In the Matter of:		
APPLICATION OF BLUE GRASS ENERGY COOPERATIVE CORPORATION FOR AN ADJUSTMENT OF RATES	)	CASE NO. 2014-00339

RESPONSE OF BLUE GRASS ENERGY COOPERATIVE CORPORATION
TO THE REQUESTS FOR INFORMATION PROPOUNDED
DURING THE HEARING HELD APRIL 15, 2015

TIVE CORPORATION FOR AN ENT OF RATES	)	CASE NO. 2014-00339
VERIFICATION OF MICHA	ODT TO	DUIT I TARAC

STATE OF KENTUCKY )

COUNTY OF Jess Amire )

Michael I. Williams, President and Chief Executive Officer of Blue Grass Energy Cooperative Corporation, being duly sworn, states that he has supervised the preparation of the following response(s) of Blue Grass Energy Cooperative Corporation to the Requests for Information propounded at the hearing held in the above-captioned matter on April 15, 2015, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Michael I. Williams

The foregoing Verification was signed, acknowledged and sworn to before me this day of April, 2015, by Michael I. William, President/Chief Executive Officer of Blue Grass Energy Cooperative Corporation.

NOTARY PUBLIC, Notary # 527 583
Commission expiration: 2/5/2019

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APPLICATION OF BLUE GRASS ENERGY	)	
COOPERATIVE CORPORATION FOR AN	)	CASE NO. 2014-00339
ADJUSTMENT OF RATES	)	

# VERIFICATION OF J. DONALD SMOTHERS

COUNTY OF Jassamin )

J. Donald Smothers, Vice President and Chief Financial Officer of Blue Grass Energy Cooperative Corporation, being duly sworn, states that he has supervised the preparation of the following response(s) of Blue Grass Energy Cooperative Corporation to the Requests for Information propounded at the hearing held in the above-captioned matter on April 15, 2015, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

J. Donald Smothers

The foregoing Verification was signed, acknowledged and sworn to before me this <u>//6</u> day of April, 2015, by J. Donald Smothers, Vice President/Chief Financial Officer of Blue Grass Energy Cooperative Corporation.

NOTARY PUBLIC, Notary #

Commission expiration: 2/5/2019

VERIFICATION OF JAM	ECD	ADIZING
COOPERATIVE CORPORATION FOR AN ADJUSTMENT OF RATES	)	CASE NO. 2014-00339
APPLICATION OF BLUE GRASS ENERGY	)	

STATE OF KENTUCKY

COUNTY OF Jess Amina

James R. Adkins, being duly sworn, states that he has supervised the preparation of the following response(s) of Blue Grass Energy Cooperative Corporation to the Requests for Information propounded at the hearing held in the above-captioned matter on April 15, 2015, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

James R. Adkins

The foregoing Verification was signed, acknowledged and sworn to before me this  $\frac{2}{3}$ day of April, 2015, by James R. Adkins.

> NOTARY PUBLIC, Notary # 527583 Commission expiration: 2/5/2019

# PSC CASE NO. 2014-00339 BLUE GRASS ENERGY COOPERATIVE CORPORATION REQUEST FOR INFORMATION AT HEARING HELD APRIL 15, 2015

# **RESPONSIBLE PARTY: Michael I. Williams**

Request 1. Please provide a copy of Blue Grass Energy's 2014 Annual Reliability Report, including its Vegetation Management Plan.

Response 1. Attached hereto as Exhibit 1 [PSC Request No. 1, Pages 2-63 of 63] is Blue Grass Energy's 2014 Annual PSC Reliability Report. The requested Vegetation Management Plan is included at pages 59-63 of the attached Exhibit. A paper and electronic copy of this document is also being filed contemporaneously in Administrative Case No. 2011-00450, pursuant to the Orders entered in that matter on May 30, 2013, and April 1, 2014.



Blue Grass Energy

2014 Annual PSC Reliability Report

#### **SECTION 1: CONTACT INFORMATION** UTILITY NAME 1.1 BLUE GRASS ENERGY COOPERATIVE CORPORAT REPORT PREPARED BY 1.2 TOM CASTLE E-MAIL ADDRESS OF PREPARER 1.3 TOMC@BOENERGY.COM PHONE NUMBER OF PREPARER 1.4 (859) 885-2120 **SECTION 2: REPORT YEAR** CALENDAR YEAR OF REPORT 2014 SECTION 3: MAJOR EVENT DAYS 3.1 11.65 FIRST DATE USED TO DETERMINE $T_{\text{MED}}$ 3.2 Jan 1 2009 LAST DATE USED TO DETERMINE $T_{\text{MED}}$ Dec 31 2013 3.3 NUMBER OF MED IN REPORT YEAR 3.4 4 NOTE: Per IEEE 1366 TMED should be calculated using the daily SAIDI values for the five prior years. If five years of data are not available, then utilities

NOTE: Per IEEE 1366 T<sub>MED</sub> should be calculated using the daily SAIDI values for the five prior years. If five years of data are not available, then utilities should use what is available until five years are accumulated.

	SECTION 4: S	YSTEM RELIABILITY RESULTS	
Total Customers	55,614	Total Circuits	130
		Excluding MED	
	5 Year Average		Reporting Year
SAIDI	114.10	SAIDI	122.9
SAIFI	1,14	SAIFI	1.22
		Including MED	
	5 Year Average		Reporting Year
SAIDI	231.50	SAIDI	257.8
SAIFI	1.42	SAIFI	1.54

Substation Name and Number 3M #2 41

**Substation Location** 

Hwy 982, Cynthiana, KY 41031

Circuit Name and Number

3M #2 154

Circuit Location

Industrial Park

Total Circuit Length (Miles)

50.7 379

2014 Member Count Date of last Trim

February 2012

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	173.58	1.8754	455.96	4.2111
Bird	0.04%	0.06%	0.00%	0.00%
Deterioration	6.46%	5.82%	9.13%	7.83%
Equipment Fault	28.18%	27.01%	42.54%	31.20%
Fire	0.04%	0.06%	0.00%	0.00%
Large Animal	0.01%	0.03%	0.00%	0.00%
Lightning	7.15%	4.00%	0.54%	0.94%
Power Supplier	43.76%	39.90%	33.77%	22.43%
Public Accident	1.17%	1.15%	0.00%	0.00%
Scheduled	4.31%	6.81%	7.17%	13.85%
Small Animal	0.65%	0.93%	0.23%	0.31%
Squirrel	0.17%	0.25%	0.23%	0.31%
Tree - Non ROW	3.27%	10.10%	6.23%	22.49%
Tree - ROW	2.25%	1.29%	0.00%	0.00%
Unknown Cause	2.45%	2.48%	0.14%	0.56%
Wind	0.07%	0.11%	0.03%	0.06%

Corrections to be made

Substation Name and Number 3M #2 41

**Substation Location** 

Hwy 982, Cynthiana, KY 41031

Circuit Name and Number

3M #2 164

Circuit Location

Oddville

Total Circuit Length (Miles)

2014 Member Count

132.4 1244

Date of last Trim

December 2010

	5 Year Av	2014		
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	170.15	1.7292	188.98	1.2822
Bird	0.14%	0.21%	0.00%	0.00%
Deterioration	5.50%	4.46%	0.23%	0.63%
Equipment Fault	4.90%	3.91%	0.51%	0.69%
Ice/Snow	5.03%	0.28%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Lightning	23.18%	15.31%	84.50%	78.37%
Overload	0.80%	0.79%	0.00%	0.00%
Power Supplier	26.57%	32.35%	0.00%	0.00%
Public Accident	3.35%	2.62%	4.41%	6.90%
Scheduled	0.77%	0.97%	0.12%	0.13%
Small Animal	0.38%	0.71%	0.21%	0.50%
Squirrel	1.58%	0.97%	6.92%	5.83%
Tree - Non ROW	0.93%	0.63%	0.36%	0.25%
Tree - ROW	0.44%	0.31%	0.99%	0.94%
Unknown Cause	19.23%	33.80%	1.70%	5.64%
Wind	7.18%	2.67%	0.05%	0.13%

Corrections to be made

Substation Name and Number BRIDGEPORT

21

**Substation Location** 

Taylor Branch Rd., Frankfort, KY 40601

Circuit Name and Number

**BRIDGEPORT 114** 

Circuit Location

Huntington Woods/Taylor Branch

Total Circuit Length (Miles)

83.3 1193

2014 Member Count Date of last Trim

December 2011

	5 Year Av	2014		
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	267.14	2,3838	310.12	3.0273
Bird	0.15%	0.34%	0.00%	0.00%
Deterioration	0.31%	0.47%	0.11%	0.22%
Equipment Fault	15.69%	18.57%	33.05%	30.21%
Ice/Snow	0.07%	0.06%	0.00%	0.00%
Lightning	10.03%	8.01%	5.79%	2.85%
Power Supplier	27.68%	31.75%	46.03%	32.30%
Public Accident	2.24%	5.27%	3.90%	13.79%
Scheduled	0.15%	0.57%	0.32%	0.61%
Small Animal	0.49%	0.79%	0.22%	0.42%
Squirrel	0.31%	0.51%	0.07%	0.14%
Tree - Non ROW	12.93%	10.49%	6.12%	10.08%
Tree - ROW	7.56%	5.49%	4.10%	8.83%
Unknown Cause	1.84%	2.97%	0.23%	0.53%
Wind	20.54%	14.71%	0.05%	0.03%

Corrections to be made

Currently in the process of building 30 miles of

deteriorating single-phase conductor

Power supplier adding secondary substation to improve reliability

Substation Name and Number

BRIDGEPORT 21

Substation Location

Taylor Branch Rd., Frankfort, KY 40601

Circuit Name and Number

**BRIDGEPORT 134** 

Circuit Location

Harvieland/Flat Creek

Total Circuit Length (Miles)

71.4 439

2014 Member Count Date of last Trim

November 2014

	5 Year Av	2014		
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	364.35	2.8243	557.51	4.1874
Bird	0.01%	0.02%	0.00%	0.00%
Deterioration	3.08%	2.00%	0.09%	0.16%
Equipment Fault	7.00%	5.37%	1.41%	1.09%
lce/Snow	0.82%	0.85%	1.50%	1.85%
Lightning	18.63%	19.07%	19.38%	25.73%
Power Supplier	27.31%	33.65%	25.61%	23.35%
Public Accident	0.67%	1.08%	0.09%	0.11%
Small Animal	0.06%	0.08%	0.10%	0.05%
Squirrel	2.87%	6.92%	0.00%	0.00%
Tree - Non ROW	11.97%	14.89%	19.80%	24.04%
Tree - ROW	7.27%	4.05%	23.19%	13.11%
Unknown Cause	2.73%	3.52%	3.29%	3.26%
Wind	17.59%	8.50%	5.54%	7.24%

Corrections to be made

Very recently trimmed

Power supplier adding secondary substation to improve reliability

21-144

Substation Name and Number BRIDGEPORT 21

**Substation Location** 

Taylor Branch Rd., Frankfort, KY 40601

Circuit Name and Number

**BRIDGEPORT 144** 

Circuit Location

Coolbrook

Total Circuit Length (Miles)

32.6 1054

2014 Member Count

Date of last Trim

April 2013

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	210.70	2.0003	301.45	2.6875
Bird	1.23%	2,61%	0.02%	0.07%
Deterioration	1.86%	1.92%	1.79%	2.58%
Equipment Fault	1.30%	1.19%	0.07%	0.07%
Ice/Snow	0.03%	0.03%	0.00%	0.00%
Lightning	14.03%	12.76%	1.57%	2.26%
Overload	0.04%	0.07%	0.01%	0.04%
Power Supplier	35.10%	37.84%	47.36%	36.38%
Public Accident	0.17%	0.32%	0.00%	0.00%
Scheduled	0.39%	0.97%	0.10%	0.28%
Small Animal	0.60%	1.32%	0.13%	0.39%
Squirrel	0.82%	1.62%	0.02%	0.04%
Tree - Non ROW	18.32%	10.43%	0.03%	0.18%
Tree - ROW	15.26%	16.82%	37.77%	42.29%
Unknown Cause	1.40%	2.68%	0.11%	0.21%
Vandalism	0.01%	0.01%	0.00%	0.00%
Wind	9.47%	9.42%	11.01%	15.22%

Corrections to be made

Power supplier adding secondary substation to improve reliability

Substation Name and Number CLAY\_LICK

26

**Substation Location** 

Louisville, Rd., Salvisa, KY 40372

Circuit Name and Number

CLAY\_LICK 124

Circuit Location

McCouns Ferry

Total Circuit Length (Miles)

63.0

2014 Member Count

593

Date of last Trim

December 2014

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	190.13	1.6708	336.38	1.2243
Bird	2.83%	1.78%	0.01%	0.41%
Deterioration	3.19%	3.77%	0.04%	0.28%
Equipment Fault	21.31%	28.66%	3.28%	20.52%
Fire	0.01%	0.02%	0.00%	0.00%
Ice/Snow	2.32%	2.66%	0.00%	0.00%
Large Animal	0.02%	0.08%	0.00%	0.00%
Lightning	17.95%	16.03%	7.44%	15.01%
Overload	0.09%	0.06%	0.00%	0.00%
Power Supplier	1.32%	10.70%	0.00%	0.00%
Public Accident	2.02%	2.62%	3.70%	10.47%
Sag/Clearance	0.01%	0.04%	0.00%	0.00%
Small Animal	1.76%	2.52%	0.70%	2.75%
Squirrel	0.27%	0.52%	0.36%	1.79%
Tree - Non ROW	7.16%	5.91%	2.36%	6.61%
Tree - ROW	33.21%	15.60%	77.41%	28.37%
Unknown Cause	5.03%	8.18%	4.02%	11.71%
Wind	1.51%	0.83%	0.68%	2.07%

Corrections to be made

Very recently trimmed

Substation Name and Number CLAY\_LICK 26

Substation Location

Louisville, Rd., Salvisa, KY 40372

Circuit Name and Number

CLAY\_LICK 134

Circuit Location

Lillards Ferry

Total Circuit Length (Miles)

50.3

2014 Member Count

Date of last Trim

339 September 2010

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	19.43	0.3180	35.98	0.3186
Bird	0.16%	0.19%	0.00%	0.00%
Deterioration	1.33%	1.86%	1.28%	4.63%
Equipment Fault	4.01%	1.86%	1.79%	2.78%
Lightning	3.23%	2.04%	2.20%	3.70%
Overload	0.37%	0.37%	0.54%	0.93%
Power Supplier	12.88%	56.21%	0.00%	0.00%
Scheduled	7.48%	5,38%	11.39%	9.26%
Small Animal	3.01%	2.78%	4.01%	7.41%
Squirrel	3.79%	4.45%	1.08%	1.85%
Tree - Non ROW	2.24%	0.56%	0.00%	0.00%
Tree - ROW	13.18%	5.94%	33.29%	26.85%

Corrections to be made

Unknown Cause

Wind

Vegetation to be trimmed in 2016

9.46% 16.23% 25.00%

8.91% 28.20% 17.59%

11.78%

36.54%

Substation Name and Number COLEMANSVILLE 32

**Substation Location** 

Corner of HWY 1032 & 1054, Berry, KY 41003

Circuit Name and Number

**COLEMANSVILLE 114** 

Circuit Location
Total Circuit Length (Miles)

Kelat

2014 Member Count

62.7 414

Date of last Trim

January 2013

	5 Year Average		2014	
	SAIDI	SAIFI	<b>SAIDI</b>	SAIFI
Total Minutes/Frequency	43.59	0.5599	73.02	0.8961
Bird	0.28%	0.35%	0.00%	0.00%
Deterioration	19.14%	20.71%	49.15%	54.99%
Equipment Fault	23.54%	17.69%	35.42%	21.56%
Ice/Snow	8.08%	1.64%	0.02%	0.27%
Lightning	24.85%	17.69%	9.23%	14.56%
Public Accident	9.43%	21.23%	0.00%	0.00%
Scheduled	5.65%	10.44%	0.00%	0.00%
Small Animal	4.24%	3.97%	0.97%	1.35%
Squirrel	0.84%	0.86%	0.77%	0.54%
Tree - Non ROW	0.11%	0.09%	0.00%	0.00%
Tree - ROW	0.20%	0.09%	0.00%	0.00%
Unknown Cause	3.44%	4.92%	4.43%	6.74%
Wind	0.20%	0.35%	0.00%	0.00%

