3	59	1	1	60
Propane	18	---	2	16	---	1	17
Electric	14	---	3	11	---	1	13
Heat Pump	37	---	4	33	---	1	36
Gas Wall Heater	1	---	---	1	---	1	---
Baseboard Electric	3	---	---	3	---	1	24
Radiant Cable	0	---	---	---	---	---	---

Infiltration

Infiltration is the unintentional or accidental introduction of outside air into a building, typically through cracks in the building envelope and/or worn or missing weather stripping around windows and doors. This is often the least expensive, yet most cost effective method to decrease the energy needed to cool or heat one's home. The charts below show the current infiltration level and the potential infiltration level when recommended upgrades are complete.



These charts use construction labels based upon **Air Conditioning Contractors of America**

SSVEC's energy auditors also asked members if they would consider any other energy efficiency improvements to their homes; four stated they will, 25 stated they might, and 101 find it not feasible to upgrade their homes using other energy efficient improvements.