

ORIGINAL



Annual Report
of
Demand-Side Management Program
for



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

A Touchstone Energy® Cooperative



For Period January 1, 2016
through December 31, 2016
in compliance with
Decision #73930
Docket E-00000U-16-0069

17-0057

Arizona Corporation Commission

DOCKETED

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Submitted by
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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, 2016 and ending December 31, 2016.

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 2016

Program Line Item	Budget
Touchstone EE Homes	\$ -
Residential Audits	\$ 5,000
C&I Audits	\$ 25,000
DSM - Admin	\$ 80,000
DSM - Program Development	\$ 75,000
Expenses	
Advertising	\$ 75,000
Vehicle Mileage	\$ -
Communication & Notices	\$ 4,000
Misc	\$ 157
Rebates	
Water Heater	\$ 4,000
Heat Pump	\$ 20,000
Loan Programs	
Residential Loans	\$ 125,000
Commercial Loans	\$ 136,500
2016 Total Budget	\$ 549,657

Income

Carry over from 2015	\$ 581,792
Collections in 2016	\$ 219,058
Loan Repayments in 2016	\$ 246,376
YTD Income Total	\$ 1,047,226

DSM Expenses

Programs	
Touchstone EE Homes	\$ -
Residential Audits	\$ 16,308
C&I Audits	\$ 102,141
DSM - Admin	\$ 78,803
DSM - Program Development	\$ -
Expenses	
Advertising	\$ 94,525
Vehicle Mileage	\$ -
Communication & Notices	\$ 4,950
Misc	\$ 1,009
Rebates	
Water Heater	\$ 2,800
Heat Pump	\$ 17,800
Loan Programs	
Residential Loans	\$ 82,996
Commercial Loans	\$ 54,321
YTD Expenses Total	\$ 455,654

DSM Program Ending Balance \$ 591,573

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.*

(vii) Significant impacts on program Cost Effectiveness

Program ended in 2015.

(ix) Problems and Solutions:

Program no longer active

(x) Any major changes to the Program

Program no longer active.

Note: Although the program is no longer active, the energy efficiency measures continue for the life of the home.

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	5	\$ 2,200.00	\$ 416.82	3,425
Mar	4	\$ 2,000.00	\$ 333.46	2,740
Apr	5	\$ 2,500.00	\$ 416.82	3,425
May	0	\$ -	\$ -	-
Jun	1	\$ 500.00	\$ 83.36	685
Jul	2	\$ 1,000.00	\$ 166.73	1,370
Aug	3	\$ 1,500.00	\$ 250.09	2,055
Sep	4	\$ 2,000.00	\$ 333.46	2,740
Oct	6	\$ 2,400.00	\$ 500.19	4,110
Nov	3	\$ 1,200.00	\$ 250.09	2,055
Dec	3	\$ 1,500.00	\$ 250.09	2,055
YTD Totals =	38	\$ 17,800.00	\$ 3,167.85	26,030

(v) Estimated Environmental Impact

CO2 (1.844 lb. Per kWh)	47,999	pounds of CO2 emissions reduced
SO2 (.00342lb Per kWh)	89	pounds of SO2 emissions reduced
NOx (.0052 lb. per kWh)	135	pounds of NOx emissions reduced

(vi) Budget Impact

2015 Budget	\$ 20,000.00
2015 YTD Budget	\$ 20,000.00
2015 YTD Spent	\$ 17,800.00
2015 Budget Balance	<u>\$ 2,200.00</u>

Program Costs (since beginning of program)

Cost prior to 2015	\$ 273,900.00	Estimate
Cost in 2015	\$ 17,800.00	

Total Program Costs = \$ 291,700.00

(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	
Choose your city from the drop-down menu		
	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
Energy consumption (kWh)	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
Energy consumption (kWh)	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

$$\frac{\text{Annual Savings } \$512}{\text{Program Cost } \$500} = 1.024 \text{ Ratio}$$