Corrections to be made

13-114

Substation Name and Number CROOKSVILLE 13

Substation Location

Crooksville Rd., Richmond, KY 40475

Circuit Name and Number

**CROOKSVILLE 114** 

Circuit Location

Speedwell

Total Circuit Length (Miles)

69.8

2014 Member Count

621

Date of last Trim

November 2014

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	67 <b>.0</b> 3	0.6879	119.35	1.0853
Bird	4.22%	5.15%	0.00%	0.00%
Contractor	0.27%	0.61%	0.75%	1.93%
Deterioration	5.00%	3.46%	0.00%	0.00%
Equipment Fault	10.40%	9.50%	3.32%	2.23%
Large Animal	0.12%	0.51%	0.00%	0.00%
Lightning	22.64%	19.19%	53.43%	41.99%
Public Accident	18.03%	13.39%	0.00%	0.00%
Scheduled	2.41%	3.93%	0.29%	0.30%
Small Animal	3.97%	4.17%	8.08%	7.86%
Squirrel	0.08%	0.14%	0.15%	0.30%
Tree - Non ROW	3.63%	3.00%	8.68%	6.53%
Tree - ROW	4.12%	4.17%	9.71%	10.39%
Unknown Cause	24.40%	31.93%	15.60%	28.49%
Wind	0.70%	0.84%	0.00%	0.00%

Corrections to be made

Vegetation very recently trimmed

Substation Name and Number CROOKSVILLE

13

**Substation Location** 

Crooksville Rd., Richmond, KY 40475

Circuit Name and Number

**CROOKSVILLE 124** 

Circuit Location

Ogg Lane

Total Circuit Length (Miles)

50.0

2014 Member Count

689

Date of last Trim

January 2010

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	28.35	0.4891	78.13	1.5501
Bird	2.01%	2.61%	0.00%	0.00%
Deterioration	5.64%	4.51%	0.18%	0.28%
Equipment Fault	19.96%	16.91%	31.53%	23.69%
Lightning	9.69%	7.30%	0.31%	0.09%
Overload	0.11%	0.12%	0.00%	0.00%
Public Accident	30.82%	43.20%	55.64%	67.88%
Scheduled	1.04%	0.59%	0.00%	0.00%
Small Animai	4.67%	4.69%	3.20%	3.65%
Squirrel	1.27%	1.25%	0.00%	0.00%
Tree - Non ROW	5.25%	2.14%	5.82%	1.59%
Tree - ROW	1.12%	1.31%	1.91%	1.97%
Unknown Cause	15.74%	12.88%	1.40%	0.84%
Wind	2.62%	2.43%	0.00%	0.00%

Corrections to be made

Substation Name and Number DAVIS 4

**Substation Location** 

Delong Rd., Lexington, KY 40515

Circuit Name and Number

**DAVIS 104** 

**Circuit Location** 

Ashgrove Pike

Total Circuit Length (Miles)

19.5

2014 Member Count

344

Date of last Trim

January 2010

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	64.33	0.8597	90.76	1.0669
Bird	4.67%	5.48%	5.90%	6.81%
Deterioration	0.18%	0.41%	0.00%	0.00%
Equipment Fault	0.50%	0.27%	0.00%	0.00%
Lightning	40.44%	24.47%	0.92%	2.45%
Public Accident	2.84%	4.67%	0.00%	0.00%
Scheduled	1.00%	0.81%	0.00%	0.00%
Small Animal	9.30%	7.24%	31.46%	26.70%
Squirrel	0.87%	1.22%	1.07%	1.63%
Tree - Non ROW	21.68%	17.92%	30.02%	35.97%
Tree - ROW	10.57%	7.71%	20.84%	12.53%
Unknown Cause	7.39%	29.61%	7.76%	13.08%
Wind	0.57%	0.20%	2.03%	0.82%

Corrections to be made

Vegetation to be trimmed this year

Substation Name and Number DAVIS 4

**Substation Location** 

Delong Rd., Lexington, KY 40515

Circuit Name and Number

DAVIS 124

**Circuit Location** 

East Hickman Road

Total Circuit Length (Miles) 2014 Member Count

79.3 632

Date of last Trim

April 2010

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	124.97	1.5584	165,08	3.3212
Bird	0.61%	0.95%	0.00%	0.00%
Deterioration	2.46%	1.99%	1.61%	0.52%
Equipment Fault	46.76%	49.41%	73.90%	87.23%
Ice/Snow	1.15%	1.14%	0.00%	0.00%
Large Animal	0.03%	0.04%	0.00%	0.00%
Lightning	10.07%	5.31%	0.41%	0.29%
Overload	0.03%	0.04%	0.00%	0.00%
Public Accident	20.93%	14.19%	0.00%	0.00%
Scheduled	0.06%	0.12%	0.14%	0.24%
Small Animal	0.63%	0.51%	0.66%	0.52%
Squirrel	3.04%	1.83%	10.85%	3.67%
Tree - Non ROW	2.67%	2.70%	2.18%	0.91%
Tree - ROW	5.29%	4.24%	5.76%	4.34%
Unknown Cause	3.08%	15.15%	0.94%	0.67%
Wind	3.18%	2.38%	3.54%	1.62%

Corrections to be made

Equipment fixed at time of outage

Substation Name and Number FAYETTE1

Substation Location

Armstrong Mill, Lexington, KY 40515

Circuit Name and Number

FAYETTE1 144

Circuit Location

Squires Road Right Double Circuit

Total Circuit Length (Miles)

14.7

2014 Member Count

684

Date of last Trim

December 2014

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	100.70	0.8690	356.77	2.4371
Bird	0.25%	0.44%	0.00%	0.00%
Deterioration	0.66%	0.44%	0.11%	0.12%
Equipment Fault	7.00%	7.77%	1.93%	3.12%
Lightning	6.95%	9.86%	1.25%	2.10%
Overload	0.06%	0.13%	0.00%	0.00%
Public Accident	0.01%	0.03%	0.00%	0.00%
Scheduled	0.08%	0.07%	0.00%	0.00%
Small Animal	0.85%	1.62%	0.87%	2.28%
Squirrel	12.46%	27.22%	15.72%	42.65%
Tree - Non ROW	0.37%	0.54%	0.52%	0.96%
Tree - ROW	4.80%	5.01%	5.06%	6.60%
Unknown Cause	13.69%	23.22%	0.00%	0.00%
Wind	52.83%	23.65%	74.56%	42.17%

Corrections to be made

Vegetation recently trimmed

5-164

Substation Name and Number FAYETTE1

**Substation Location** 

Armstrong Mill, Lexington, KY 40515

Circuit Name and Number

FAYETTE1 164

**Circuit Location** 

Armstrong Mill

Total Circuit Length (Miles)

7.8

2014 Member Count

807

Date of last Trim

October 2014

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	58.92	0.6890	81.71	0.6530
Bird	0.13%	0.29%	0.00%	0.00%
Deterioration	0.44%	0.36%	1.24%	0.76%
Equipment Fault	10.25%	4.42%	31.60%	18.03%
Lightning	16.25%	16.58%	0.00%	0.00%
Overload	0.16%	0.29%	0.00%	0.00%
Public Accident	15.36%	28.56%	0.00%	0.00%
Scheduled	0.73%	0.36%	0.00%	0.00%
Small Animal	5.44%	4.24%	0.70%	0.38%
Squirrel	0.56%	0.90%	0.50%	1.52%
Tree - ROW	42.14%	31.76%	48.87%	40.99%
Unknown Cause	7.92%	11.62%	16.97%	37.76%
Wind	0.24%	0.32%	0.12%	0.57%

Corrections to be made

Vegetation very recently trimmed

Substation Name and Number FAYETTE1

**Substation Location** 

Armstrong Mill, Lexington, KY 40515

Circuit Name and Number

FAYETTE1 174

Circuit Location

Squires Road Left Double Circuit

Total Circuit Length (Miles)

7.1

2014 Member Count

547

Date of last Trim

October 2014

	5 Year Av	erage	2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	34.38	0.4618	105,17	1.4899
Bird	0.94%	0.79%	0.00%	0.00%
Deterioration	3.56%	2.61%	0.00%	0.00%
Equipment Fault	13.57%	9.11%	16.92%	10.55%
Lightning	1.21%	0.63%	1.97%	0.98%
Public Accident	1.70%	0.16%	0.00%	0.00%
Scheduled	0.30%	0.55%	0.00%	0.00%
Small Animal	6.16%	5.46%	8,48%	5.89%
Squirrel	5.98%	8.08%	3.44%	5.64%
Tree - Non ROW	35.64%	47.51%	56.14%	68.96%
Tree - ROW	14.94%	9.03%	11.39%	6.38%
Unknown Cause	8.81%	11.88%	0.00%	0.00%
Vandalism	0.33%	0.24%	0.00%	0.00%
Wind	6.88%	3.96%	1.65%	1.60%

Corrections to be made

Vegetation very recently trimmed

Substation Name and Number FAYETTE2

**Substation Location** 

Armstrong Mill, Lexington, KY 40515

Circuit Name and Number

FAYETTE2 104

Circuit Location

Squires Road

Total Circuit Length (Miles)

2014 Member Count

6.6 480

Date of last Trim

March 2013

	5 Year Average		20	2014	
	SAIDI	SAIFI	SAIDI	SAIFI	
Total Minutes/Frequency	70.82	0.7744	166.26	2.0292	
Bird	0.19%	0.27%	0.00%	0.00%	
Deterioration	0.36%	0.16%	0.00%	0.00%	
Equipment Fault	41.65%	29.06%	66.21%	43.94%	
Ice/Snow	0.16%	0.11%	0.00%	0.00%	
Lightning	34.13%	37.72%	27.37%	46.71%	
Overload	3.03%	3.28%	0.00%	0.00%	
Power Supplier	11.91%	13.96%	0.00%	0.00%	
Scheduled	1.63%	3.82%	0.00%	0.00%	
Small Animal	0.80%	1.29%	0.32%	0.41%	
Squirrel	4.17%	6.99%	5.74%	7.80%	
Tree - ROW	0.17%	0.16%	0.00%	0.00%	
Unknown Cause	1.67%	2.96%	0.37%	1.13%	

Corrections to be made

Equipment repaired at time of outage

Substation Name and Number FAYETTE2 6

**Substation Location** 

Armstrong Mill, Lexington, KY 40515

Circuit Name and Number

FAYETTE2 114

Circuit Location

Hartland

Total Circuit Length (Miles)

2014 Member Count

11.6

695

Date of last Trim

February 2013

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	145.05	1.1516	103.38	1.1971
Deterioration	0.12%	0.15%	0.37%	0.36%
Equipment Fault	42.31%	35.61%	92.22%	88.22%
Fire	9.06%	16.94%	0.00%	0.00%
Lightning	0.03%	0.05%	0.00%	0.00%
Overload	0.01%	0.05%	0.00%	0.00%
Power Supplier	5.81%	9.39%	0.00%	0.00%
Scheduled	1.06%	2.37%	7.40%	11.42%
Small Animal	12.41%	17.09%	0.00%	0.00%
Squirrel	0.38%	0.60%	0.00%	0.00%
Tree - Non ROW	0.33%	0.65%	0.00%	0.00%
Unknown Cause	28.45%	17.07%	0.00%	0.00%
Wind	0.03%	0.02%	0.00%	0.00%

Corrections to be made

Equipment repaired at time of outage

36-114

Substation Name and Number HEADQUARTERS

36

**Substation Location** 

Saltwell Hedquarters, Rd., Carlisle, KY 40311

Circuit Name and Number

**HEADQUARTERS 114** 

Circuit Location

**Authur Pike** 

Total Circuit Length (Miles)

27.4

2014 Member Count

157

Date of last Trim

August 2011

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	111.43	1.1286	199.55	1.1592
Bird	1.05%	2.03%	0.70%	2.20%
Deterioration	36.24%	22.80%	93.74%	85.71%
Equipment Fault	2.61%	2.37%	0.00%	0.00%
Large Animal	1.04%	0.90%	2.91%	4.40%
Lightning	19.41%	20.82%	0.76%	3.30%
Power Supplier	20.37%	34.37%	0.00%	0.00%
Sag/Clearance	1.59%	2.71%	0.00%	0.00%
Scheduled	1.48%	2.82%	0.31%	0.55%
Small Animal	0.69%	0.90%	1.14%	2.75%
Squirrel	0.09%	0.11%	0.00%	0.00%
Tree - Non ROW	11,08%	3.95%	0.00%	0.00%
Tree - ROW	1.19%	1.81%	0.00%	0.00%
Unknown Cause	2.83%	3.95%	0.43%	1.10%
Wind	0.25%	0.34%	0.00%	0.00%

Corrections to be made

Increased number of protection devices on this circuit in 2015

Substation Name and Number HICKORY PLAINS 9

**Substation Location** 

Old US 25, Berea, KY 40403

Circuit Name and Number

**HICKORY PLAINS 144** 

Circuit Location

Silver Creek

Total Circuit Length (Miles)

21.1

2014 Member Count

697

Date of last Trim

December 2014

	5 Year Av	2014		
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	35.35	0.5538	44.05	1.1033
Deterioration	5.55%	2.75%	0.00%	0.00%
Equipment Fault	10.70%	5.91%	0.00%	0.00%
Large Animal	0.15%	0.16%	0.00%	0.00%
Lightning	3.83%	3.78%	0.69%	0.13%
Overload	1.46%	1.04%	5.86%	2.60%
Public Accident	1.78%	0.47%	7.12%	1.17%
Small Animal	8.85%	9.43%	1.27%	0.91%
Squirrel	1.38%	0.83%	5.42%	1.95%
Tree - Non ROW	5.22%	2.07%	1.26%	1.17%
Tree - ROW	19.47%	36.58%	78.11%	91.81%
Unknown Cause	41.51%	36.68%	0.13%	0.13%
Wind	0.10%	0.31%	0.13%	0.13%

Corrections to be made

Vegetation very recently trimmed

Substation Name and Number HOLLOWAY

Substation Location Harrodsburg Rd., Nicholasville, KY 40356

Circuit Name and Number HOLLOWAY 114

Circuit Location Clear Creek/Murphy's Lane

Total Circuit Length (Miles) 36.2 2014 Member Count 324

Date of last Trim October 2011

	5 Year Av	2014		
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	53.89	0.6405	102.65	1.1914
Bird	3.84%	5.78%	0.00%	0.00%
Deterioration	0.33%	0.67%	0.00%	0.00%
Equipment Fault	6.49%	6.84%	11.30%	11.92%
Lightning	13.54%	7.42%	0.40%	0.26%
Power Supplier	21.77%	29.07%	0.00%	0.00%
Public Accident	32.55%	30.84%	83.24%	82.12%
Scheduled	0.23%	0.29%	0.60%	0.78%
Small Animal	1.62%	2.41%	0.69%	1.30%
Squirrel	0.44%	0.39%	1.17%	1.04%
Tree - Non ROW	8.56%	3.66%	0.00%	0.00%
Tree - ROW	0.08%	0.10%	0.20%	0.26%
Unknown Cause	8.04%	10.41%	0.45%	0.78%
Wind	2.50%	2.12%	1.95%	1.55%

Corrections to be made

No correction to be made at this time

2

Substation Name and Number HOLLOWAY

2

**Substation Location** 

Harrodsburg Rd., Nicholasville, KY 40356

Circuit Name and Number

**HOLLOWAY 134** 

Circuit Location

Southland Christian Church

Total Circuit Length (Miles) 2014 Member Count

26.4 370

Date of last Trim

December 2013

	5 Year Av	2014		
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	90.74	1.3165	168.97	2.1622
Bird	4.64%	5.54%	0.00%	0.00%
Deterioration	1.66%	1.97%	0.00%	0.00%
Equipment Fault	4.79%	3.61%	8.36%	8.50%
Ice/Snow	0.17%	0.04%	0.00%	0.00%
Lightning	18.38%	18.93%	0.42%	0.38%
Overload	1.87%	2.14%	1.51%	2.75%
Power Supplier	12.93%	14.14%	0.00%	0.00%
Public Accident	3.22%	0.66%	0.00%	0.00%
Sag/Clearance	11.55%	13.96%	31.00%	42.50%
Scheduled	0.57%	1.23%	0.00%	0.00%
Small Animal	1.95%	1.97%	1.50%	2.13%
Squirrel	0.13%	0.29%	0.00%	0.00%
Tree - Non ROW	21.31%	14.37%	57.21%	43.75%
Tree - ROW	8.78%	14.08%	0.00%	0.00%
Unknown Cause	8.01%	7.02%	0.00%	0.00%

