BEFORE THE CORPORATION COMMISSION OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF OKLAHOMA GAS AND ELECTRIC COMPANY FOR AN ORDER OF THE COMMISSION AUTHORIZING APPLICANT TO MODIFY ITS RATES, CHARGES, AND TARIFFS FOR RETAIL ELECTRIC SERVICE IN OKLAHOMA	))))))	CAUSE NO. PUD 201500273

RESPONSIVE TESTIMONY

AND EXHIBITS

OF

KEVIN J. MARA

ON BEHALF OF

E. SCOTT PRUITT,

OKLAHOMA ATTORNEY GENERAL

March 21, 2016

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is Kevin J. Mara. I am a Vice President with GDS Associates, Inc. My business address is 1850 Parkway Place, Marietta, Georgia.

Q. PLEASE BRIEFLY OUTLINE YOUR EDUCATIONAL AND PROFESSIONAL EXPERIENCE.

A. I received a Bachelor of Science degree in Electrical Engineering from Georgia Institute of Technology in 1982. Between 1983 and 1988, I worked at Savannah Electric and Power as a distribution engineer designing new services to residential, commercial, and industrial customers. From 1989 until 1998, I was employed by Southern Engineering Company as a planning engineer providing planning, design, and consulting services to publicly-owned electric utilities. In 1998, I, along with a partner, formed a consulting firm, Hi-Line Associates, which specialized in the design and planning of electric distribution systems. In 2000, Hi-Line Associates became a wholly owned subsidiary of GDS Associates, Inc., and the name of the firm was changed to Hi-Line Engineering, LLC. In 2001, we merged our operations with GDS Associates, Inc., and Hi-Line Engineering became a department within GDS. I serve as the Principal Engineer for Hi-Line Engineering and as a Vice President of GDS Associates.

I have field experience in the operation, maintenance, and design of transmission and distribution systems. I have performed numerous planning studies for electric utilities. I have prepared short circuit models and overcurrent protection schemes for numerous electric utilities. I have also provided general consulting regarding system reliability and resiliency, smart grid systems, and renewable energy. I regularly consult regarding right-

of-way maintenance for many of our clients including bidding of clearing contracts, qualifying contractors, review of contractor work, and assisting on disputes with contactors, and customers. In addition, my staff includes registered foresters and arborists who provide right-of-way prescriptions for trimming, clearing and herbicide application.

Q. PLEASE DESCRIBE GDS ASSOCIATES.

A. GDS is an energy and utility consulting firm with offices in Marietta, Georgia; Austin, Texas; Manchester, New Hampshire; Madison, Wisconsin; and Auburn, Alabama. GDS provides a variety of services to the electric utility industry, including power supply planning and procurement, fuel supply and planning, electric utility restructuring analysis, rates and regulatory consulting, financial analysis, load forecasting, statistical services, and electrical system operation, planning and design. GDS also provides natural gas, telephone, and water utility consulting services.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of the Oklahoma Attorney General ("AG").

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. No. This is my first testimony before this Commission.

Q. HAVE YOU TESTIFIED BEFORE ANY REGULATORY COMMISSIONS?

A. I have submitted testimony before the Federal Energy Regulatory Commission ("FERC"), the District of Columbia Public Service Commission ("PSC" or "Commission") and the Public Utility Commission of Texas. I have also submitted expert opinion reports before the United States District Courts in California, South Carolina, and Alabama.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?

A. The purpose of my testimony is to present the findings and recommendations of the AG in this case with regard to: (1) review of the vegetation management budgets of Oklahoma Gas and Electric Company ("OG&E" or "Company") and (2) comment on OG&E's proposed vegetation management tracker.

Q. WHAT HAVE YOU RELIED UPON IN MAKING YOUR EVALUATION AND RESULTING CONCLUSIONS AND RECOMMENDATIONS?

A. I have relied upon the information in the direct testimony of OG&E's witnesses, OG&E's responses to data requests ("DRs") submitted by the AG and other parties, analysis performed by GDS, and my educational training and related professional experience.