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	2	\$ 200.00	\$ 250.00	2,054
Mar	2	\$ 200.00	\$ 250.00	2,054
Apr		\$ -	\$ -	-
May		\$ -	\$ -	-
Jun	2	\$ 200.00	\$ 250.00	2,054
Jul		\$ -	\$ -	-
Aug	4	\$ 400.00	\$ 500.00	4,108
Sep	3	\$ 300.00	\$ 375.00	3,081
Oct	4	\$ 400.00	\$ 500.00	4,108
Nov	5	\$ 500.00	\$ 625.00	5,136
Dec	6	\$ 600.00	\$ 750.00	6,163
YTD Totals =	28	\$ 2,800.00	\$ 3,500.00	28,759

(v) Estimated Environmental Impact

CO2 (1.844 lb. Per kWh)	53,032	pounds of CO2 emissions reduced
SO2 (.00342lb Per kWh)	98	pounds of SO2 emissions reduced
NOx (.0052 lb. per kWh)	150	pounds of NOx emissions reduced

(vi) Budget Impact

2016 Budget	\$ 25,000.00
2016 YTD Budget	\$ 25,000.00
2016 YTD Spent	\$ 2,800.00
2015 Budget Balance	\$ 22,200.00

Program Costs (since beginning of program)

Program began in 2016	\$ 290,200.00
Cost in 2016	\$ 2,800.00

Total Program Costs = \$ 293,000.00

(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 an 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 2016 we issued 9 loans for a total of \$109,472.10. The loans were for thermal improvements (insulation and windows) and included 4 high efficiency Heat Pumps

(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

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

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

Cooling Season Requirements by building components

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

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

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

The following Assumptions were used:

Heating Degree Days 2486
Cooling Degree Days 2174
Heating hours 1261
Cooling hours 1842
Cost of Natural Gas \$1.13776 per therm
Cost of Electricity \$ 0.1217 per kWh
A/C Coefficient of Performance 2.5

There are 3125 Btu's per kWh of electricity
Old Furnace is 60% efficient
New Furnace is 80% efficient
Old Windows U-Value of 1.1
New Windows U-Value of at least .58
Old Doors R1.79
New Doors R5 or better

Using the above formulas we estimate* the completed projects will produce the following savings:

(iii) Estimated Cost Savings to Participants

Btu Reduction =	57,019,108
Heating Cost Reduction =	\$ 544
Cooling Cost Reduction =	\$ 414

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, measured, or predicted.

(iv) Gas and Electric Savings:

Estimated Reduction in Gas Purchases =	380.2	therms
Estimated Reduction in kWh Purchases =	3,404.9	

(v) Estimated Environmental Savings (electric only)

(v) Estimated Environmental Impact

CO2 (1.844 lb. Per kWh)	6,279	pounds of CO2 emissions reduced
SO2 (.00342lb Per kWh)	12	pounds of SO2 emissions reduced
NOx (.0052 lb. per kWh)	18	pounds of NOx emissions reduced

(vi) Program Expenditures:

Total amount of money Loaned: \$ 109,472
Loan payments received: \$ 184,782

(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 participants: 1- project was the replacement of 18 old PTAC heating and cooling units for a Hotel. Project included a new centralized energy management system to control the units remotely to increase the energy efficiency of operations.

(ii) Copies of Marketing Material

The availability of the loan is on our website and presented during commercial audits.