Corrections to be made

Repaired clearance issue at time of outage

Substation Name and Number JACKSONVILLE

**Substation Location** 

Russell Cave Rd., Cynthiana, KY 41031

Circuit Name and Number

**JACKSONVILLE 104** 

**Circuit Location** 

Date of last Trim

Broadwell

Total Circuit Length (Miles)

26.5 176

2014 Member Count

April 2014

	5 Year Av	2014		
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	64.68	1.0500	42.77	1.2045
Bird	0.15%	0.22%	0.00%	0.00%
Deterioration	7.16%	7.47%	0.00%	0.00%
Equipment Fault	15.77%	21.86%	0.00%	0.00%
Lightning	22.05%	12.77%	13.87%	8.49%
Public Accident	8.99%	3.35%	0.00%	0.00%
Small Animal	4.41%	5.74%	1.38%	1.42%
Squirrel	0.15%	0.22%	0.60%	0.47%
Tree - Non ROW	9.86%	18.40%	74.53%	80.19%
Tree - ROW	0.39%	0.11%	0.00%	0.00%
Unknown Cause	30.63%	29.76%	9.62%	9.43%
Wind	0.44%	0.11%	0.00%	0.00%

Corrections to be made

Vegetation recently trimmed

39-114

Substation Name and Number JACKSONVILLE

39

**Substation Location** 

Russell Cave Rd., Cynthiana, KY 41031

Circuit Name and Number

**JACKSONVILLE 114** 

Circuit Location

**Bourbon Acres** 

Total Circuit Length (Miles)

90.3

2014 Member Count

622

Date of last Trim

August 2013

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	144.12	1.7659	163.63	3.0048
Bird	0.63%	0.58%	0.00%	0.00%
Deterioration	10.74%	7.94%	2.70%	1.82%
Equipment Fault	2.56%	1.69%	1.10%	0.48%
Large Animal	1.93%	1.11%	8.45%	3.21%
Lightning	38.10%	32.30%	6.93%	4.82%
Public Accident	2.20%	1.44%	0.00%	0.00%
Sag/Clearance	4.69%	10.92%	20.56%	32.00%
Scheduled	1.30%	1.60%	1.20%	1.34%
Small Animal	2.66%	2.17%	0.47%	0.32%
Squirrel	1.11%	0.87%	0.12%	0.11%
Tree - Non ROW	12.13%	14.79%	14.63%	11.18%
Tree - ROW	7.11%	3.90%	11.24%	3.37%
Unknown Cause	4.63%	5.43%	7.29%	5.99%
Wind	10.19%	15.26%	25.31%	35.37%

Corrections to be made

Conductor Sag issue fixed at time of outage

Substation Name and Number LEES\_LICK

34

**Substation Location** 

HWY 1842, Cynthiana, KY 41031

Circuit Name and Number

LEES\_LICK 114

**Circuit Location** 

White Oak

Total Circuit Length (Miles)

55.5

2014 Member Count

448

Date of last Trim

December 2009

5 Year Average			2014		
SE)	SAIDI	SAIFI	SAIDI	SAIFI	
Total Minutes/Frequency	67.00	1.0172	90.29	1.1987	
Bird	1.21%	1.62%	1.97%	2.05%	
Deterioration	0.26%	0.13%	0.00%	0.00%	
Equipment Fault	2.51%	1.67%	5.83%	5.40%	
lce/Snow	0.15%	0.04%	0.00%	0.00%	
Lightning	28.44%	19.27%	23.37%	13.22%	
Overload	0.60%	0.97%	0.00%	0.00%	
Power Supplier	23.33%	36.01%	0.00%	0.00%	
Public Accident	3.99%	2.63%	0.00%	0.00%	
Sag/Clearance	0.22%	0.18%	0.83%	0.74%	
Scheduled	0.02%	0.04%	0.07%	0.19%	
Small Animal	1.99%	2.11%	0.33%	0.37%	
Squirrel	0.06%	0.09%	0.00%	0.00%	
Tree - Non ROW	5.84%	3.69%	0.32%	0.19%	
Unknown Cause	9.73%	9.96%	0.54%	0.74%	
Wind	21.63%	21.59%	66.74%	77.09%	

Corrections to be made

Single outage caused by wind skewing statistics

Substation Name and Number LEES\_LICK

34

**Substation Location** 

HWY 1842, Cynthiana, KY 41031

Circuit Name and Number

LEES\_LICK 124

**Circuit Location** 

Leesburg

Total Circuit Length (Miles)

13.0

2014 Member Count

156

Date of last Trim

June 2010

	5 Year Average			2014	
	SAIDI		SAIFI	SAIDI	SAIFI
Total Minutes/Frequency		147.47	1.2716	165.78	1.9872
Bird		0.22%	0.50%	0.41%	0.65%
Deterioration		4.82%	7.06%	0.00%	0.00%
Equipment Fault		6.87%	6,65%	24.68%	14.84%
Lightning		71.78%	42.85%	68.94%	65.48%
Power Supplier		10.48%	29.02%	0.00%	0.00%
Public Accident		3.99%	10.08%	5.83%	18.71%
Scheduled		1.32%	2.62%	0.00%	0.00%
Small Animal		0.52%	1.21%	0.14%	0.32%

Corrections to be made

Substation Name and Number MERCER\_CO 25

Substation Location Industr

Industrial Park Drive, Harrodsburg, KY 40330

Circuit Name and Number

MERCER CO 104

Circuit Location

**Mercer County Schools** 

Total Circuit Length (Miles)

1.2

2014 Member Count

20

Date of last Trim

2010

	5 Year Average			2014		
	SAIDI		SAIFI	SAIDI	SAIFI	
Total Minutes/Frequency		29.05	0.4510	34.20	0.9500	
Deterioration	1	.93%	2.22%	0.00%	0.00%	
Equipment Fault	35	.35%	17.90%	0.00%	0.00%	
Lightning	13	.39%	6.65%	0.00%	0.00%	
Power Supplier	24	.91%	50.90%	100.00%	100.00%	
Small Animal	1	.62%	2.22%	0.00%	0.00%	
Squirrel	2	.58%	2.22%	0.00%	0.00%	
Unknown Cause	20	.22%	17.90%	0.00%	0.00%	

Corrections to be made

Substation Name and Number MERCER\_CO

25

**Substation Location** 

Industrial Park Drive, Harrodsburg, KY 40330

Circuit Name and Number

MERCER\_CO 114

Circuit Location

**Bohon Road** 

Total Circuit Length (Miles)

25.4

2014 Member Count

253

Date of last Trim

November 2014

	5 Year Av	2014		
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	39.30	0.4537	166.57	1.7233
Bird	10.23%	10.80%	0.00%	0.00%
Deterioration	34.41%	14.46%	40.28%	18.81%
Equipment Fault	0.78%	0.51%	0.35%	0.46%
Large Animal	0.06%	0.17%	0.00%	0.00%
Lightning	4.14%	2.27%	4.88%	2.98%
Power Supplier	27.36%	52.63%	31.10%	57.80%
Small Animal	0.50%	0.52%	0.59%	0.69%
Squirrel	0.25%	0.35%	0.29%	0.46%
Unknown Cause	3.93%	5.04%	0.88%	1.38%
Wind	18.34%	13.24%	21.64%	17.43%

Corrections to be made

Power Supplier, no corrections to be made at this time

Substation Name and Number MILLERSBURG 38

**Substation Location** 

Miller Station Rd., Carlisle, KY 40311

Circuit Name and Number

MILLERSBURG 124

Circuit Location

Miller Station Road

Total Circuit Length (Miles)

34.3 364

2014 Member Count Date of last Trim

April 2010

	5 Year Average			2014		
	SAIDI		SAIFI	SAIDI	SAIFI	
Total Minutes/Frequency	126.	14	1.2922	185.76	2.1099	
Bird	0.47	7%	0.94%	0.00%	0.00%	
Deterioration	6.80	)%	6.59%	0.05%	0.13%	
Equipment Fault	20.58	3%	16.07%	29.27%	16.54%	
Large Animal	0.03	3%	0.04%	0.00%	0.00%	
Lightning	5.72	2%	5.14%	0.22%	0.26%	
Overload	0.31	1%	0.34%	0.80%	0.65%	
Power Supplier	16.83	3%	29.59%	0.00%	0.00%	
Public Accident	2.40	)%	2.72%	0.00%	0.00%	
Sag/Clearance	0.84	1%	4.68%	2.86%	14.32%	
Scheduled	0.60	)%	2,59%	2.05%	7.94%	
Small Animal	0.81	%	1.28%	0.00%	0.00%	
Squirrel	0.71	%	1.79%	0.15%	0.26%	
Tree - Non ROW	19.28	1%	8.89%	5.79%	5.73%	
Unknown Cause	0.06	%	0.13%	0.17%	0.26%	
Vandalism	12.34	%	14.92%	41.90%	45.70%	
Wind	12.20	)%	4.29%	16.72%	8.20%	

Corrections to be made

Substation Name and Number NEWBY 7

**Substation Location** 

Maple Grove Rd., Richmond, KY 40475

Circuit Name and Number

NEWBY 104

**Circuit Location** 

Hickory Hill

Total Circuit Length (Miles)

18.1

2014 Member Count

256

Date of last Trim

January 2012

	5 Year Av	2014		
	SAIDI	SAIDI SAIFI		SAIFI
Total Minutes/Frequency	142.67	1.2102	143.84	1.0469
Bird	1.07%	2.84%	0.00%	0.00%
Deterioration	0.04%	0.13%	0.20%	0.75%
Equipment Fault	5.32%	3.68%	3.78%	7.09%
Lightning	4.16%	4.13%	2.61%	4.85%
Overload	0.03%	0.06%	0.00%	0.00%
Power Supplier	5.17%	15.64%	0.00%	0.00%
Small Animal	3.55%	6.39%	0.00%	0.00%
Squirrel	8.48%	15.61%	0.00%	0.00%
Tree - Non ROW	68.52%	46.67%	93.41%	87.31%
Unknown Cause	3.15%	4.20%	0.00%	0.00%
Wind	0.50%	0.65%	0.00%	0.00%

Corrections to be made

Substation Name and Number NEWBY 7

Substation Location

Maple Grove Rd., Richmond, KY 40475

Circuit Name and Number

NEWBY 114

Circuit Location

Baldwin

Total Circuit Length (Miles)

19.6

2014 Member Count

128

Date of last Trim

August 2014

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	173.14	1.5946	343.68	2.0625
Deterioration	23.14%	12.05%	58.29%	46.59%
Equipment Fault	20.39%	8.82%	22.33%	16.29%
Lightning	22.98%	25.48%	10.68%	20.45%
Power Supplier	4.26%	11.87%	0.00%	0.00%
Scheduled	0.13%	0.20%	0.00%	0.00%
Small Animal	5.17%	7.15%	0.00%	0.00%
Squirrel	6.95%	11.80%	0.00%	0.00%
Tree - Non ROW	10.89%	14.80%	0.00%	0.00%
Tree - ROW	3.20%	3.92%	7.18%	12.12%
Unknown Cause	2.89%	3.92%	1.53%	4.55%

Corrections to be made

Vegetation recently trimmed

No further action to be taken at this time

7-124

Substation Name and Number NEWBY 7

**Substation Location** 

Maple Grove Rd., Richmond, KY 40475

Circuit Name and Number

NEWBY 124

Circuit Location

Shallow Ford

Total Circuit Length (Miles)

13.3

2014 Member Count

148

Date of last Trim

January 2012

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	168.38	1.5855	325.09	. 1.2432
Bird	0.24%	0.51%	0.00%	0.00%
Equipment Fault	9.84%	13.38%	0.00%	0.00%
Large Animal	0.14%	0.34%	0.00%	0.00%
Lightning	2.62%	3.58%	1.37%	7.61%
Power Supplier	4.38%	11.93%	0.00%	0.00%
Public Accident	2.74%	6.05%	2.16%	7.07%
Small Animal	0.33%	0.51%	0.00%	0.00%
Squirrel	7.40%	12.21%	0.51%	1.63%
Tree - Non ROW	47.21%	26.08%	95.80%	83.15%
Tree - ROW	1.22%	0.85%	0.00%	0.00%
Unknown Cause	0.06%	0.09%	0.16%	0.54%
Wind	23.82%	24.46%	0.00%	0.00%

Corrections to be made

Substation Name and Number NICHOLASVILLE 1-

**Substation Location** 

Bethany Rd., Nicholasville, KY 40356

Circuit Name and Number

NICHOLASVILLE 124

Circuit Location

Spears

Total Circuit Length (Miles)

27.7

2014 Member Count

365

Date of last Trim

September 2011

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	105.38	0.7797	345.47	2.1233
Bird	1.05%	3.09%	0.00%	0.00%
Deterioration	3,14%	4.50%	0.00%	0.00%
Equipment Fault	28.28%	26.00%	41.63%	45.94%
Ice/Snow	0.55%	0.42%	0.00%	0.00%
Lightning	39.40%	29.80%	55.46%	47.48%
Public Accident	4.05%	4.08%	0.00%	0.00%
Small Animal	1.52%	3.65%	1.71%	4.77%
Squirrel	0.31%	0.56%	0.47%	1.03%
Tree - Non ROW	0.34%	0.21%	0.51%	0.39%
Tree - ROW	16.77%	18.97%	0.00%	0.00%
Unknown Cause	4.26%	7.87%	0.00%	0.00%
Wind	0.32%	0.84%	0.21%	0.39%

Corrections to be made

Equipment repaired at time of outage No corrections to be made at this time

Substation Name and Number NICHOLASVILLE 1

**Substation Location** 

Bethany Rd., Nicholasville, KY 40356

Circuit Name and Number

**NICHOLASVILLE 144** 

**Circuit Location** 

**Brittany Heights** 

Total Circuit Length (Miles)

4.5

2014 Member Count

24

Date of last Trim

November 2014

	5 Year Average			2014	
	SAIDI		SAIFI	SAIDI	SAIFI
Total Minutes/Frequency		39.13	0.4500	47.46	0.4583
Bird		10.99%	22.22%	3.42%	9.09%
Deterioration		24.56%	12.96%	0.00%	0.00%
Equipment Fault		2.66%	1.85%	0.00%	0.00%
Lightning		32.48%	20.37%	76.12%	54.55%
Small Animal		21.19%	31.48%	5.44%	18.18%
Squirrel		1.13%	1.85%	4.65%	9.09%
Tree - ROW		2.51%	1.85%	10.36%	9.09%
Unknown Cause		4.47%	7.41%	0.00%	0.00%

Corrections to be made

Substation Name and Number NINEVAH 22

Clifton Rd., Lawrenceburg, KY 40342 **Substation Location** 

Circuit Name and Number **NINEVAH 104** Circuit Location Fox Creek Office

Total Circuit Length (Miles) 35.0 2014 Member Count 394

Date of last Trim March 2013

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	158.32	1.5194	264.07	1.5102
Bird	1.61%	2.31%	0.00%	0.00%
Deterioration	3.46%	3,43%	0.05%	0.34%
Equipment Fault	21.44%	13.70%	0.00%	0.00%
Lightning	2.94%	1.90%	0.00%	0.00%
Power Supplier	27.00%	12.96%	80.93%	65.21%
Scheduled	0.63%	1.37%	0.08%	0.17%
Small Animal	0.23%	0.50%	0.69%	2.52%
Squirrel	9.92%	15.37%	1.62%	6.89%
Tree - Non ROW	9.19%	9.15%	7.45%	12.10%
Tree - ROW	6.67%	4.66%	0.00%	0.00%
Unknown Cause	14.54%	33.41%	2.31%	6.72%
Wind	2.31%	1.24%	6.89%	6.05%