Q. HAVE YOU PREPARED ANY EXHIBITS WITH THIS TESTIMONY?

A. Yes. I have prepared Exhibit KJW-1, which shows proposed changes to the Pro forma for Distribution Vegetation Management, and Exhibit KJM-2, which shows my recommended changes to the distribution vegetation management expense levels.

II. SUMMARY OF TESTIMONY

Q. PLEASE SUMMARIZE THE CONCLUSIONS AND RECOMMENDATIONS YOU HAVE REACHED AS A RESULT OF YOUR REVIEW AND ANALYSIS.

A. Oklahoma Corporation Commission ("OCC" or "Commission") Rules, See OKLA. ADMIN. CODE §165:35-25-15, require utilities to perform vegetation management on a four-year cycle. This means that all lines should be trimmed or managed within a four-year period. The vegetation management plan filed by OG&E on February 29, 2016, states that OG&E has two categories of vegetation management: Category 1 circuits are

to be cleared end-to-end on a four-year cycle, and Category 2 circuits are to be inspected for vegetation issues every four-years and only immediate reliability concerns will be addressed at that time. The Category 1 feeders are circuits with high customer density and/or high priority for restoration, while Category 2 circuits are circuits with lower customer density. With the expiration of the System Hardening budget, OG&E shifted from a one-tier system to a two-tier system, which appears to have occurred sometime prior to 2014.

The data presented by OG&E shows they have not been able to meet a four-year trim cycle for the last four years. The data further shows that over the four year period from 2012 to 2015, OG&E preformed vegetation management on only 8,520 miles of distribution, which is only 46% of the Company's total miles of line.

In 2009, OG&E requested and obtained approval for the System Hardening Rider as a means for a one-time catch-up so they could meet a four-year trim cycle in future years. According to OG&E's witness Jarod Cassada, once the System Hardening Rider expired, OG&E "quickly discovered that the amount of funding in base rates is not adequate to maintain the four year cycle requirement".[1]

OG&E is proposing to move from the two-tier vegetation management system to a single-tier system and manage all of their right-of-way as Category 1 right-of-way, resulting in an increase in the Distribution Cycle Trimming shown on Exhibit KJM-1. OG&E has provided no basis for the need to shift to a single-tier system. I have estimated the shift to a single-tier system will be $7,902,766 per year for each of the next four years. There has been no discussion by OG&E witnesses regarding specific

[1] Cassada Dir. Test., 14:10-11.

improvements in reliability that can be expected by the change, nor are any studies presented to justify an annual operation and maintenance ("O&M") cost of $7,902,766. Another point to consider is that best practices for vegetation management in the electric utility industry suggest that a rigid right-of-way maintenance program with fixed clearance requirements applied to all distribution lines is not cost effective for reliability and resiliency.[2] As shown in the attached Exhibits KJM-1 and KJM-2, the difference between OG&E's pro forma cost for distribution cycle trimming ($23,359,503) and my proposed two-tier system cost ($19,005,331) is $4,354,171, which represents a significant reduction in the Company's O&M costs. Further, in my opinion, the system reliability should actually improve because my proposed budget for vegetation management will have OG&E maintaining a four-year cycle with the funding provided by the recommended adjustment.

A four-year trim cycle consisting of vegetation management activities on 4,646 miles per year will reduce the amount of non-cycle work required. It is my belief that the current increase in non-cycle work is directly related to OG&E not completing a four-year trim cycle. Many of OG&E's feeders have not been trimmed in more than 8 years, naturally resulting in an increase in non-cycle work. I recommend a reduction in the pro forma for the non-cycle work.

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[2] *See Best Practices in Vegetation Management for Enhancing Electric Service in Texas,* submitted by Texas Engineering Experiment Station to Public Utility Commission of Texas November 11, 2011, http://interchange.puc.texas.gov/WebApp/Interchange/application/dbapps/filings/pgSearch_Results.asp?TXT_CNTR_NO=38257&TXT_ITEM_NO=5, and *Before and After the Storm,* a compilation of recent studies, programs and policies related to storm hardening and resiliency by Edison Electric Institute, March 2014, at page 4, http://www.eei.org/issuesandpolicy/electricreliability/mutualassistance/Documents/BeforeandAftertheStorm.pdf.