(iii) Estimated Cost Savings to Participant

Saving Estimate provided by manufacturer

Assumptions		Compressor Watts	Heater Pump Watts	Low Fan Watts	High Fan Watts
PTACs	10 Units	750 W	1090 W	65 W	85 W
\$/KWH	\$0.08	< \$ charge per KWH from Utility			
% In Heating Mode per Year	50%	< Percentage of time the average unit spends in Heating Mode per year.			
% In Cooling Mode per Year	50%	< Percentage of time the average unit spends in Cooling Mode per year.			
% High Fan Runtime	50%	< Percentage of time the average unit is in High Fan Mode when either Cooling or Heating the room.			
% Electric Heater Runtime	100%	< Percentage of time the average unit is in Electric Heat Mode when Heating the room.			
Heating %Runtime Savings/Degree	5.0%	< %Component runtime savings per degree of setback when in Heating Mode.			
Cooling %Runtime Savings/Degree	2.0%	< %Component runtime savings per degree of setback when in Cooling Mode.			

Heating Mode Estimate	% Time In Setback	Hours In Setback/ Year	Setback Degrees	%Runtime Savings	Compressor	Electric Heater	Low Fan	High Fan
					KWH Savings per PTAC	KWH Savings per PTAC	KWH Savings per PTAC	KWH Savings per PTAC
Setback 1	5%	219 hrs	2	10.0%	0.00 KWH	23.87 KWH	0.71 KWH	0.93 KWH
Setback 2	8%	350 hrs	4	20.0%	0.00 KWH	76.39 KWH	2.28 KWH	2.98 KWH
Setback 3	12%	526 hrs	8	40.0%	0.00 KWH	229.16 KWH	6.83 KWH	8.94 KWH
				70.0%	0.00 KWH	329.42 KWH	9.82 KWH	12.84 KWH

Cooling Mode Estimate	% Time In Setback	Hours In Setback/ Year	Setback Degrees	%Runtime Savings	Compressor	Electric Heater	Low Fan	High Fan
					KWH Savings per PTAC	KWH Savings per PTAC	KWH Savings per PTAC	KWH Savings per PTAC
Setback 1	5%	219 hrs	2	4.0%	6.57 KWH	0.00 KWH	0.28 KWH	0.37 KWH
Setback 2	8%	350 hrs	4	8.0%	21.02 KWH	0.00 KWH	0.91 KWH	1.19 KWH
Setback 3	12%	526 hrs	8	16.0%	63.07 KWH	0.00 KWH	2.73 KWH	3.57 KWH
				28.0%	90.67 KWH	0.00 KWH	3.93 KWH	5.14 KWH

		Compressor	Heat Pump	Low Fan	High Fan	Estimated Total Savings per Year
Estimated Total KWH Savings per Ptac per Year		90.67 KWH	329.42 KWH	13.75 KWH	17.98 KWH	451.82 KWH
Estimated Total \$ Savings per Ptac per Year		\$7.16	\$26.02	\$1.09	\$1.42	\$35.69
Estimated Total KWH Savings at Property per Year		906.66 KWH	3294.20 KWH	137.51 KWH	179.82 KWH	4518.19 KWH
Estimated Total \$ Savings at Property per Year		\$71.63	\$260.24	\$10.86	\$14.21	\$356.94

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

No practical way to measure savings on individual PTAC.

(v) Estimated Environmental Savings (total program)

(vi) Program Expenditures:

YTD Total amount of money Loaned: \$ 54,321

YTD Loan payments received: \$ 61,594

(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.

IRRIGATION PUMP TEST PROGRAM AND VFD'S

As part of the program funded by the American Recovery and Reinvestment Act of 2009, we began a pump testing program to measure the current efficiency of local wells and explaining the proper way to use VFD's. The program is extremely cost effective and we continued the program in 2017 using the C&I budget until we submit a plan for 2018. This program is operated under a contract with Lincus, Inc., an Engineering Firm that specializes in well efficiency improvement programs for APS, SRP, and for most California Electric and Water Utilities.