Corrections to be made

Power supplier, no corrections to be made at this time

Substation Name and Number NINEVAH

22

**Substation Location** 

Clifton Rd., Lawrenceburg, KY 40342

Circuit Name and Number

**NINEVAH 114** 

Circuit Location

Walker Lane

Total Circuit Length (Miles) 2014 Member Count

13.0 119

Date of last Trim

December 2011

	5 Year Av	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI	
Total Minutes/Frequency	64.47	0.7629	126.08	1.0420	
Bird	0.97%	2.20%	0.00%	0.00%	
Deterioration	1.58%	0.64%	0.00%	0.00%	
Equipment Fault	29.16%	24.59%	0.00%	0.00%	
Lightning	1.05%	2.64%	0.00%	0.00%	
Power Supplier	38.77%	26.43%	99.12%	96.77%	
Small Animal	0.21%	0.44%	0.00%	0.00%	
Squirrel	0.31%	0.66%	0.00%	0.00%	
Tree - ROW	6.52%	10.52%	0.00%	0.00%	
Unknown Cause	21.38%	31.86%	0.88%	3.23%	

Corrections to be made

Power Supplier, no corrections to be made at this time

Substation Name and Number NINEVAH 22

**Substation Location** 

Clifton Rd., Lawrenceburg, KY 40342

Circuit Name and Number

**NINEVAH 134** 

Circuit Location

Lanes Mill

Total Circuit Length (Miles)

58.1

2014 Member Count

957

Date of last Trim

December 2011

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	110.41	1.2450	255.17	1.4984
Bird	0.29%	0.55%	0.02%	0.07%
Deterioration	4.62%	3.36%	0.42%	0.98%
Equipment Fault	11.60%	23.94%	3.66%	6.83%
Fire	0.02%	0.03%	0.04%	0.14%
Ice/Snow	0.18%	0.24%	0.00%	0.00%
Large Animal	0.02%	0.02%	0.00%	0.00%
Lightning	13.64%	13.87%	3.59%	3.97%
Power Supplier	39.35%	15.86%	85.13%	65.90%
Public Accident	8.22%	17.58%	0.00%	0.00%
Scheduled	0.18%	1.44%	0.23%	2.79%
Small Animal	2.80%	4.03%	3.45%	9.76%
Squirrel	0.55%	0.99%	0.66%	2.79%
Tree - Non ROW	5.16%	6.23%	1.55%	3.49%
Tree - ROW	6.21%	4.45%	0.88%	2.51%
Unknown Cause	4.73%	6.64%	0.33%	0.70%
Wind	2.44%	0.77%	0.03%	0.07%

Corrections to be made

Power Supplier, no corrections to be made at this time

Substation Name and Number NORTH MADISON

15

**Substation Location** 

Jacks Creek Pike, Richmond KY 40475

Circuit Name and Number

**NORTH MADISON 104** 

Circuit Location

**Shiloh Point** 

Total Circuit Length (Miles)

12.0

2014 Member Count

184

Date of last Trim

March 2010

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	57.38	0.8459	126.83	1.2065
Bird	0.57%	0.77%	0.00%	0.00%
Deterioration	6.39%	3.47%	14.46%	12.16%
Equipment Fault	35.32%	22.62%	79.91%	79.28%
Lightning	7.77%	5.01%	3.30%	4.05%
Overload	23.37%	21.43%	0.00%	0.00%
Power Supplier	11.40%	19.34%	0.00%	0.00%
Public Accident	0.64%	0.77%	0.00%	0.00%
Small Animal	3.15%	3.85%	1.92%	4.05%
Tree - Non ROW	1,42%	0.51%	0.00%	0.00%
Unknown Cause	0.24%	0.26%	0.41%	0.45%
Wind	9.72%	21.97%	0.00%	0.00%

Corrections to be made

Equipment repaired at time of outage No corrections to be made at this time

Substation Name and Number POWELL TAYLOR 28

**Substation Location** 

1024 Powell Taylor Rd., Lawrenceburg, KY 40342

Circuit Name and Number

**POWELL TAYLOR 144** 

**Circuit Location** 

Powell Taylor/Glenview

Total Circuit Length (Miles)

9.7

2014 Member Count

180

Date of last Trim

January 2012

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	28.81	0.4454	45,33	0.3722
Bird	1.74%	2.49%	0.00%	0.00%
Deterioration	10.98%	9.48%	7.77%	16.42%
Equipment Fault	2.97%	4.74%	2.37%	1.49%
Lightning	9.57%	9.73%	0.00%	0.00%
Power Supplier	8.16%	40.62%	0.00%	0.00%
Small Animal	4.30%	6.49%	0.00%	0.00%
Squirrel	3.41%	4.74%	2.99%	5.97%
Tree - Non ROW	7.56%	0.75%	0.00%	0.00%
Tree - ROW	27.52%	12.97%	86.88%	76.12%
Unknown Cause	3.12%	5.24%	0.00%	0.00%
Wind	20.67%	2.74%	0.00%	0.00%

Corrections to be made

Substation Name and Number SINAI

23

**Substation Location** 

Hwy 62, Lawrenceburg, KY 40342

Circuit Name and Number

**SINAI 104** 

**Circuit Location** 

**Buntain School Road** 

Total Circuit Length (Miles) 2014 Member Count

26.7 201

Date of last Trim

January 2012

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	128.75	1.6588	144.70	2.6161
Bird	2.18%	4.56%	0.00%	0.00%
Deterioration	6.84%	4.98%	4.83%	3.80%
Equipment Fault	13.70%	8.34%	4.80%	3.99%
Ice/Snow	3.31%	2.04%	0.00%	0.00%
Lightning	13.49%	9.96%	19.68%	16.16%
Power Supplier	22.15%	34.83%	40.61%	38.22%
Public Accident	0.04%	0.06%	0.19%	0.19%
Sag/Clearance	1.04%	0.78%	0.00%	0.00%
Scheduled	1.15%	4.55%	5.10%	14.42%
Small Animal	12.87%	12.15%	0.54%	0.76%
Squirrel	0.13%	0.18%	0.21%	0.38%
Tree - Non ROW	3.96%	5.34%	15.19%	13.88%
Unknown Cause	17.87%	11.28%	8.85%	8.18%
Wind	1.25%	0.96%	0.00%	0.00%

Corrections to be made

Power supplier, no corrections to be made at this time

23-134

Substation Name and Number SINAI 23

**Substation Location** 

Hwy 62, Lawrenceburg, KY 40342

Circuit Name and Number

**SINAI 134** 

Circuit Location

Ashby Road

Total Circuit Length (Miles)

60.0

2014 Member Count

458

Date of last Trim

April 2013

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	111.24	1.4064	114.99	1.5745
Bird	0.85%	0.87%	0.00%	0.00%
Deterioration	0.53%	0.43%	0.58%	0.69%
Equipment Fault	2.29%	2.83%	0.36%	0.28%
Ice/Snow	5.61%	1.15%	0.00%	0.00%
Lightning	14.77%	14.31%	25.92%	22.88%
Power Supplier	15.07%	26.86%	0.00%	0.00%
Public Accident	0.10%	0.06%	0.48%	0.28%
Sag/Clearance	0.06%	0.06%	0.00%	0.00%
Scheduled	1.48%	5.10%	6.04%	22.07%
Small Animal	15.02%	14.57%	2.35%	3.33%
Squirrel	0.19%	0.28%	0.22%	0.28%
Tree - Non ROW	15.50%	9.13%	12.93%	5.27%
Tree - ROW	0.06%	0.09%	0.00%	0.00%
Unknown Cause	10.10%	10.25%	28.78%	26.63%
Wind	18.37%	14.00%	22.35%	18.30%

Corrections to be made

Substation Name and Number SOUTH ELKHORN

12

**Substation Location** 

3251 Keene Rd., Nicholasville, KY 40356

Circuit Name and Number

**SOUTH ELKHORN 124** 

Circuit Location

Champions

Total Circuit Length (Miles)

30.5

2014 Member Count

377

Date of last Trim

January 2011

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	76.19	0.7634	179.73	1.1034
Bird	1.36%	2.36%	0.00%	0.00%
Equipment Fault	4.00%	5.07%	0.00%	0.00%
Lightning	19.66%	20.99%	0.06%	0.24%
Public Accident	7.65%	25.02%	0.51%	1.44%
Scheduled	0.33%	0.28%	0.00%	0.00%
Small Animal	1.63%	2.36%	0.07%	0.24%
Squirrel	1.65%	2.78%	0.30%	1.20%
Tree - Non ROW	10.95%	7.51%	8.05%	4.33%
Tree - ROW	42.40%	26.27%	89.64%	90.38%
Unknown Cause	3.75%	5.21%	1.37%	2.16%
Wind	6.64%	2.15%	0.00%	0.00%

Corrections to be made

Vegetation to be trimmed in 2015

Substation Name and Number SOUTH JESSAMINE

14

**Substation Location** 

1307 Chrisman Mill Rd., Nicholasville, KY 40356

Circuit Name and Number

**SOUTH JESSAMINE 114** 

Circuit Location

Locust Heights/Southbrook

Total Circuit Length (Miles) 2014 Member Count

23,4 798

Date of last Trim

March 2011

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	71.05	0.8625	120.73	0.9787
Bird	2.03%	3.60%	0.06%	0.26%
Deterioration	0.71%	0.64%	0.22%	0.26%
Equipment Fault	22.62%	41.56%	0.12%	0.13%
lce/Snow	0.19%	0.20%	0.00%	0.00%
Lightning	33.37%	20.86%	0.00%	0.00%
Public Accident	0.27%	0.20%	0.00%	0.00%
Sag/Clearance	33.38%	21.65%	98.21%	95.39%
Scheduled	0.02%	0.06%	0.00%	0.00%
Small Animal	1.69%	2.73%	1.26%	3.71%
Squirrel	0.04%	0.06%	0.12%	0.26%
Unknown Cause	5.68%	8.43%	0.00%	0.00%

Corrections to be made

Clearance issue fixed at time of outage No corrections to be made at this time

Substation Name and Number SOUTH JESSAMINE 14

**Substation Location** 

1307 Chrisman Mill Rd., Nicholasville, KY 40356

Circuit Name and Number

**SOUTH JESSAMINE 124** 

Circuit Location

Sulphur Well

Total Circuit Length (Miles)

56.2

2014 Member Count

494

Date of last Trim

August 2011

	5 Year Average		2014	
	SAIDI	SAIFI	<b>\$AIDI</b>	SAIFI
Total Minutes/Frequency	120.46	1.0521	154.68	1,5121
Bird	1.46%	4.00%	1.13%	3.35%
Deterioration	2.43%	3.35%	0.29%	0.54%
Equipment Fault	11.65%	19.23%	0.95%	0.94%
Fire	10.59%	8.04%	41.24%	27.98%
Large Animal	0.02%	0.04%	0.10%	0.13%
Lightning	10.26%	22.70%	0.26%	0.80%
Overload	0.02%	0.04%	0.09%	0.13%
Public Accident	56.87%	30.63%	49.30%	53.55%
Sag/Clearance	0.30%	1.04%	1.17%	3.61%
Scheduled	0.04%	0.08%	0.00%	0.00%
Small Animal	1.35%	3.19%	1.88%	3.75%
Squirrel	0.27%	0.50%	0.80%	1.20%
Tree - Non ROW	1.60%	2.08%	1.91%	2.68%
Tree - ROW	0.67%	1.19%	0.89%	1.34%
Unknown Cause	2.35%	3.73%	0.00%	0.00%
Wind	0.03%	0.04%	0.00%	0.00%

Corrections to be made

No corrections to be performed at this time

Substation Name and Number VAN\_ARSDELL

**Substation Location** 

104 Bardstown Rd., Harrodsburg, KY 40330

Circuit Name and Number

VAN\_ARSDELL 114

**Circuit Location** 

Shakertown

Total Circuit Length (Miles)

124.2 906

2014 Member Count Date of last Trim

December 2014

	5 Year Average		2014		
	SAIDI		SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	148	83	1.5306	222.61	3.49
Bird	0.7	2%	1.34%	0.93%	1.11%
Contractor	0.0	3%	0.07%	0.10%	0.16%
Deterioration	3.2	6%	2.54%	0.32%	0.35%
Equipment Fault	4.1	9%	3.14%	3.28%	1.83%
lce/Snow	3.54	4%	1.57%	0.00%	0.00%
Lightning	36.3	4%	26.43%	55.26%	29.56%
Overload	0.1	5%	0.22%	0.51%	0.47%
Power Supplier	11.1	1%	22.73%	24.08%	27.92%
Public Accident	0.2	2%	0.22%	0.15%	0.09%
Sag/Clearance	0.0	1%	0.01%	0.00%	0.00%
Scheduled	2.30	6%	16.43%	5.04%	28.71%
Small Animal	0.43	3%	0.91%	0.38%	0.76%
Squirrel	0.54	4%	0.79%	1.20%	1.14%
Tree - Non ROW	22.4	5%	11.97%	1.24%	0.63%
Tree - ROW	1.70	0%	1.57%	3,33%	2.50%
Unknown Cause	3.80	6%	5.87%	4.19%	4.77%
Wind	9.0	8%	4.18%	0.00%	0.00%

Corrections to be made

Substation Name and Number VAN\_ARSDELL 24

**Substation Location** 

104 Bardstown Rd., Harrodsburg, KY 40330

Circuit Name and Number

VAN\_ARSDELL 124

Circuit Location

**Bohon Road** 

Total Circuit Length (Miles)

37.9 335

2014 Member Count

Date of last Trim

April 2013

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	134.88	1.6619	239.31	3.3121
Bird	0.12%	0.18%	0.00%	0.00%
Deterioration	5.47%	4.38%	0.14%	0.27%
Equipment Fault	10.16%	7.00%	17.05%	10.18%
Ice/Snow	0.08%	0.07%	0.00%	0.00%
Lightning	54.92%	41.40%	51.93%	31.77%
Power Supplier	12.12%	20.73%	22.02%	28.93%
Public Accident	4.42%	3.84%	0.00%	0.00%
Scheduled	1.33%	9.02%	3.76%	22.62%
Small Animal	1.53%	2.05%	2.74%	3.33%
Squirrel	0.40%	0.68%	0.00%	0.00%
Tree - Non ROW	1.20%	1.51%	0.23%	0.27%
Tree - ROW	0.05%	0.07%	0.00%	0.00%
Unknown Cause	6.63%	7,87%	2.03%	2.52%
Vandalism	0.00%	0.00%	0.00%	0.00%
Wind	1.51%	1.11%	0.10%	0.09%

Corrections to be made

24-134

Substation Name and Number VAN\_ARSDELL

**Substation Location** 

104 Bardstown Rd., Harrodsburg, KY 40330

Circuit Name and Number

VAN\_ARSDELL 134

Circuit Location

Kirkwood

Total Circuit Length (Miles)

86.8 446

2014 Member Count

Date of last Trim

October 2009

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	192.35	2.2787	392.04	4.0099
Bird	0.48%	0.91%	0.00%	0.00%
Deterioration	6.57%	4.49%	5.01%	3.47%
Equipment Fault	12.76%	16.18%	0.18%	0.22%
Lightning	43.74%	29.45%	72.76%	58.34%
Overload	0.04%	0.04%	0.00%	0.00%
Power Supplier	15.78%	29.72%	18.81%	33.44%
Public Accident	0.24%	0.26%	0.07%	0.11%
Scheduled	0.72%	1.50%	0.63%	1.45%
Small Animal	4.13%	3.15%	0.64%	0.89%
Squirrel	4.56%	6.14%	0.38%	0.84%
Tree - Non ROW	1.12%	0.39%	0.54%	0.11%
Tree - ROW	0.71%	1.08%	0.00%	0.00%
Unknown Cause	4.65%	4.82%	0.98%	1.12%
Wind	4.51%	1.89%	0.00%	0.00%

Corrections to be made

Vegetation to be trimmed this year

Substation Name and Number VAN\_ARSDELL

24

**Substation Location** 

104 Bardstown Rd., Harrodsburg, KY 40330

Circuit Name and Number

VAN\_ARSDELL 144

Circuit Location

Cornishville

Total Circuit Length (Miles)