Q. WHAT ARE YOUR RECOMMENDATIONS?

A. I recommend:

1. OG&E adhere to the mandated four-year trim cycle.
2. OG&E maintain the two-tier trimming system recognizing the differences between urban and rural feeders, which have very different vegetation issues.
3. OG&E be required to file quarterly reports during each year to report the progress of the Company's Vegetation Management Plan
4. Reducing OG&E's budget for Distribution Cycle Trim by $4,354,171.
5. Reducing OG&E's budget for the non-cycle work by $657,027.
6. Disallowing OG&E's proposed vegetation management tracker.

III. VEGETATION MANAGEMENT

Q. WHAT ARE YOUR GENERAL IMPRESSIONS OF OG&E'S VEGETATION MANAGEMENT FOR ITS DISTRIBUTION SYSTEM?

A. OG&E witness Cassada discusses OG&E's vegetation management program and the need to "generate enough space around the conductors to facilitate the safe, reliable operation of the power system."[3] The National Electric Safety Code ("NESC") rules state that "vegetation that may damage ungrounded supply conductors should be pruned or removed."[4] In my opinion, OG&E's current vegetation management plan appears to meet the requirements of the NESC.

[3] Cassada Dir. Test. 4:13-15.
[4] National Electric Safety Code (NESC) Rule 218A, 2012 NESC.

Q. **DOES THE COMMISSION HAVE REQUIREMENTS FOR VEGETATION MANAGEMENT?**

A. Yes, OKLA. ADMIN. CODE §165:35-25-15 requires utilities to preform vegetation management on a four-year cycle. This means that all lines should be trimmed or managed within a four-year period. The frequency of the cycle is typically dictated by the growth rates of the local vegetation.

Another advantage of having a four-year cycle is to control the "volunteer" trees that Mr. Cassada mentioned in his testimony.[5] These are seedling trees which establish themselves under the power lines. A four-year cycle helps to control these seedlings before they interfere with the power lines, although initially, seedlings do not normally have a significant impact on the reliability of distribution lines. Mr. Cassada noted that OG&E removes trees with a breast height diameter ("BHD") of over eight inches under power lines. A tree with a BHD of eight inches is a significant tree and not a tree that has sprung up in just four years. Depending on the species of the tree, the time required to obtain an eight inch BHD is between ten to twenty-five years.

Further, the four-year cycle also addresses tree limbs that grow into the right-of-way or that may over hang a power line. Finally, this cycle provides the opportunity for the utilities to identify leaning, diseased, or dead trees that may pose a danger to the power lines if the trees should fall over.

[5] Cassada, Dir. Test. 4:13-15.

Q. CAN YOU EXPLAIN EXACTLY HOW VEGETATION AFFECTS SYSTEM RELIABILITY AND SAFETY?

A. Outages attributed to vegetation are generally caused by mechanical failure caused by a tree, or by electrical contact of the vegetation with the energized conductors. An example of mechanical failure is a tree that falls into a distribution line breaking conductors, crossarms, and/or poles. An outage caused by an electric contact with vegetation occurs when a tree or vine grows and comes into contact with energized conductors which results in a short circuit. Within the power industry, a majority of vegetation outages on distribution lines are caused by mechanical failures caused by trees.[6] Thus, the key to effective vegetation management is identification and remediation of what is commonly referred to as hazard trees or danger trees, as well as remediation of overhanging branches. For distribution systems, a hazard tree is usually a dead tree adjacent to a line but outside the clearance zone, or a tree that is leaning over toward a line. Healthy trees taller than the distribution line, which could fall into the line, are not considered danger trees, and therefore are not remediated.