Summary of Program Results

In 2016, the program started rebuilding its customer base and again pursued pump tests, pump system upgrades and VFD installation projects. The program has also participated in the irrigation customer meeting on December 4, 2016 and re-introduced the Advanced Pump Efficiency Program (APEP) to SSVEC irrigation customers. As a part of the program's 2016 overall effort, the following services and results were achieved:

City of Benson – Completed 18 pump tests of the City's water distribution systems

Performed a total of four energy audits:

- City of Benson – wastewater systems audit performed and presented
- City of Benson – water systems audit
- City of Wilcox – water systems audit
- San Pedro Golf Course – water systems audit

Developed pump systems training website under the Pump Efficiency Organization for SSVEC irrigation customers

Pump systems and VFD installation improvements in 2016 resulted in a total of 967,013 kWh per year of energy savings. These savings came from 10 pump tests that resulted in major overhauls at a farming company for which the program also assisted in developing a grant proposal for government funding. Also, contributing to the total kWh savings above was the installation of a VFD on a 300 hp well pump at another major farm management company.



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Program Highlights and Results

Current Participants in Database

- Agricultural Customers / Farm Management Companies
- Water Treatment Facilities - Municipal
- Wastewater Treatment - Municipal
- Golf Courses
- Farm Management Companies
- Individual Farmers

New or Expanded Participants for 2017

Municipalities

Water Distribution & Storage Systems

Engineering Firms

Distributors

Smaller Pumps - Prescriptive approach

Achieved in 2016: 967,013 kWh

No. of Tests and VFDs: 18 and 1, respectively

Water Saved: 0.9 MG (serves additional 12 households)



3



SSVEC PROGRESS TOWARDS EE GOALS

SSVEC PROJECTED SAVINGS							
	2010	2011	2012	2013	2014	2015	2016
Sales (kWh)	822,775,674	840,860,567	869,421,000	829,295,000	793,046,000	816,634,953	805,404,000
Estimated Savings (kWh)		347,449	226,957	223,168	47,789	4,477,268	1,025,659
Actual Sales less Savings (kWh)		840,513,118	869,194,043	829,071,832	792,998,211	812,157,685	804,378,341
Required Savings from Prior Year Sales							
Required Savings (%)		1.25%	3.00%	5.00%	7.25%	9.50%	12.00%
Cooperative Discount (%)		75%	75%	75%	75%	75%	75%
Required Cooperative Savings (%)		0.94%	2.25%	3.75%	5.44%	7.13%	9.00%
Required Cooperative Savings (kWh)		7,713,522	18,919,363	32,603,288	45,092,916	56,504,528	73,497,146
Accumulated Program Savings			347,449	574,406	797,574	845,363	5,322,631
Existing Programs (kWh)		347,449	226,957	223,168	47,789	4,477,268	1,025,659
New Programs (kWh)		-	-	-	-	-	-
Total Savings (kWh)		347,449	574,406	797,574	845,363	5,322,631	6,348,290
Savings (%)		0.042%	0.068%	0.092%	0.102%	0.671%	0.777%
Difference (kWh)		(7,366,073)	(18,344,957)	(31,805,713)	(44,247,553)	(51,181,897)	(67,148,856)
Projected % of Achievement			3.04%	2.45%	1.87%	9.42%	8.64%

2010-2011 sales are actual kWh sales as reported in the annual report.

2012-2013 sales are projections of kWh sales provided by SSVEC.

2011 savings based on 2011 yr end DSM report (therm equivalents converted at 1 therm = 29.3 kWh)

3,559 therms
104,287 kWh

PROPOSED 2017 OPERATING BUDGET

At the direction of the Commission, SSVEC was told to keep using the 2011 DSM program until we were directed in the 2015 Rate case to submit a new program on June 1, 2017 for the 2018 program year. 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 proposed the following DSM Budget for 2017 redistributing the approved amount of \$549,657. As explained below, the 2011 budget no longer distributes the funds in a way that matches the programs demands and costs. No changes to the approved DSM adder are requested at this time.