70.9

2014 Member Count

600

Date of last Trim

May 2010

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	144.59	1.3647	198.78	2.5187
Bird	0.41%	0.51%	0.00%	0.00%
Deterioration	0.19%	0.27%	0.06%	0.07%
Equipment Fault	2.43%	1.66%	0.21%	0.13%
Large Animal	0.02%	0.02%	0.00%	0.00%
Lightning	41.88%	40.36%	66.13%	45.61%
Power Supplier	9.36%	21.49%	19.41%	27.86%
Public Accident	7.01%	8.52%	0.00%	0.00%
Scheduled	1.77%	6.11%	5.12%	15.55%
Small Animal	24.69%	7.69%	0.42%	0.40%
Squirrel	2.03%	3.35%	2.05%	3.51%
Tree - Non ROW	5.04%	4.45%	0.00%	0.00%
Tree - ROW	0.45%	0.61%	0.23%	0.07%
Unknown Cause	3.65%	4.42%	6.37%	6.82%
Wind	1.08%	0.54%	0.00%	0.00%

Corrections to be made

Vegetation to be trimmed this year

Substation Name and Number WEST BEREA

**Substation Location** 

5350 Walnutmeadow Rd., Berea, KY 40403

Circuit Name and Number

**WEST BEREA 104** 

Circuit Location

**New Peggy Flats** 

Total Circuit Length (Miles)

44.3 729

2014 Member Count Date of last Trim

July 2014

	5 Year Av	2014		
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	107.25	1.0250	415.10	3.3621
Bird	2.28%	4.95%	0.00%	0.00%
Deterioration	2.09%	1.82%	1.09%	0.94%
Equipment Fault	1.77%	2.28%	0.15%	0.20%
Lightning	37.75%	28.83%	39.72%	31.70%
Overload	0.06%	0.08%	0.00%	0.00%
Power Supplier	14.01%	18.79%	18.09%	28.64%
Public Accident	28.30%	20.58%	35.05%	29.01%
Scheduled	0.36%	1.31%	0.00%	0.00%
Small Animal	4.51%	8.81%	1.66%	2.77%
Squirrel	0.22%	0.62%	0.02%	0.04%
Tree - Non ROW	0.70%	0.99%	0.35%	0.57%
Tree - ROW	1.71%	2.09%	1.87%	2.65%
Unknown Cause	5.48%	7.90%	2.00%	3.47%
Wind	0.77%	0.96%	0.00%	0.00%

Corrections to be made

Substation Name and Number WEST BEREA 8

Substation Location

5350 Walnutmeadow Rd., Berea, KY 40403

Circuit Name and Number

**WEST BEREA 114** 

Circuit Location

Days Inn

Total Circuit Length (Miles)

4.0

2014 Member Count

4.0

Date of last Trim

118 2009

	5 Year Average		2014		
	SAIDI		SAIFI	SAIDI	SAIFI
Total Minutes/Frequency		42.12	0.6712	73.42	1.0000
Equipment Fault		50.45%	59.60%	0.00%	0.00%
Lightning		1.19%	0.76%	0.06%	0.85%
Power Supplier		34.84%	29.55%	99.94%	99.15%
Small Animal		13.52%	10.10%	0.00%	0.00%

Corrections to be made

8-124

Substation Name and Number WEST BEREA 8

**Substation Location** 

5350 Walnutmeadow Rd., Berea, KY 40403

Circuit Name and Number

**WEST BEREA 124** 

Circuit Location

Dogwood Drive

Total Circuit Length (Miles)

44.8

2014 Member Count

1151

Date of last Trim

December 2009

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	103.03	1.3425	256.93	2.7341
Bird	0.59%	0.91%	0.00%	0.00%
Deterioration	0.29%	0.18%	0.02%	0.03%
Equipment Fault	17.58%	14.24%	0.54%	0.32%
Lightning	20.90%	21.29%	17.27%	16.68%
Overload	0.02%	0.03%	0.00%	0.00%
Power Supplier	14.14%	14.28%	28.35%	35.05%
Public Accident	28.96%	29.60%	44.44%	35.37%
Scheduled	0.42%	0.18%	0.04%	0.06%
Small Animal	3.21%	4.58%	0.57%	1.05%
Squirrel	0.33%	0.53%	0.51%	1.11%
Tree - Non ROW	2.69%	2.30%	0.10%	0.16%
Tree - ROW	3.38%	3.59%	5.39%	6.77%
Unknown Cause	1.48%	1.58%	2.23%	2.70%
Wind	6.01%	6.72%	0.56%	0.70%

Corrections to be made

8-134

Substation Name and Number WEST BEREA

**Substation Location** 

5350 Walnutmeadow Rd., Berea, KY 40403

Circuit Name and Number

**WEST BEREA 134** 

**Circuit Location** 

Wallacetown

Total Circuit Length (Miles)

36.6

2014 Member Count

462

Date of last Trim

January 2010

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	116.36	1.1108	160.27	1.8420
Bird	0.69%	1.17%	0.00%	0.00%
Deterioration	0.43%	1,13%	1.57%	3.41%
Equipment Fault	4.94%	3.90%	0.18%	0.12%
Ice/Snow	4.06%	1.56%	0.00%	0.00%
Lightning	4.05%	4.91%	7.94%	5.41%
Power Supplier	12,44%	17.38%	45,18%	52.41%
Public Accident	9.30%	10.99%	14.81%	17.04%
Scheduled	0.36%	0.27%	0.00%	0.00%
Small Animal	1.69%	2.77%	2.59%	3.53%
Squirrel	0.07%	0.19%	0.00%	0.00%
Tree - Non ROW	14.37%	7.95%	0.00%	0.00%
Tree - ROW	6.30%	4.36%	20.91%	10.22%
Unknown Cause	39.40%	38.93%	6.82%	7.87%
Wind	1.90%	4.48%	0.00%	0.00%

Corrections to be made

Substation Name and Number WEST BEREA

**Substation Location** 

5350 Walnutmeadow Rd., Berea, KY 40403

Circuit Name and Number

**WEST BEREA 154** 

Circuit Location

Walnut Meadow

Total Circuit Length (Miles)

46.5 237

2014 Member Count Date of last Trim

September 2009

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	70.38	0.7941	158.02	1.8734
Bird	1.97%	2.76%	0.00%	0.00%
Deterioration	21.60%	18.49%	17.19%	15.99%
Equipment Fault	6.50%	10.84%	0.10%	0.23%
Lightning	11.12%	8.40%	2.98%	2.48%
Power Supplier	21.42%	24.34%	47.70%	51.58%
Public Accident	0.50%	0.64%	0.00%	0.00%
Sag/Clearance	3.69%	2.34%	0.00%	0.00%
Scheduled	0.60%	0.64%	0.27%	0.23%
Small Animal	5.34%	7.86%	4.20%	5.18%
Tree - Non ROW	1.75%	1.81%	3.90%	3.83%
Tree - ROW	2.98%	2.23%	5.84%	4.05%
Unknown Cause	15.53%	15.41%	17.53%	15.99%
Wind	6.70%	3.83%	0.29%	0.45%

Corrections to be made

3-134

Substation Name and Number WEST NICHOLASVILLE

**Substation Location** 

398 Bass Pond Glen Dr., Nicholasville, KY 40356

Circuit Name and Number

**WEST NICHOLASVILLE 134** 

**Circuit Location** 

Loan Oak/Clear Creek

Total Circuit Length (Miles)

46.6 988

2014 Member Count

Date of last Trim

March 2013

	5 Year Average		2014	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	75.66	1.1477	118.98	1.1204
Bird	2.50%	3.32%	0.00%	0.00%
Deterioration	0.59%	0.58%	0.10%	0.18%
Equipment Fault	5.79%	5.01%	8.36%	9.85%
Lightning	1.90%	1.85%	2.73%	2.53%
Overload	0.20%	0.30%	0.29%	0.45%
Power Supplier	21.12%	31.66%	0.00%	0.00%
Public Accident	3.74%	1.85%	0.00%	0.00%
Scheduled	0.16%	0.21%	0.00%	0.00%
Small Animal	1.56%	0.97%	0.47%	1.17%
Squirrel	0.83%	1.04%	0.03%	0.09%
Tree - Non ROW	0.13%	0.19%	0.41%	0.99%
Tree - ROW	3.97%	3.07%	0.75%	1.45%
Unknown Cause	30.19%	33.68%	0.00%	0.00%
Wind	27.30%	16.23%	86.81%	83.11%

Corrections to be made

Substation Name and Number WEST NICHOLASVILLE 3-

**Substation Location** 

398 Bass Pond Glen Dr., Nicholasville, KY 40356

Circuit Name and Number

WEST NICHOLASVILLE 154

Circuit Location

North Main Street

Total Circuit Length (Miles)

9.5

2014 Member Count

692

Date of last Trim

February 2010

	5 Year A	verage	20	14
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	21.26	0.3303	11.40	0.4639
Bird	0.04%	0.09%	0.00%	0.00%
Deterioration	0.43%	0.53%	0.00%	0.00%
Equipment Fault	1.66%	1.84%	0.00%	0.00%
Lightning	6.02%	5.60%	0.00%	0.00%
Public Accident	10.39%	27.57%	96.84%	98.13%
Small Animal	1.02%	2.89%	0.00%	0.00%
Squirrel	1.68%	3.50%	3.16%	1.87%
Unknown Cause	78.76%	57.99%	0.00%	0.00%

Corrections to be made

Substation Name and Number WEST NICHOLASVILLE 3-

**Substation Location** 

398 Bass Pond Glen Dr., Nicholasville, KY 40356

Circuit Name and Number

WEST NICHOLASVILLE 164

**Circuit Location** 

Squire Lake

Total Circuit Length (Miles)

2014 Member Count

6.3 412

Date of last Trim

January 2013

	5 '	Year Av	erage	20	14
	SAIDI		SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>		21.78	0.2649	17.66	0.3180
Bird		0.58%	1.28%	0.00%	0.00%
Deterioration		2.96%	4.77%	0.00%	0.00%
Equipment Fault		9.13%	14.48%	46.50%	54.96%
Lightning		2.27%	1.28%	0.00%	0.00%
Public Accident		7.13%	7.15%	43.95%	29.77%
Scheduled		1.37%	0.55%	0.00%	0.00%
Small Animal	7.44	0.14%	0.37%	0.00%	0.00%
Squirrel		0.20%	0.73%	1.21%	3.05%
Unknown Cause		75.71%	68.84%	5.17%	9.92%
Wind		0.51%	0.55%	3.17%	2.29%

Corrections to be made



# DISTRIBUTION RIGHT-OF-WAY VEGETATION MANAGEMENT 2015 PLAN/ 2014 PLAN REVIEW

April 2015

## Blue Grass Energy Vegetation Management Plan

### 2014 Review of Plan Implementation

Blue Grass Energy developed a formal plan to manage the maintenance of vegetation on distribution rights-of-way (ROW) in 2007/2008. The plans goals were established to provide excellent member service, maintain current tree related reliability, and look for opportunities to increase production and reduce program cost. These plans were continued and improved into 2014.

As stated in the previously submitted Vegetation Management Plan, the plan may be modified from time-to-time based on performance as measured by tree-related service reliability and evaluations of member satisfaction with service reliability. Specific reliability metrics may include Tree SAIFI, trends in customer minutes interrupted by tree-related causes and tree-caused primary interruptions per 100 line miles as internal benchmarks of program performance over time. A Tree-Caused Outage Report summarizes these reliability criteria and is regularly reviewed and monitored daily. Upon reporting of tree related outages a field investigation is conducted to determine the root cause.

### 2012-2015 Vegetation Management Strategy

#### SCHEDULED MAINTENANCE AND CLEARANCE

Blue Grass Energy provides electric service to over 55,000 members through a network of over 4,600 miles of distribution line. Blue Grass Energy uses a cyclic approach to preventive vegetation management of its electric distribution ROW. Different circuits or portions of circuits may be scheduled on different cycles based on site conditions, sensitivity of the line to interruptions caused by trees or criticality of the line. The maintenance cycle for tree removal, tree pruning or brush control may be the same or different for a given scheduling unit. Following pruning and clearance operations, herbicide application is conducted after one full growing season.

As illustrated in Table 1, Blue Grass Energy completed 25 distribution circuits scheduled in 2014 for a total of 777 miles of distribution line. In 2015, there are 24 distribution circuits, for a total of 718 miles scheduled for completion in 2015. The varying site conditions determine the cost and cause completed miles to vary by year. Of the 2013 maintenance year mileage, 9 circuits consisting of 532 miles were identified for selective herbicide application and completed in 2014. Herbicide application of 7 circuits consisting of 591 miles from the 2014 maintenance year will be completed in 2015.

Table 1. Blue Grass Energy R/W Miles Scheduled vs. Completed

Maintenance Year	2012	2013	2014	2015
Scheduled	893	908	777	718
Completed	761	901	777	TBD

#### RELIABILITY

In 2008, Blue Grass Energy developed and implemented an outage investigation process to better understand the cause of tree failures. The data was again used in 2014 to identify species failure rates and help plan future scheduled and non scheduled work to eliminate potential outages. The investigation of all tree related outages will continue through 2015 to collect data on major outage categories.

Historical Blue Grass Energy tree caused outages within the right of way are illustrated in Table 2.

Table 2. Number of Tree-Caused Outages within the ROW on the Blue Grass Energy System

Year	2010	2011	2012	2013	2014
TOTALS	121	68	67	65	91

#### 2014 VEGETATION MANAGEMENT PLAN REVIEW

Changes were implemented in 2014 to improve the ROW management plan. The "Distribution Right-Of-Way Vegetation Management Plan" submitted March 2014 reiterated in detail the processes that were built into the plan.

In 2014, all scheduled mileage was completed within the 2014 calendar year.

Listed below are some of the processes used in 2014:

- Continuation of Formal Contractor Evaluation Program. Each contractor will be rated on nine qualitative categories such as customer complaints, quarterly mileage goals, exceptions/ omissions, quality/standards, tools/equipment, unscheduled interruptions/OSHA LWD, contractor cooperation & communication, crew professionalism, and data accuracy.
- 2. Yearly Revision of formal program policies and procedures and assurance of consistent implementation throughout the system to include additional detailed requirements.
- 3. Continued yearly revision of a general 5-6 year maintenance cycle for the system based on collected field data. In areas where standard clearances cannot be consistently achieved (e.g., subdivisions), mid cycle assessments will be conducted and cycles adjusted based on those findings. Recommended cycle lengths are guidelines.
- 4. ISA Certified Arborist Utility Specialist supervisory personnel have adequate utility vegetation management technical expertise and a qualified ISA Certified Assistant Arborist is on staff.
- Selective use of herbicides to control resprouting from the stumps of removed deciduous trees.
- 6. RE-established formal herbicide spray program to control woody species following maintenance pruning.

- Written notification of property owners of the intent to prune trees and requirement of
  written permission for "yard" tree removals. We always strive to not allow property
  owners to influence pruning clearances.
- The crew labor and equipment complements were adjusted throughout the year to maximize cost effectiveness.
- 9. Revised and improved the formal work monitoring and completion process. Each circuit is individually and 100 percent audited by ROW supervisory personnel to ensure specifications for clearance and quality are achieved.
- Records were maintained of key aspects of the ROW vegetation management program to document program performance. This data provides information necessary for ongoing program management and circuit scheduling.

#### 2015 VEGETATION MANAGEMENT PLAN

In addition to continuing the Distribution Right-Of-Way Vegetation Management Plans outlined for 2014 we intend to utilize the following key objectives in the upcoming year:

- > Continue Formal Crew Field Audit Evaluation process, at the 100 percent level
- Uphold National Arbor Day Tree Line USA standards
- > Continue to uphold ANSI A300 pruning and Z133 safety standards
- Utilization of vegetation management Best Management Practices as defined by the International Society of Arboriculture.
- Continue to evaluate and increase production and quality with established work force.
- > Further inspection and reduction of unnecessary reactive maintenance
- > Utilize multiple ROW vegetation maintenance contractors
- Continue with formal herbicide spray program to control woody species following maintenance pruning.

# **Appendix**

# ROW VEGETATION MAINTENANCE CLEARANCE CYCLE SCHEDULING STRATEGY

The following table summarizes the Blue Grass Energy ROW vegetation maintenance scheduling strategy. Individual circuits may be accelerated or deferred based on assessment of field conditions and operating performance.

Circuit Description	Primary Cycle Length (Years)	Mid-cycle Inspection/selective Tree Maintenance (Years)
Feeder Multi-phase	5-6	2 to 3
Feeder Laterals (single-phase)	5-6	
Industrial Circuits	5-6	Annual inspection and selective maintenance

#### **PSC CASE NO. 2014-00339**

# BLUE GRASS ENERGY COOPERATIVE CORPORATION REQUEST FOR INFORMATION AT HEARING HELD APRIL 15, 2015

#### **RESPONSIBLE PARTY: Donald Smothers**

Request 2. Please refer to Blue Grass Energy's Response to Commission Staff's First Request for Information, Item No. 49.