Q. HAVE YOU REVIEWED OG&E'S VEGETATION MANAGEMENT PLAN FOR THE COMPANY'S DISTRIBUTION SYSTEM?

A. Yes, I have reviewed the plan submitted to the OCC on February 29, 2016.[7] Appendix E provides the Plan's trimming and tree removal guidelines. The OG&E plan calls for trimming of vegetation to a set clearance distance; however, as I will explain later,

[6] Best Practices in Vegetation Management for Enhancing Electric Service in Texas submitted to Public Utility Commission of Texas November 11, 2011, Page 4.
[7] AG DR 7-7_att.

OG&E does not maintain all distribution rights-of-way with the trim requirements described in Appendix E.

Q. PLEASE EXPLAIN OG&E'S CATEGORIES FOR CIRCUITS AS IT RELATES TO THE COMPANY'S VEGETATION MANAGEMENT OF DISTRIBUTION LINES.

A. In this cause OG&E states that the Company has two categories of vegetation management.[8] Under the Company's Vegetation Management Plan, Category 1 circuits are to be cleared end-to-end on a four-year cycle, and Category 2 circuits are to be inspected for vegetation issues every four-years, and only immediate reliability concerns will be addressed at that time. The Category 1 feeders are circuits with high customer density and/or high priority for restoration, while Category 2 circuits are circuits with lower customer density.[9]

Mr. Cassada stated the reason for the Company's shift to a two-tier system was that with the expiration of the System Hardening budget, OG&E no longer had the resources to maintain all distribution lines in the same manner.[10] However, I understand the System Hardening budget depleted in 2014, while the shift to a two-tier system appears to have occurred prior to 2014.

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8 Resp. to AG DR 7-18
9 Id.
10 Id.

The following table shows the miles of line of each Category for the year last trimmed.[11]

	Miles of Line by Category of Trim		
Year	**1**	**2**	**Total**
2008	408.28	232.87	641.15
2009	391.68	3,123.12	3,514.80
2010	967.11	3,711.99	4,679.10
2011	980.48	2,160.98	3,141.46
2012	553.57	1,180.69	1,734.26
2013	596.44	795.32	1,391.76
2014	579.82	2,175.17	2,754.99
2015	560.59	2,078.59	2,639.18

Total Miles 2012-2015 8,520.19

My analysis of this data shows that approximately 25% of circuits are classified as Category 1.

Q. DID OG&E'S DISTRIBUTION CYCLE TRIM PROGRAM MAINTAIN A FOUR-YEAR CYCLE FROM 2012 TO 2015?

A. No. The workpapers presented by Mr. Cassada included the year of the last trim for each circuit for each category (Category 1 or 2) on OG&E's system in Oklahoma. My analysis of this data reveals that out of 18,587 miles of distribution lines in Oklahoma, OG&E trimmed only 8,520.19 miles of line between 2011 and 2015. This is

[11] Resp. to AG DR1-3, Excel File Source Document 20151118.xlsx.

further confirmed OG&E's 2016 Annual Reliability Report, which included the miles of line actually trimmed in 2015. [12]

I note Mr. Cassada's testimony includes descriptions of reasons why it is difficult to maintain a four-year cycle. The stated reasons include natural events, contractor availability, cost issues, and increased customer requests.[13] In my opinion, the reasons given by Mr. Cassada may account for some failure to meet a four-year trim cycle, which requires vegetation management on roughly 4,646 miles of line per year. However, the data shows that over the four-year period from 2011 to 2015, OG&E performed vegetation management on only 46% of the Company's total miles of line on an annual basis. Mr. Cassada's testimony does not adequately explain this level of non-compliance.

Q. HOW MANY MILES OF DISTRIBUTION LINE DID OG&E REPORT AS BEING TRIMMED IN 2015?

A. OG&E filed its Annual Reliability Report on February 29, 2016. This report included a summary of vegetation management in 2015, which included a list of circuits, mileage of each circuit, and the trim category of each circuit.

The total miles of line trimmed was 2,070.84 miles, which is well below the goal of 4,646 miles. For the total circuit miles that had vegetation management activities, 887.76 miles were listed as Category 1, and 1,183.08 miles were listed as Category 2.