Program Line Item	Budget
Touchstone EE Homes	\$ -
Residential Audits	\$ 25,000
C&I Audits	\$ 125,000
DSM - Admin	\$ 100,000
DSM - Program Development	\$ 50,000
Expenses	
Advertising	\$ 100,000
Vehicle Mileage	\$ -
Communication & Notices	\$ 6,000
Misc	\$ 1,000
Rebates	
Water Heater	\$ 4,000
Heat Pump	\$ 20,000
Loan Programs	
Residential Loans	\$ 275,000
Commercial Loans	\$ 350,000
2017 Total Budget	\$ 1,056,000

This proposed Budget will be used to proportionally distribute the \$591,573 carry-over from 2016 to the budget line items.

The changes in the Budget were based on the actual expenses accrued in 2016 and projected expenses for 2017. The changes from 2015 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 to reflect underfunding in 2016.

The table below shows how using the Budget amount specified by Decision 73930 of Docket No. E-01575A-11-0223 to be based on \$549,657 per year, was used to distribute the funds collected from the DSM surcharge and the funds from loan repayments between the budget line items.

Income and Expense Summary				
Program Costs	Budget	Income	Expense	Balance
Touchstone EE Homes	\$ -	\$ -	\$ -	\$ -
Residential Audits	\$ 5,000	\$ 9,526	\$ 16,308	\$ (6,782)
C&I Audits	\$ 25,000	\$ 47,631	\$ 102,141	\$ (54,510)
DSM - Admin	\$ 80,000	\$ 152,419	\$ 76,159	\$ 76,260
DSM - Program Development	\$ 75,000	\$ 142,893	\$ -	\$ 142,893
Expenses				
Advertising	\$ 75,000	\$ 142,893	\$ 94,525	\$ 48,367
Vehicle Mileage	\$ -	\$ -	\$ -	\$ -
Communication & Notices	\$ 4,000	\$ 7,621	\$ 4,950	\$ 2,671
Misc	\$ 157	\$ 299	\$ 1,009	\$ (710)
Rebates				
Water Heater	\$ 4,000	\$ 7,621	\$ 5,444	\$ 2,177
Heat Pump	\$ 20,000	\$ 38,105	\$ 17,800	\$ 20,305
Loan Programs				
Residential Loans	\$ 125,000	\$ 238,155	\$ 82,996	\$ 155,158
Commercial Loans	\$ 136,500	\$ 260,065	\$ 54,321	\$ 205,744
totals	\$ 549,657	\$ 1,047,226	\$ 455,654	\$ 591,573

SSVEC is planning to submit an expanded 2018 DSM plan in June and request no changes to the DSM adder even though we have sufficient funds to fund the entire 2017 program. Our Members are used to the current adder and rather than eliminate it to then turn around and have re-implement a larger adder in 2017 to meet the needs of the expanded program would be counterproductive.

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 2016

“Saving Energy in the New Year with Together We Save”

2/3^{rds} of a page of 2 pages

February 2016 - May 2016

None

June 2016

“Before You Leave for Vacation”

2/3^{rds} of a page of 2 pages

“Auto Pay Program”

1/3rd of a page of 2 pages

July 2016 - November 2016

None

December 2016

“Watch that Electric Bill! Holidays can mean increased electricity usage”

1 page of 2 pages

AD COPY FOR JANUARY 2016 THROUGH DECEMBER 2016

January 2016

June 2016

TS/SPV

Co-opCONNECTION

News and Information from SSVEC January 2016

Calendar

January 18, 2016

Offices closed for Martin Luther King, Jr./ Civil Rights Day
To report a power outage or other electrical emergencies, call 1-800-422-3275.

January 20, 2016

SSVEC Board of Directors Meeting
9:30 a.m. at 350 North Haskell Ave., Wilcox, Arizona. Call to members at 9:35 a.m.

February 15, 2016

Offices closed for Presidents Day
To report a power outage or other electrical emergencies, call 1-800-422-3275.

February 24, 2016

SSVEC Board of Directors Meeting
9:30 a.m. at 311 East Wilcox Drive, Sierra Vista, Arizona. Call to members at 9:35 a.m.