- a. Please provide the number of Blue Grass Energy customers/Members that were enrolled in and/or took advantage of each of the demand-side management, conservation, and energy efficiency programs offered by the Cooperative in calendar years 2011-2014.
- b. Please provide copies of the promotional materials utilized and/or distributed by Blue Grass Energy with respect to its demand-side management, conservation, and energy efficiency programs; or, alternatively, please describe the efforts undertaken by Blue Grass Energy to promote its demand-side management, conservation, and energy efficiency programs.
- c. Please provide the total cost incurred by Blue Grass Energy related to its demand-side management, conservation, and energy efficiency programs in calendar year 2014.

## Response 2(a).

PROGRAM	NO. Enrolled 2011	-2012	<b>- 2013</b>	- 2014
Direct Load Control Simple Saver Program	420	396	2950	982
Energy Audits	1323	1326	2021	1121
Button-up	222	68	101	78
Button-up w/air seal	(included in Button-up)			
Heat Pump	0	2	34	34
Tune-ups	83	56	25	50
TSE home	38	57	106	129
Dual Fuel	20	0	0	0
Industrial Compressed Air	0	0	0	0
Commercial Adv. Lighting	2	4	8	1
Compact fluorescents	5328	7968	4808	4000

Response 2(b). Attached hereto as Exhibit 2 [PSC Request No. 2, Pages 3-38 of 38] are the requested promotional materials.

Response 2(c). With respect to calendar year 2014, the total cost incurred by Blue Grass Energy related to its demand-side management, conservation, and energy efficiency programs was \$139,704.

## Promotion/Advertising of DSM Programs

Simple Saver (Direct Load Control Switch)

Direct Mail postcard - Jan. 2014

Mobile Banner - Feb. 2014

Bill Insert - March 2014

Print Ads - March 2014

County Fair Ads

Bill Insert - Sept. 2014

Quarterly Direct Mailings of postcards

Billboard - Dec. 2014

Energy Efficiency Programs brochure

Central Kentucky Home, Garden & Flower Show - booth promoting SimpleSaver

Anderson County Community & Business Expo - booth promoting SimpleSaver

Cynthiana Home & Garden Show - booth promoting SimpleSaver

bgenergy.com website ads on home page and throughout website

Television ads

Television interviews on noon news shows in Lexington Area several different stations

Outbound Calling (small amount finishing up from campaign started in 2013)

Button-Up and Air Seal

Bill Insert

Television ads

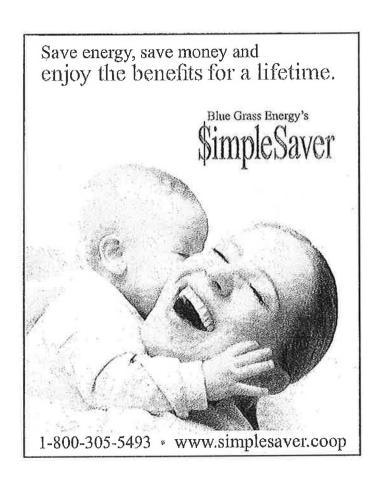
**Brochures** 

Touchstone Energy Home

Call members requesting service for new homes



the thirt Ad





Mobile Banner (website) Feb. 2014

PSC Request 2 Exhibit 2 Page 6 of 38

SC Request 2 Exhibit 2 Page 7 of 38

That does it take to save money and energy?

2 minutes

1-800-305-5493 • www.simplesaver.coop

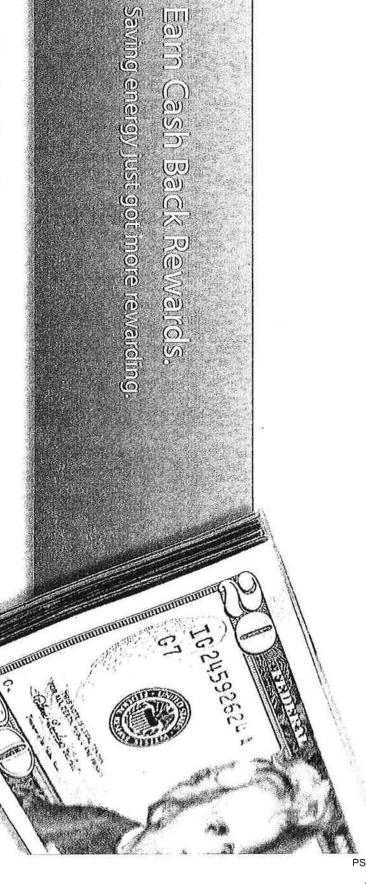
Blue Grass Energy's

PSC Request 2 Exhibit 2 Page 7 of 38

Divect Mail Jan. 2014 1st atr.

Blue Grass Energy's

ImpleSaver



Direct Mailing Bstrand 2nd atr.

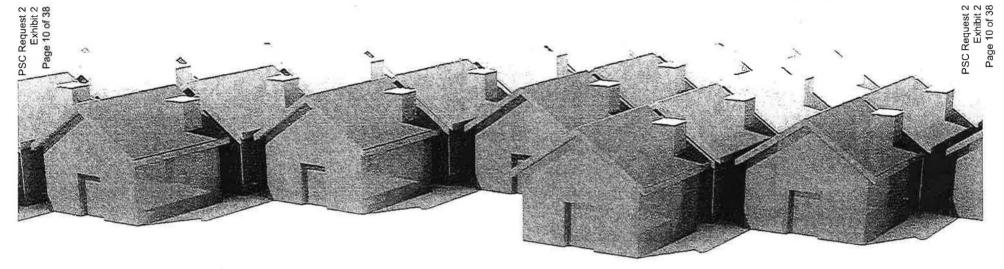
PSC Request 2 Exhibit 2 Page 8 of 38



Direct Mailing Postrand 3rd Qtr.

PSC Request 2 Exhibit 2 Page 9 of 38

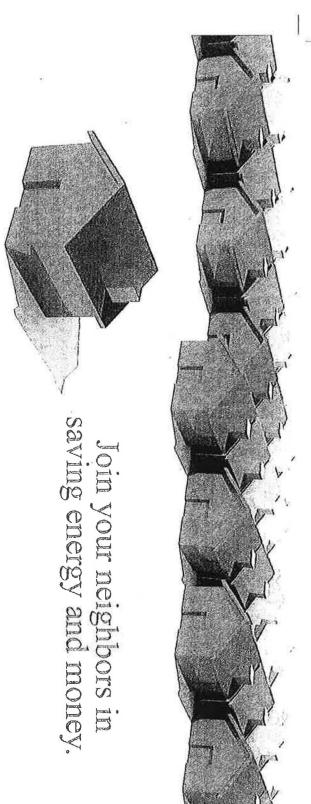
Direct Mailing Postcard 4th Qtr.



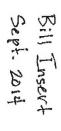
Join your neighbors in saving energy and money.

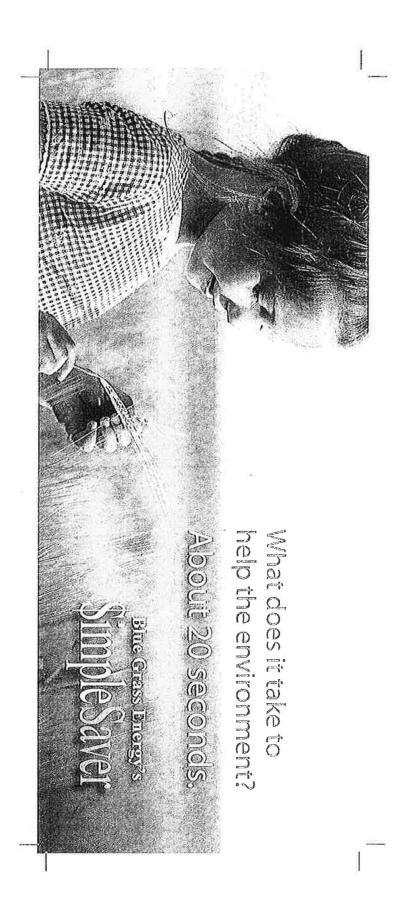
Blue Grass Energy's
\$1MD16SaV61

1-800-305-5493 • www.simplesaver.coop



Bill Insert March 2014







Being energy smart pays.

www.simplesaver.coop

Blue Grass Energy
A Touchstone Energy Cooperative And

Digital Billboard

SimpleSaver
1-800-305-5493
www.simplesaver.coop

SimpleSaver (Direct Load Control)

SimpleSaver pays you to help control your power cost.

A remote switch is installed on your water heater or air-conditioning unit. Units will be cycled off during times of peak usage—when electricity is more expensive.

Eligibility: Any Blue Grass Energy member. Benefits:

- \$10 bill credit in February for each active water heater control device.
- \$5 bill credit in June, July, August and September for each active A/C unit control device. (\$20 total)



#### For the existing home...

#### **Home Energy Audits**

Whether your house is always too cold or too hot, your bills are a little too high, or you just want to learn how you can become more energy efficient, Blue Grass Energy can help.

Our RESNET HERS Certified energy raters will come to your home to perform an energy audit. They inspect the likely suspects — your insulation, windows, ductwork, water heater or any other place you think might be troublesome — and show you how you can make a few changes that will make your home more comfortable and your energy bill lower. And the best part is, energy audits are free to all Blue Grass Energy members.

You can also check out our Home Energy Calculator in the Savings Center at www.bgenergy.com.



A Button-Up can improve the efficiency and comfort of your home. One of our energy advisors will identify areas where improved insulation is needed and suggest weatherization techniques to reduce heat loss in the home.

- . Up to \$1,370 for energy efficiency improvements including:
  - -adding insulation
  - -replacing windows
  - -air sealing

irunume.

Rebates available to any BGEnergy member with an electrically-heated home at least two years old.

Thinking about replacing your old electric furnace, baseboard heat or ceiling cable with a 13 SEER/7.5 HSPF or higher heat pump? Check with us first.

 Up to \$1,000 for replacement of an electric furnace, baseboard heat or ceiling cable heat with a high-efficiency heat pump.

Any BGEnergy member with a home heated by electric furnace, baseboard heat or ceiling cable that is at least two years old. New manufactured homes also qualify.

Duct-Seal is another home efficiency program targeted to BGEnergy members who have electrically-heated homes.

 \$250 rebate per system to members for sealing ductwork.
 Members may do the work or hire a contractor. Final duct leakage must be less than 10 percent of the system's fan capacity.

Any BGEnergy member with an electrically-heated home at least two years old. Duct systems must be accessible and in an unconditioned space.

Don't forget to use your Care and Care

money back in

your pocket!





#### For the home you're building...

#### **Touchstone Energy Home**

Blue Grass Energy's Touchstone Energy Home is designed to provide you with superior comfort and energy savings while promoting exemplary building performance in new site-built homes. One of our RESNET HERS raters will work with you. When standards are met, a certificate will be issued stating the RESNET HERS rating and that the home meets Touchstone Energy standards.

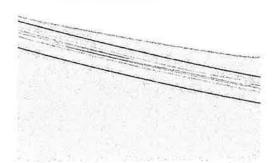
#### Benefits:

- · Energy-efficient design from blueprints
- RESNET HERS Index certificate (\$1,200 value)
- IECC Code Compliance
- · Greater home comfort
- · Pride in home ownership



Eligibility: Members building an electrically-heated new home. Home must meet certain specifications to qualify.

Call 1-888-546-4243 for more details.



Making life better, the cooperative way.

#### Other member benefits...

#### Pay-as-you-go

Say goodbye to deposits, late fees, disconnect fees and reconnect fees with the new Payasayouago program (A Prepaid Energy Solution).

For more information, or to sign up, call (888) 546-4243.

#### Levelized Budget Billing

Levelized Budget Billing averages payments into 12 (monthly) installments throughout the year eliminating extremes in monthly bills. Certain restrictions apply for enrollment.

#### **Automatic Bill Payment**

Conveniently pay your bill using automatic bill payment, which deducts the amount of the electric bill each month from your bank account or debit/credit card.

#### E-Billing

E-Billing takes online bill payment one step further by emailing your electric bill each month. On your billing date, you'll receive an email linking you directly to your Blue Grass Energy bill.

#### Co-op Connections Card

The Co-op Connections Card offers discounts at hundreds of Kentucky businesses and thousands across the nation. It can also save you money at the pharmacy. Visit www.bgenergy.com for more information.



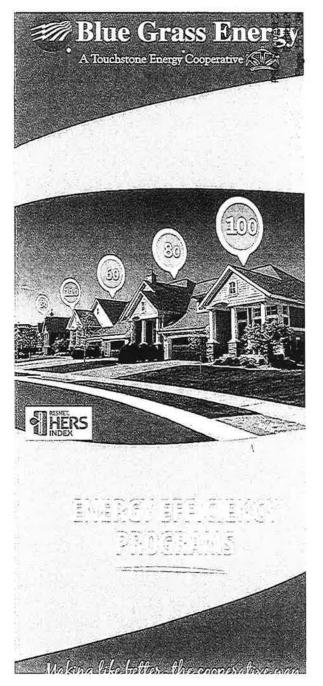












PSC Request 2 Exhibit 2 Page 16 of 38



### Home Energy Audit

Too hot? Too cold? Bills too high?

Your home may need an Energy Audit.

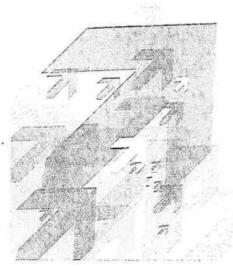
Our energy advisors can show you where you can save money . . . and it's free!

Apply online or call today.

1-888-546-4243 www.bgenergy.com



Making life better, the cooperative way



### pay · as · you · go

### A Prepaid Energy Solution

- Goodbye to Deposits
- Goodbye to Late fees
- Goodbye to Disconnect fees
- Goodbye to Reconnect fees

Call 1-888-546-4243 for more information.



Making life better, the cooperative way



Want to take a good look at your home's actual energy use and get a free Phillips Slimstyle LED bulb? Check out Billing*Insights* on our website.

This new tool allows you to view energy use and costs by using your billing history, actual weather data and some information about your home. It'll also show you how you can lower your energy costs and become more energy efficient.

It's totally free, available 24/7 and only takes about 10 minutes to complete.







The ENERGY STAR® Appliance Program provides an incentive to cooperative members who purchase and install ENERGY STAR certified appliances.

ENERGY/STAR/Appliances	Rébate		
Refrigerator	\$100		
Freezer	\$50		
Dishwasher	\$50		
Clothes Washer	\$75		
Heat Pump Water Heater	\$300		
Heat Pump	\$300		
Central Air Conditioning	\$300		

For more information, visit our website.





# YOU CALL. WE HAUL. APPLIANCE RECYCLING PROGRAM

Want \$50 for recycling your old refrigerator or freezer? We will pay you for recycling your Inefficient, working appliance through our Appliance Recycling Program.

Have your account number ready and call **1-844-HAUL4ME** to schedule your pick up.

Qualifying refrigerators and freezers must be:

- in working condition (compressor running)
- plugged in and running at scheduled pick-up
- between 7.75 -- 30 cubic feet
- empty and defrosted, with water lines disconnected at scheduled pick-up time

For complete details, visit www.bgenergy.com





- They last up to 10 times longer than standard incandescent bulbs.
- They use one-third the energy of incandescent bulbs.
- For each 75-watt incandescent or more in energy costs over its CFL, save an average of \$50 CFLs and save more than \$250! bulb replaced with a 20-watt lifetime; change five bulbs to
- They fit in almost any fixture, vanities, ceiling fans and porch both indoors and outdoors, including
- They are convenient in hard-tolights. reach and high-use fixtures
- Remember: CFLs work better in open fixtures that allow air flow.

- Each bulb prevents more than They provide the same amount of light (lumens) as standard watts of energy. incandescent bulbs, but use fewer
- emissions over its lifespan. 450 pounds of greenhouse gas

# Where to use:

- To get the most energy savings replace bulbs where lights are on the most often, such as your dining room and porch. family and living room, kitchen

11

#### How to choose:

Matching the right type of CFL to the right kind of fixture helps ensure that it will perform properly and last a long time. Read the packaging to be sure that the type you choose works for the fixture you have in mind. For example: For recessed fixtures, it is better to use a "reflector" CFL instead of a standard type. If a light fixture is connected to a dimmer or three-way switch, select CFLs labeled as appropriate for a dimmer or three-way switch.