Q. WHAT IS YOUR UNDERSTANDING OF THE SYSTEM HARDENING RIDER?

A. I have reviewed many of the filings in the cause adopting OG&E's System Hardening Rider. The Final Order in the case, OCC Order No. 567670, dated May 13, 2009,

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[12] AG DR 7-7_att.
[13] Cassada Dir. Test. 10:7-10.

includes a description of the aggressive vegetation management program and capital investments in the System Hardening Program, which was a systematic circuit hardening effort to be included in the rider.[14] OG&E's Leader of System Integrity, Ms. Tammy W. Turnipseed testified that OG&E was to undertake a "catch-up" program to establish a four-year vegetation management encroachment cycle for both urban and rural areas.[15] This catch-up phase, totaling $10.2 million, was spread over three years. In addition, OG&E was to undertake aggressive vegetation management activities, including removing unplanned-for "volunteer" trees, using herbicide, adding four feet of clearance to lines, removing certain large trees, and removing large overhanging vegetation. All vegetation management on the rider was to be capped at $33.2 million.

The catch-up phase was to be completed by OG&E by June 30, 2012.[16] It is my understanding, from reviewing the Final Order No. 567670, that the System Hardening Rider for aggressive vegetation management was not intended to be used for Distribution Cycle Trimming. Rather, it was intended to be used for expanding the rights-of-way and removing trees and overhanging limbs.

Ms. Turnipseed also testified that the reasons for the one-time catch-up to the four-year cycle in 2008 included:

1. Increased competition for vegetation management contractors,
2. Having to pull crews off of normal cycle trimming for storm work, and
3. Record rainfall in 2007 led to increased vegetation growth.[17]

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[14] *See* Final Order No. 567670, at 3, *Appl. Of Okla. Gas and Elec. Co. for an Order of the Comm'n Granting the Recovery of Costs Associated with its System Hardening Program and Authorizing a Recovery Rider*, Cause No. PUD 200800387.

[15] *Id.*

[16] *Id.*, Joint Stipulation at 2

[17] Tammy W. Turnipseed 12, Dir. Test. Cause No. PUD 200800387.

Mr. Cassada additionally testified that the reasons for OG&E needing to catch up on its vegetation management in 2015 include:

1. Uncertainity as to the availability of vegetation management contractors,
2. Having to pull crews off of normal cycle trimming for storm work, and
3. Heavy rainfall that delayed scheduled work.[18]

It appears that the reported causes for falling behind on the four-cycle trim cycle have not changed in the past seven years.

Q. IS THE SYSTEM HARDENING RIDER STILL AVAILABLE TO OG&E TO FUND VEGETATION MANAGEMENT?

A. No. This rider has expired. Mr. Cassada stated that once the System Hardening Rider expired, OG&E "quickly discovered that the amount of funding in base rates is not adequate to maintain the four year cycle requirement".[19] Assuming only costs that met the requirements of the purported purpose of the System Hardening Rider were charged to the rider, it seems that OG&E would have known much earlier the limitations of base rates to fund a four-year cycle requirement.

Q. CAN YOU EXPLAIN THE INCREASE IN SPENDING FOR DISTRIBUTION SYSTEM VEGETATION MANAGEMENT PROPOSED BY OG&E?

A. One major change that OG&E is proposing is to move from a two-tier vegetation management system to a single tier system, and to manage all of the Company's rights-of-way as Category 1 rights-of-way. This results in an increase in vegetation

[18] Cassada Dir. Test. 10:11 to 12:30.
[19] Id. 14:10-11.

management dollars on a per mile basis. In addition, OG&E has increased the cost for the Category 2 rights-of-way to cover the expected cost to clear them to Category 1 guidelines.[20]

Another major change in the distribution cycle trimming program is that OG&E is proposing to increase the total miles trimmed in the test year from 3,175 miles to 4,578 miles, to meet a four-year trim cycle. While 4,646 miles is the average annual mileage of line necessary to meet a four-year trim cycle, an increase in mileage from 3,175 to 4,578 will result in a significantly larger vegetation management budget. OG&E's proposed changes from the test year are shown in Exhibit KJM-1: OG&E Pro Forma Adjustment – Operating Income – Vegetation Management Distribution Cycle.