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

Saving Energy in the New Year with Together We Save

And Saving Energy Means Saving Money!

The "Together We Save" Internet site (www.togetherwesave.com) contains tips on how to save energy in your home. It also includes a home efficiency analysis.

What else does the site contain?

You'll find several articles explaining how you can save by taking specific actions. "Watch and Learn" is a collection of video clips on energy-saving measures on subjects such as kitchen tips, setting your programmable thermostat, stopping air infiltration, Energy Star appliances, heating and cooling, and crilling fan savings.

And "Energy Savings Applications" goes into detail of topics such as upgrading appliances, adjusting your thermostat and water heater, turning off

lights and electronics, adding insulation and compact fluorescent lights and replacing your home heating and cooling system.

What if I don't have Internet access?

If you don't have a computer, you can still get basic information on saving energy at home. From now through the end of the March, SSVEC will provide a copy of "101 Low Cost/No Cost Home Energy-Saving Measures" in paper form free of charge to members who request it.

To receive your copy, simply call (520) 384-5510 and request that the information be sent to you by providing your mailing address.



Facebook is one more way SSVEC is announcing planned power outages

SSVEC has been posting announcements of planned power outages on its Facebook page. By promoting the post to Facebook members in the affected zip code areas and through individuals sharing the post, we are able to reach several hundred (in some cases thousands) of households.

In cases of planned power outages, we continue to send public service announcements to newspapers, post flyers in public places within the community, and, in the case of extended planned outages, use direct mail.

Facebook is one more way we're using social media to provide important information to cooperative members.

TS/SPV

Co-opCONNECTION

News and Information from SSVEC June 2016

Calendar

June 22

SSVEC Board of Directors Meeting
9:30 a.m. at 1657 Cooperative Way, Benson, Arizona. Call to members at 9:35 a.m.

July 4

Offices closed for Independence Day
To report a power outage or other electrical emergencies, call 1-800-422-3275.

July 27

SSVEC Board of Directors Meeting
9:30 a.m. at 350 N. Haskell Avenue, Wilcox, Arizona. Call to members at 9:35 a.m.

August 17

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

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

Before You Leave for Vacation

Some tips to save energy at home while you're gone

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 needlessly while you're gone.

Decide what you can turn off

First, 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 home that is "closed up" in warm weather will be forced to run longer and more often using more energy than it otherwise would.

If you're going to be gone for two weeks or more, consider emptying, defrosting and unplugging your refrigerator. (Be sure to prop the door open to allow air to circulate in the refrigerator cabinet.) You may save enough on your electricity costs to retuck it with fresh basics when you return.



What you should leave on

Turn your air conditioner off and you can be assured it uses no electricity.

However, if you have houseplants that would 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 "instant on" features 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 surges.

Auto Pay Program

Enjoy the convenience of having your bill automatically paid each month from your bank account or credit or debit card when you enroll in Auto Pay. With Auto Pay, you no longer have to worry about remembering when your bill needs to be paid since your payment is automatically deducted from your account each month.

If you travel or are "out of town" a lot, this can be a real help in that your electric bill is automatically paid on time. You can sign up for Auto Pay and have the amount of your electric bill deducted from your checking or savings account by visiting an SSVEC office. Or if you have access to the internet you can apply online for your checking or savings account or your credit or debit card. Simply go to www.ssvvec.org, set up a Smart Hub account. Once it is set up go to the "Billing and Payments" section and click on "Auto Pay" to enroll.

December 2016

TS/SPV

Co-opCONNECTION

News and Information from SSVEC December 2016

Calendar

December 21

SSVEC Board of Directors Meeting
9:30 a.m. at Apache Generating Station, 3525 N. Hwy. 191, Cochise, Arizona. Call to members at 9:35 a.m.

December 23 and 26

SSVEC Offices and Facilities Closed for Christmas Holiday
To report a power outage or other electrical emergencies, call 1-800-422-3275.