To get the right amount of light, choose an ENERGY STAR-qualified light bulb that offers the same light output, or lumen rating, as the light you are replacing. The higher the lumen rating, the greater the light output.

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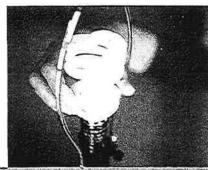
40-watt incandescent bulb	=	7 to 9-watt CFL
60-watt incandescent bulb	=	11 to 15-watt CFL
75-watt incandescent bulb	=	18 to 20-watt CFL
100-watt incandescent bulb	=	23 to 25-watt CFL

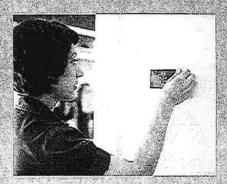
Choose the color that works best for you. For example, while most CFLs are created with warm colors for most rooms in your home, you might choose a cooler color for task lighting.



www.bgenergy.com











Blue Grass Energy
A Touchstone Energy Cooperative

888-546-4243

www.bgenergy.com

For more information, please contact your local Touchstone: Enorgy connerative or vieit TonetherMassue com



Touchstone Energy®
Cooperatives

TOGETHERWESAVE, COM





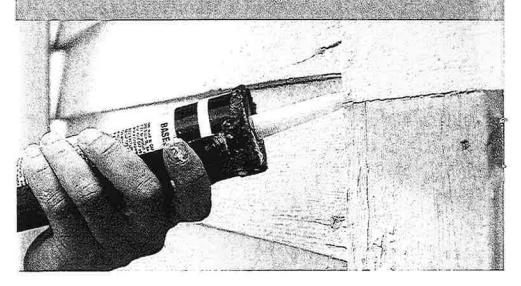
Touchstone Energy Cooperatives

TOGETHERW/FSAVE.COM

### DO A LITTLE SAVE A LOT.

EVERYTHING YOU DO, NO MATTER HOW SMALL, CAN ADD UP TO BIG SAVINGS — FOR YOU AND YOUR NEIGHBORS. FROM FLIPPING A SWITCH TO UPGRADING TO CFLs. SO TAKE YOUR PICK, AND SAVE YOUR MONEY.

FIND OUT HOW THE LITTLE CHANGES ADD UP AT TOGETHERWESAVE COM.



### **WATER HEATING**

- 1. Set water heater temperature no higher than 120°F.
- 2. For households with 1 or 2 members, a 115°F setting may work fine.
- 3. Install water-heater wrap per manufacturer's instructions.
- 4. Drain 1-2 gallons from bottom of water heater each year to reduce sediment build up.
- 5. Install heat traps on hot and cold water lines when it's time to replace your water heater.
- 6. Insulate exposed hot water lines.
- 7. Limit shower length to 5-7 minutes.
- 8. Install low-flow shower heads.
- 9. Fix dripping faucets.
- 10. Don't let water run while you are shaving.
- 11. Don't let water run while brushing your teeth.

### **LAUNDRY**

- 12. Wash clothes in cold water. Use hot water only for very dirty leads
- 13. Only do full laundry loads.
- 14. If you must do smaller loads, adjust the water level in the washing machine to match the load size, especially when using hot water.
- 15. Always use cold-water rinse.
- 16. Use bath towels at least twice before washing them.
- 17. Clean your dryer's lint trap before each load.
- 18. Make sure the outdoor dryer exhaust door closes when the dryer is off.
- 19. Verify dryer vent hose is tigntly connected to inside wall fitting.
- 20. Check that the dryer vent hose is tightly connected to dryer.
- 21. Make sure dryer vent hose is not kinked or clogged.
- 22. Minimize clothes drying time; use moisture sensor on dryer if available.
- 23. Dry consecutive loads to harvest heat remaining in dryer from last load.
- 24. Consider using a "solar-powered" clothes dryer, an old fashioned clothes line.

### **KITCHEN**

- 25. Use your refrigerator's anti-sweat feature only if necessary.
- 26. Switch your refrigerator's power-saver to "ON," if available.
- 27. Clean refrigerator coils annually.
- 28. Set the refrigerator temperature to 34° 37°F and freezer temperature to 0° 5°F.
- 29. Ensure gaskets around door seal tightly.
- 30. Unplug unused refrigerators or freezers.
- 31. Use microwave for cooking when possible.
- 32. When cooking on the oven range, use pot lids to help food cook faster.
- 33. If you are heating water, use hot tap water instead of cold.
- 34. Remember to use the kitchen exhaust fan when cooking and turn it off after cooking.
- 35. Use a crockpot instead of simmering foods on the stove.
- 36. Rinse dirty dishes with cold water before putting them into the dishwasher.
- 37. Use cold water for garbage disposal.
- 38. Only run dishwasher when fully loaded.
- 39. Use air-dry cycle instead of heat-dry cycle to dry dishes.





### **LIGHTING**

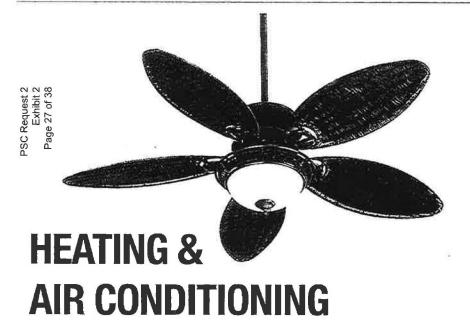
- 40. Replace any light bulb that burns more than one hour per day with its equivalent compact fluorescent bulb.
- 41. Turn off unnecessary lighting.
- 42 Replace outdoor lighting with its outdoor-rated equivalent compact fluorescent bulb.
- 43. Use fixtures with electronic ballasts and T-8, 32-watt fluorescent lamps.
- 44. Use outdoor security lights with a photocell and/or a metion sensor.

### **MISCELLANEOUS**

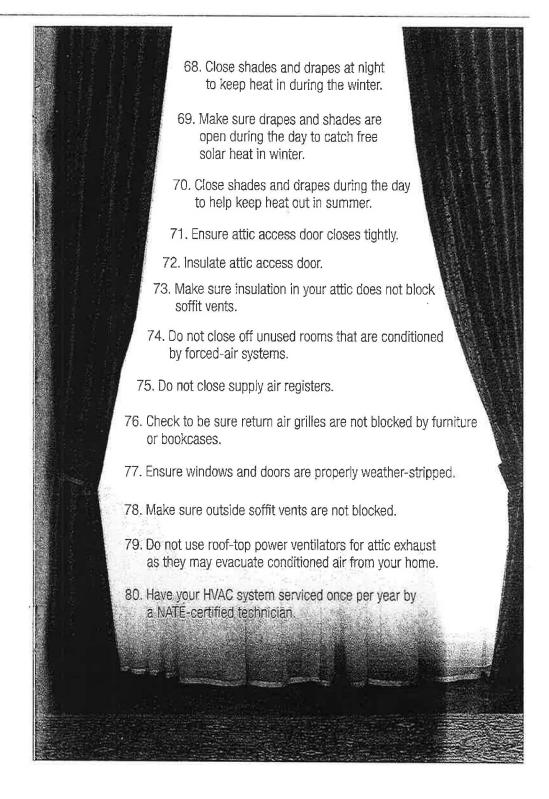
- 45. Turn computers and monitors off when not in use.
- 46. Make sure electric blankets are turned off in the morning.
- 47. Turn waterbed heater off when not needed.
- 48. Turn large-screen TV's off completely when not in use.
- 49. Turn off stereos and radios when not in use.
- 50. Remember to turn off hair curling irons and hot rollers.
- 51. Turn off coffee makers when not in use.
- 52. Turn off pool pump and/or heater when not needed.
- 53. Verify livestock water tank heaters are off when not needed.
- 54. Make sure heat tape is off when not needed.
- 55. Unplug battery chargers when not needed.
- 56. Ensure all new appliances purchased are Energy Star approved.







- 57. Set thermostats to 78° F in summer, 68° F in winter.
- 58. Run ceiling paddle fans on medium, blowing down in summer.
- 59. Run ceiling paddle fans on low, blowing up in winter.
- 60. Change HVAC filters monthly.
- 61. When installing new air filters, make sure they are facing in the correct direction (look for arrow on side of filter).
- 62. When heating or cooling, keep windows locked.
- 63. Insulate electric wall plugs and wall switches with foam pads.
- 64. Caulk along baseboards with a clear sealant.
- 65. Close fireplace dampers when not burning a fire.
- 66. Caulk around plumbing penetrations that come through walls beneath bathroom and kitchen sinks.
- 67. Caulk electrical wire penetrations at the top of the interior walls.



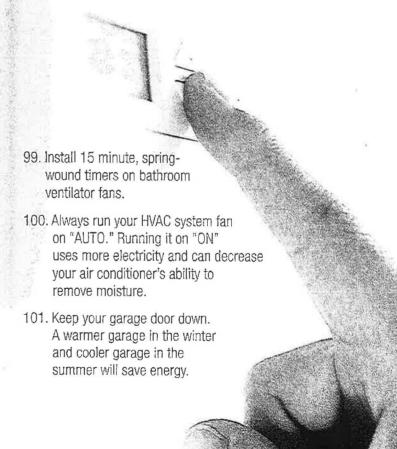
- 81. Monitor your home's relative humidity in the summer.

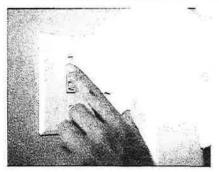
  If it consistently stays in the 60 percent range or higher, ask your HVAC technician about lowering your central air conditioning unit's indoor fan speed.
- 82. Ensure window A/C units are weather-stripped.
- Ensure windows with window mounted A/C units have weather-stripping between the middle of the top and bottom pane.
- 84. Remove and clean window A/C filter monthly.
- 85. Keep "fresh-air" vents on window A/C units closed.
- 86. Use heavy-duty, clear sheets of plastic on the inside of windows to reduce the amount of cold air entering your home.
- 87. Minimize use of electric space heaters.
- 88. Ensure your outdoor heat pump/air conditioning unit is kept clean and free of debris.
- 89. When using the fireplace, reduce heat loss by opening damper in the bottom of the firebox (if provided) or open the nearest window slightly.
- In a basement, seal the sill and band joist with durable caulking or foam sealant.
- 91. Ensure floor registers are not blocked with rugs, drapes or furniture.
- 92. Outside your home, caulk around all penetrations including telephone, electrical, cable, gas, water spigots, dryer vents, etc.
- 93. Caulk around storm windows.
- 94. Caulk around basement windows.

- 95. Verify your supply air duct "boots" (behind supply air registers) are caulked to your ceiling or wall sheetrock or flooring.
- 96. If in unconditioned space, verify your ducts are tightly connected to your HVAC equipment.
- 97. Verify all outdoor doors (including storm doors) close and seal tightly.

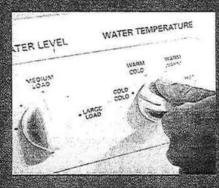
98. In two-story homes serviced by one HVAC system, a paddle fan at the top of the stairs can push down hot, second-floor air.

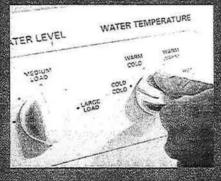
PSC Request Exhibit Page 28 of 3







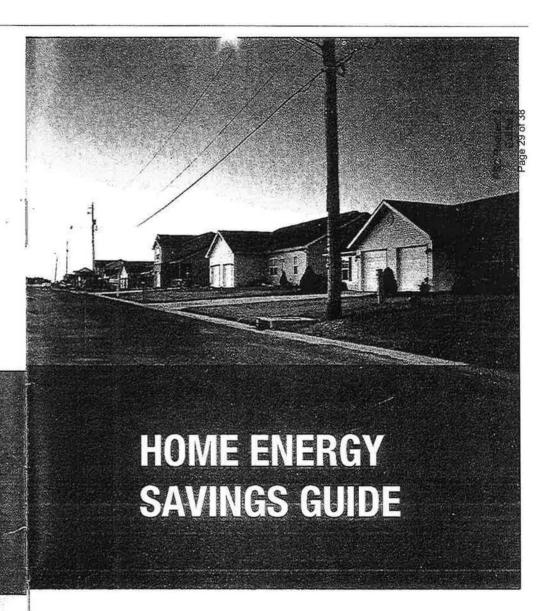




Blue Grass Energy A Touchstone Energy Cooperative 888-546-4243

www.bgenergy.com

For more information, please contact your local Touchstone Energy cooperative or visit TogetherWeSave.com. Revised June 2011





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## FIND OUT HOW THE LITTLE CHANGES ADD UP.

FLIP THE SWITCH, LOWER THE BLINDS. INSULATE YOUR ATTIC.
LOWER THE TEMPERATURE ON YOUR THERMOSTAT. THESE SOUND
LIKE SIMPLE TASKS. TAKE ALL OF THESE STEPS AROUND YOUR
HOME AND YOU CAN RACK UP BIG SAVINGS.

#### TOGETHER WE SAVE.

THIS HOME ENERGY SAVINGS GUIDE CONTAINS VALUABLE TIPS ON HOW TO IMPROVE YOUR HOME'S EFFICIENCY.

FOR MORE INFORMATION; PLEASE CONTACT YOUR LOCAL TOUCHSTONE ENERGY COOPERATIVE AND VISIT TOGETHERWESAVE.COM.

#### **HOME ENERGY SAVINGS**

Your Touchstone Energy cooperative works hard to hold down energy prices. You, too, can play an important role in controlling your energy costs by evaluating your home and taking simple steps to trim unnecessary energy use. The following are some tips to help you reduce your energy costs.

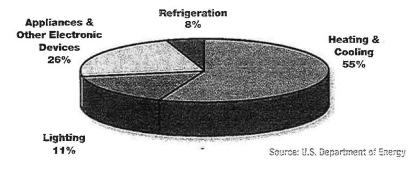
PSC Request 2 Exhibit 2 Page 30 of 38

#### **HOME ENERGY COSTS**

Get a clear picture of which parts of your home use the most energy.

- The first step in reducing home energy costs is to review last year's utility bills. Using the below national "percentage" averages, a homeowner who spent \$1,900 a year for home energy would have paid roughly:
  - \$1045 for heating and cooling
  - \$494 for appliances and other electronic devices
  - \$209 for lighting
  - \$152 for refrigeration
- When implementing energy-saving measures, remember, you cannot save more than you are spending.
- Contact your local Touchstone Energy cooperative to review your bills and receive a more accurate estimate. Go to TogetherWeSave.com for more information.

#### **AVERAGE HOME ENERGY USAGE**



#### **HOME ENERGY SAVING TIPS**

Assess how your family uses energy in your home.

- · Leaving unnecessary lights on increases energy costs.
- Turn off computers and other office equipment when they're not being used, especially overnight and on weekends.
- Heating your home to higher than 68° in the winter or cooling it below 75° in the summer costs more.
- Taking long showers runs up the water heating (and water/sewer) bills.

#### INSULATION

- If you have insulation in your attic graded at R-19 or less, consider bringing it up to R-38 in moderate climates and R-49 in cold climates.
- In cold climates, if you have floor insulation graded at R-11 or less, consider bringing it up to R-25.



#### WINDOWS

Windows leak heat. If you have single-pane windows, consider doing the following:

- · Tighten and weather-strip your old windows and then add storm windows.
- · Replace your old single-glazed windows with new double-glazed windows.
- In colder climates, "low-e" coatings on glass can help reduce heat loss through windows.
- In hot climates, consider adding solar screening to west-facing windows that catch a lot of heating late in the day. Solar screening is sold at many home improvement stores.

#### **AIR INFILTRATION**

Air that transfers in and out of homes through cracks, crevices and holes increases energy consumption. Here are some helpful tips to avoid air infiltration:

- · Seal around pipe penetrations coming through walls.
- During hot and cold weather, ensure windows are closed tightly and locked.
- Ensure weather-stripping around doors and windows is tight.
- When your fireplace is not operating, its flue should be closed tightly, with a sign hanging from the flue handle warning it is closed.
- Check the ceiling behind the cornice of built-in bookshelves for holes cut during construction.
- Drop-down stairways should fit tightly into the ceiling and be carefully weather-stripped.
- Whole-house attic fans should be sealed tightly during the winter.
- Make sure your outside dryer vent door closes when the dryer is not in use.
   This requires cleaning away lint accumulation periodically.