Q. DO YOU AGREE WITH THE INCREASE IN MILEAGE PROPOSED BY OG&E?

A. I agree that OG&E needs to adhere to the mandated four-year trim cycle. The pro forma suggested by Mr. Cassada, 4,578 miles of line, is actually 69 miles short of a four-year cycle on all lines (18,587 miles divided by four years yields 4,646 miles per year). However, if OG&E does trim 4,578 miles of line in 2016 as Mr. Cassada suggests, this will be the first time in four years that OG&E has been close to meeting the four-year trim cycle. The average mileage maintained in 2012 to 2015 was 2,130 miles per year, which is significantly below the 4,578 miles of rights-of-way proposed for 2016.

The data presented by OG&E shows that the Company has not been able to meet a four-year trim cycle for the last four years. In 2009, OG&E requested and obtained approval for the System Hardening Rider as a means for a one-time catch-up, so the Company

[20] Resp. to AG DR 7-18.

could meet a four-year trim cycle. Now OG&E is requesting additional funding to meet the same four-year trim cycle.

I agree that an increase in the miles of line trimmed over those trimmed in the test year is necessary; however, I recommend more rigorous reporting by OG&E, such as quarterly reporting during each year for compliance with the annual filing of the Company's Vegetation Management Plan. Further, because the challenges facing OG&E in 2015 were the same as it faced in 2008, OG&E may need to plan to trim more than 4,646 miles per year in order to meet the goal of a four-year cycle. OG&E's challenges are similar to challenges faced by other electric utilities, and can be mitigated with proper planning.

Q. DO YOU AGREE WITH OG&E'S PROPOSED CHANGE FROM A TWO-TIER TRIMMING SYSTEM TO A ONE-TIER SYSTEM?

A. No, I disagree with this proposed change. Essentially, this increase in costs is for upgrading to Category 1 the right-of-way maintenance for 75% of the distribution lines which are currently maintained as Category 2. The System Hardening Rider was purported to be a one-time catch-up to a four-year cycle. Now OG&E is asking for additional funds to catch up 75% of the right-of-way to Category 1.

As a comparison, trimming rights-of-way that have been Category 1 will cost about $3,376 per mile.[21] OG&E's projected weighted average cost per mile to bring Category 2 rights-of-way up to Category 1 will be $6,093 per mile.[22] The pro forma shows 2,908 miles of line will change from Category 2 to Category 1. Thus, the catch-up cost is the difference of $6,093 per mile of line versus $3,376 per mile of line for 2,908 miles, which

[21] WP H's Vegetation Dx and Tx.xlsx.
[22] *Id.*

is $7,902,766 per year. Since this is an annual budget for the catch-up to Category 1, a four-year catch-up will greatly exceed the "one time" catch-up that was approved in the 2009 System Hardening Rider.

In addition, OG&E has provided no basis for the need to shift to a single tier system. There has been no discussion by OG&E witnesses regarding specific improvements in reliability that can be expected by the change, nor are any studies presented to justify this annual O&M cost of $7,902,766. Mr. Cassada suggests that there was an improvement in tree-related outages due to the aggressive vegetation management funded by the System Hardening Rider and now, with those dollars exhausted, Mr. Cassada suggests tree-related outages are increasing.[23] However, only one year, 2015, included an increase in tree-related outages, and that single increase does not represent a trend. Further, there is no data to suggest the Category 2 rights-of-way are the cause of the increase. In fact, since Category 1 vegetation management is used for circuits serving many more consumers, it is reasonable to conclude that these circuits contribute significantly to OG&E's system average interruption frequency index ("SAIFI") and system average interruption duration index ("SAIDI").