January 2

SSVEC Offices and Facilities Closed for New Year's Day Holiday
To report a power outage or other electrical emergencies, call 1-800-422-3275.

January 18, 2017

SSVEC Board of Directors Meeting
9:30 a.m. at 350 N. Haskell Avenue, Wilcox, Arizona. Call to members at 9:35 a.m.

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

Watch that Electric Bill!

Holidays can mean increased electricity usage

With cold weather and the holidays coming there's a good chance you'll be using more electricity than usual. (And that will mean a larger electric bill than usual for the following month.) Note where you are using your electric appliances/equipment and try to get the maximum benefit from them.

Space Heaters

During winter months many people use space heaters for supplemental heat. And they are great to provide a little heat right where you need it (such as a bedroom or bathroom). But be careful because a space heater can add to your electric bill if used constantly. It costs about 23 cents to run a space heater for an hour. That means if you use a space heater for three hours every day you'll add about \$20.00 to your monthly bill. More hours (and more space heaters in use) will add to this cost.

Solutions: Use the space heater sparingly and be sure to turn it off when you leave the room. Or consider an electric blanket. You can use an electric blanket through the night (10 hours) for a total of 15 to 30 cents a night depending on the setting. (Using a space heater through the night can cost between \$45 and \$60 for the month.)

Keeping the Warm In

With a lot of people coming and going (kids home from school and holiday visitors), you'll be losing a little of your house's heat every time an exterior door is open. Remind everyone in the house to hurry in or out and not linger with the door open, and invite guests to immediately come in to reduce the time a door is open.

Solutions: Install or replace a storm door. Be sure it is installed for a snug fit. This will help keep the warmth in as people come and go. Remember also to check and regularly replace the heat pump or furnace filter to assure your system is running at peak efficiency.

Taking Advantage of the Heat You "Create"

If you have an open fireplace be sure the damper is closed when it is not in use. Consider investing in glass doors/enclosure so that the warm air in the room does not escape.

Solutions: There are grate heaters or radiators that can be installed in an open fireplace to take advantage of the fire's heat without losing the warm air in your home up the chimney. Just be sure to have the installer check clearances and be sure there is adequate fireproofing to make the installation safe.

Bake to Your Heart's Delight

There's a good reason for doing your holiday baking or cooking in the evenings or on a particularly cold day. That excess heat can help warm the kitchen (and the cooks) as well as adjoining areas of the house.



SSVEC's New **FREE** Energy Audit

A detailed and personalized report that can help you reduce energy use. Information on available incentives, zero percent "retrofit" loans and other programs. To find out more about our new **FREE** energy audit, call us at 520-515-3497.



Sulphur Springs Valley Electric Cooperative, Inc.

A "Touchstone Energy" Cooperative
www.ssvec.org

MAXimize your savings!



"Now, I'm in control of my electric costs."



**No security deposits.
No late fees. No surprises.**

With SSVEC's Pre-Paid Metering, you pay in advance for your electricity—similar to filling your car's gas tank. It's an easy way to "pay as you go"—and it may be an option if you:

- want to control the frequency and amount of your payments
- only live here part-time
- want to manage your energy costs

You decide how much to pre-pay, you can check your balance anytime, and SSVEC will send you electronic notifications, letting you know it's time to add some funds to your account. Plus, with SSVEC's online SmartHub, you can monitor your daily usage. You can add money by phone, online, SmartHub app, or at any SSVEC office. There are no worries about delinquent notices, deposits or late fees.

Find out if SSVEC's Pre-Paid Metering is right for you. Call your local office.



SSVEC Pre-Paid METERING



Sulphur Springs Valley Electric Cooperative, Inc.



Facebook.com/SSVEC

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Find out if SSVEC's pre-paid metering is right for you. Call your local office.



SSVEC Pre-Paid METERING



Sulphur Springs Valley Electric Cooperative, Inc.



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