#### REFRIGERATION

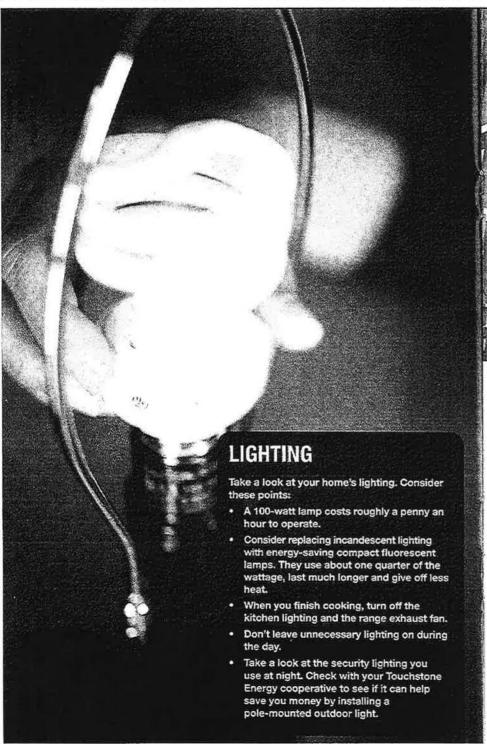
Trim your refrigerator's energy use.

- Make sure refrigerator and freezer seals fit tightly when doors close.
- Keep outside coils clean. Dirty coils make your refrigerator compressor work longer to remove heat.
- Setting your freezer below 0° uses extra energy.
- Setting your refrigerator below 37° uses extra energy.

#### **HEATING & AIR CONDITIONING**

Heating, ventilating, and air conditioning (HVAC) uses the largest chunk of your home energy dollar. Keep it running "lean and mean."

- HVAC systems should be checked to verify they are moving the correct amount of air. An HVAC technician can tell you if it is.
- Heat pump and air conditioning systems should be checked annually to verify they are properly charged, strictly in accordance with manufacturer quidelines.
- · Inside and outside coils should be kept clean and free of debris.
- Gas furnaces should be tuned for maximum combustion efficiency.
- · Return filters should be changed monthly.
- Have an HVAC technician check carefully for duct leaks. Leaks that are found should be sealed with fiberglass mesh and mastic sealant.

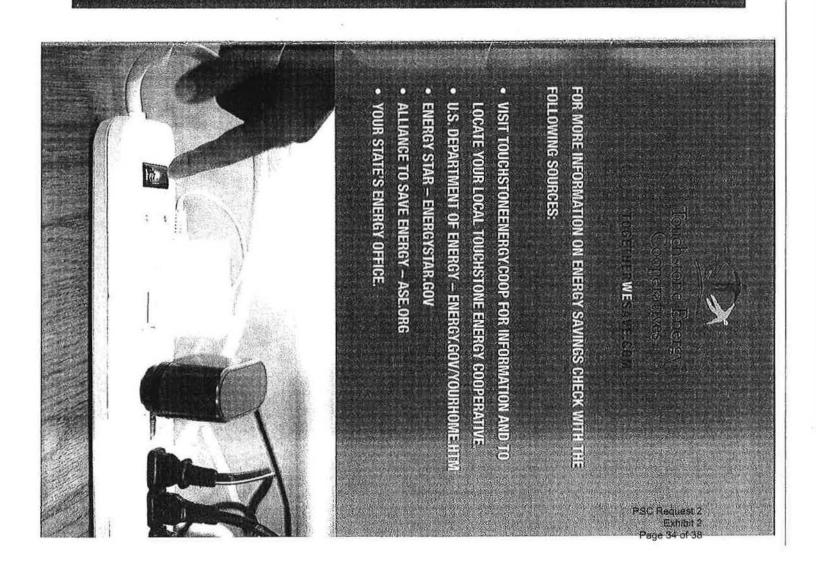




#### **SELECTING A CONTRACTOR**

Some of the work you will want to complete will require the services of a contractor. When selecting a contractor, keep in mind that the best price is not always the best value. Here are some questions to ask when deciding who to use:

- · How long have you been in business?
- Can you provide proof that you are state-licensed and carry workers' compensation insurance?
- · Can you provide the names of neighbors who have used your services?
- · Are you a member of the Better Business Bureau?



### Bulbs, brands, lumens, and labels—oh my!

If you have been gradually making the switch to the new energy-efficient lighting choices, you've noticed that more changes have come to the light bulb aisle. Remember when the odd-looking corkscrew compact fluorescent (CFL) bulb was introduced to consumers a few years ago? It's still there and so are most of the classic pear-shaped incandescent bulbs. But today's lighting choices have expanded and gotten serious makeoverstheir packaging labels and lingo included. There are LEDs, CFLs, halogen, lumens, CRI, and more, and there is a host of lighting brands. But in recent years, the focus has been on making all bulbs: more energy efficient and cost-effective.

#### End of an Era

We've basked in the golden glow of Thomas Edison's incandescent bulb since the 1800s, but this January marked the end of its run. That's when the federal government finalized its mandated phase-out of selected general-purpose light bulbs and Edison's less energy efficient incandescent ones. While you still may find 100- and 75-watt bulbs on store shelves, manufacturers in the U.S. stopped producing them. The old 40- and 60-watt bulbs, which represented more than half the market, are following suit. What brought about the lighting change? In 2007, the U.S. Department of Energy estimated that home and commercial lighting was consuming more electricity annually-about 300 billion kilowatt-hours of lighting or the equivalent of about 100 power plants-but most of it was wasted Old-fashioned incandescent bulbs used plenty of energy to produce only 10 percent light, with 90 percent of the energy given off as heat. In comparison, today's more-energy-saving-incandescent light bulbs use 25 percent less energy to do the job of lighting the same spaces in your home.

electric bill, but a CFL bulb adds just \$1.20 a year and an LED about \$1 per year. That means that a typical household could potentially save about \$50 per year by replacing 15 old incandescent bulbs.

#### Lighting the Way

Since lighting accounts for nearly 20 percent of the average home's electricity use, don't stay in the dark when shopping for new bulbs that save on energy and your electric bill. Things to know before you go:

- · Lumens arothe new watts. It's all about the lumens or the amount of light a light bulb emits. Remember this formula: the higher the lumens, the brighter the light-to replace a 100-watt incandescent bulb, choose a bulb that offers about 1,600 lumens. There are handy charts at www.energystar.gov/?c=lighting.pr\_ lighting\_landing that help you compare the old measure of watts to lumens.
- · Three steps to your new bulbs. STEP 1: Choose the amount of lumens you need based on how bright you want a room; STEP 2: Determine which bulb has the lowest estimated energy cost per year. This will save you the most money; and STEP 3: Choose bulbs based on your needs—how long it will last and light appearance,
- · Read the label. Always check the package, making sure that it carries the U.S. Department of Energy's ENERGY STAR logo. New Lighting Facts labels on boxes will also help consumers understand what they are purchasing—amount of lumens, estimated annual operating cost, and light color.

#### Look on the Bright Side

Prime replacements for the traditional incandescent light bulb are the higherefficiency CFL and LED or light emitting diode bulbs. But be prepared to pay more upfront for some of the bulbs you choose. Lighting experts say that LEDs are the best choice for energy efficiency. If price is not a concern, LEDs can last for up to two decades, save you 75 percent or more in energy costs, and offer superior color and brightness. However, they can cost an estimated \$10 to \$60 per bulb.

The Energy Department assures consumers that there is a bright sidelower electricity bills over the longer term. These are their estimates: using a traditional incandescent bulb adds about \$4.80 per year to the average household

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### **BEAT THE PEAK:** You have the power to plan

A large part of power supply cost is determined by energy used during peak load periods when people are using the greatest amount of electricity. If we can reduce the demand during these peak times, we can reduce Blue Grass Energy's power costs and minimize increases on your monthly electric bill.



Enroll in Blue Grass Energy's voluntary Beat the Peak, and we'll alert you by text message, e-mail or phone. Alerts will tell you when a peak period time is expected. Here's an example: "Beat the Peak: Conserve energy tomorrow between 4-7 p.m. Raise your A/C thermostat two (2) degrees."

You have the power to plan your energy conservation measures.

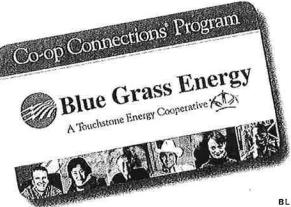
- Adjust the thermostat by two (2) degrees (up in the summer and down in the winter)
- · Postpone hot water use
- Delay using major appliances (dishwasher, washing machine, clothes dryer)
- · Turn off unneeded lights or appliances

Why should you enroll? Since Blue Grass Energy is a member-owned cooperative, our goal is to provide reliable power at the lowest possible cost. Beat the Peak is designed to help take control of higher power costs through energy conservation during high demand periods. Conserving during peak periods also helps reduce the strain on the power grid. When Blue Grass Energy is successful in reducing peak demand it helps reduce our cost, which in turn helps keep your cost down.

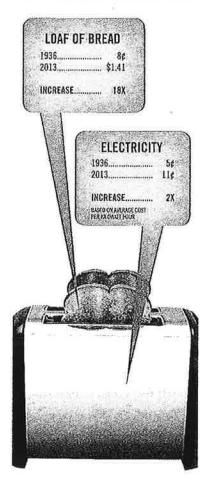
Enroll today by visiting our Web site or text bgpeak to 85700. Message and data rates may apply.

Beat the Peak: You have the power to plan.

Don't forget the many ways you can save with the Co-op Connections Card!



ELECTRICITY PUTS BREAD ON YOUR TABLE. AND KEEPS IT IN YOUR WALLET.



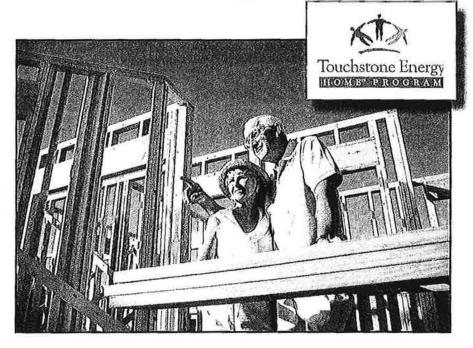
Keeping energy atfordable. Just another way it pays to be a co-op member. Learn more about the power of your co-op membership at TogetherWeSave.com.

TOGETHER WESAVE.COM

### Save money with a Touchstone Energy Home

Combine the efficiency of electric heating and cooling with high insulation standards when building a new home, and you have the basis for the Touchstone Energy Home. Blue Grass Energy provides home testing and computer analysis, including a free energy rating using the Home Energy Rating System (HERS Index) to each qualifying participant at no charge to the member. A HERS rating is valued at up to \$1,200.

When standards are met, a certificate will be issued stating the home meets Touchstone Energy standards. The benefits of a Touchstone Energy Home include energy-efficient design from blueprints, RESNET HERS Index certificate, 2009 IECC (International Energy Conservation Code) compliance, greater home comfort, and pride in home ownership. This program is for new homes only. Call to speak with a certified HERS rater for more information.





### HERE'S SOMETHING THAT WILL REALLY WAKE YOU UP.

We know how you like your electricity... affordable.
And for the past 76 years, we've helped to keep it
That way. Learn more about the power of your co-op
membership at TogetherWeSave.com.



TOGETHERWESAVE.COM

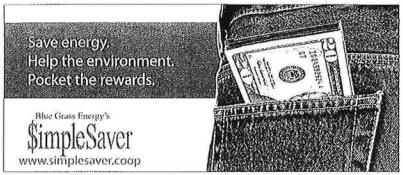
### Put money back in your pocket with SimpleSaver

Did you know we pay you to help keep your electricity affordable and our environment healthy?

Annually, you can receive bill credits for the following amounts:

- \$10 bonus this year only for new participants
- \$20 for each central air conditioner
- \$10 for each water heater (40+ gallons)

This may not sound like a lot of money, but consider that the program costs you nothing: no effort, no inconvenience, and no discomfort.



SimpleSaver helps us to limit electric use at peak times during the summer and winter. This delays construction of expensive new power plants and helps to keep our fuel costs down, which, in turn, helps keep your energy costs affordable. Managing peak load also decreases Kentucky's carbon footprint.

With SimpleSaver, you benefit, Blue Grass Energy benefits, and the environment benefits. To sign up, just call (800) 305-5493.

### **BLUE GRASS ENERGY ANNUAL MEETING**

#### Thursday, June 5, 2014 & Keeneland Entertainment Center

Members will elect one director from each of the following districts: District 1, District 3 and District 7. Each director will serve a four-year term. The following, from Article IV, Section 5, of Blue Grass Energy's bylaws, outlines the nomination process.

Article IV, Section 5 - Nominations. It shall be the duty of the Board of Directors to appoint, not less than fifty (50) days and not more than one hundred, twenty (120) days before the date of a meeting the members at which a report of the election of directors is to be made a committee on nominations consisting of not less than five (5) nor more than ten (10) members who shall be selected so as to give equitable representation on the committee to the geographical areas served or to be served by the Cooperative. No officer or member of the Board of Directors shall be appointed a member of such committee. The committee shall prepare and post at the principal office of the Cooperative at least forty-five (45) days before the meeting, a list of nominations for Board of Directors.

One-half percent (1/2%) or more of the

total number of consumers shown on the Financial and Statistical Report of RUS Form 7 as of December 31 of the calendar year preceding the election may make other nominations in writing over their original dated signatures, signed within 120 days prior to the annual meeting, together with printed names, telephone numbers, and addresses by filing such nominations not more than ninety (90) days and not less than fifty (50) days prior to the meeting and the Secretary shall post the same at the same place where the list of nominations made by the committee is posted, if, after examination of the Provost, it is determined by said Provost that said petitions meet the requirements of the Bylaws, Articles of Consolidation, and the laws of the Commonwealth of Kentucky. In no event shall a member sign more than one petition for the nomination of a director from a district.

All nominating petitions shall be submitted on the form of "Nomination Petition" provided by the cooperative. All nominees shall certify their qualifications by signing a "Certification of Candidate for Director" and completing the "Application for Candidate for Director" form provided by cooperative and file same with the cooperative not less than 50 days before the date of the meeting of the members.

The date of the first working day not less than forty-five (45) days prior to the Annual Meeting shall be established as the certificate date which determines whether a member is in good standing and qualified for the purpose of signing a nominating petition and/or voting.

A member in good standing is any active member who is in compliance with the Bylaws, Rules and Regulations of the Cooperative, and Rules and Regulations of the Public Service Commission as of forty-five (45) days prior to the Annual Membership Meeting. The Secretary shall deliver a list of members in good standing on the certification date to the Provost.

Any member, whose service is disconnected for any reason, will automatically become a nonyoting member until said member is reconnected and receiving electrical current.

#### **PSC CASE NO. 2014-00339**

### BLUE GRASS ENERGY COOPERATIVE CORPORATION REQUEST FOR INFORMATION AT HEARING HELD APRIL 15, 2015

RESPONSIBLE PARTY: James R. Adkins

Request 3. Please refer to the Supplemental Testimony of James R. Adkins in Support of the Settlement Agreement, a copy of which was attached as Exhibit B to Blue Grass Energy's Motion for Leave to File Additional Testimony in Support of Stipulation filed in this matter on April 14, 2015. Please provide a version of Exhibit C to Mr. Adkins' testimony in its native electronic format (*i.e.*, Microsoft Excel), with data including formulae in all cells and rows fully intact and fully accessible.

Response 3. The requested Microsoft Excel file is filed contemporaneously with this Response.

# PSC CASE NO. 2014-00339 BLUE GRASS ENERGY COOPERATIVE CORPORATION REQUEST FOR INFORMATION AT HEARING HELD APRIL 15, 2015

#### RESPONSIBLE PARTY: Michael I. Williams

**Request 4.** Please provide the longest span of wire (pole to pole) in Blue Grass Energy's distribution system.

**Response 4.** Blue Grass Energy's longest span is a single-phase line that is 1,868 feet long. It runs from one ridge top to another ridge top.