Another point to consider is that best practices in the electric utility industry suggest that a rigid right-of-way maintenance program with fixed clearance requirements applied to all distribution lines is not cost-effective for reliability and resiliency.[24] Therefore, I recommend that OG&E maintain its two-tier system, which recognizes the differences between urban and rural distribution lines which have very different vegetation issues.

[23] Cassada Dir. Test. 12:28-31.

[24] *Best Practices in Vegetation Management for Enhancing Electric Service in Texas,* submitted to Public Utility Commission of Texas November 11, 2011.

Q. WHAT ADJUSTMENT WOULD YOU RECOMMEND?

A. As shown in the following table, in 2015, OG&E's median bid price for vegetation management for Category 2 rights-of-way was $3,481 per mile, and the median bid price for Category 1 was $5,921 per mile.[25] It is important to note that these are median costs for vegetation management and not the low bid cost. As Mr. Cassada stated in his direct testimony, OG&E has experienced uncertainty with the availability of its vegetation contractors, which are a highly specialized workforce in high demand by all regional utilities.[26] Though the uncertainty of availability of a skilled workforce would tend to drive the median price significantly higher than the low bid, using the median value is reasonable for budgeting.

Category	2015 Miles	Total VM Cost Based on Mean Bid Price	Weighted Mean Bid Price per Mile
1	561	$ 3,319,307.10	$ 5,921
2	2079	$ 7,234,703.96	$ 3,481
Grand Total	**2639**	**$ 10,554,011.07**	

Attachment KJM-2 to my testimony shows my recommended changes to the distribution vegetation management expense level. The changes show an increase in mileage from OG&E's proposed 4,578 miles to 4,646 miles to meet a four-year vegetation management cycle. For the division of miles into Category 1 and Category 2, I assigned 25% of the total mileage to Category 1. In addition, I applied the median bid prices for vegetation management to Category 1 and Category 2 rights-of-way.

[25] Resp. to AG DR1-3, Excel File Source Document 20151118.xlsx.
[26] Cassada Dir. Test. 11:19-21.

The difference between OG&E's pro forma cost for distribution cycle trimming ($23,359,503) and my proposed two-tier system cost ($19,005,331) is $4,354,171, which represents a significant reduction in the O&M costs.

Q HOW WILL THE SYSTEM RELIABILITY BE AFFECTED BY MAINTAINING A TWO-TIER VEGETATION MANAGEMENT PLAN?

A. Regulators must strike a balance between the cost of reliability projects and the resulting improvement in system reliability. Tree-related outages represent less than 15% of SAIDI and SAIFI for OG&E's system. In contrast, lightning-caused outages on OG&E's system represent a larger percentage of outages in terms of SAIDI and SAIFI. Investing ratepayer dollars for Category 1 vegetation management in rural areas may provide some marginal increase in reliability, but it comes at a significant annual cost.

OG&E has been using the two-tier system for some time. The data indicates that from 2010 to 2014, the lines were trimmed using this system.[27] In addition, the System Hardening Rider helped remove large trees and large overhanging branches, and helped eliminate volunteer trees in the rights-of-way. The catch-up provided by the System Hardening Rider should have resulted in a clearer right-of-way that OG&E can maintain with the Company's current two-tier vegetation management plan. As I stated earlier, the mechanical component of tree failure is a primary cause of tree-related outages, and the System Hardening Rider was implemented to remove many of these trees and limbs. A strict compliance to a fixed trim distance suggested by Category 1 may not be a cost-effective solution.

[27] Resp. to AG DR1-3, Excel File Source Document 20151118.xlsx.

With my recommendation, the system's reliability should actually improve because my proposed budget for vegetation management will have OG&E actually maintaining a four-year trim cycle with the funding provided by the recommended adjustment.

Q. CAN YOU EXPLAIN NON-CYCLE TRIMMING?

A. A four-year trim cycle is a vegetation management plan that addresses each mile of line within a four-year period. Non-cycle work is site-specific work that may occur at the request of a customer, or for a specific problem in the right-of-way that was not addressed in the planned cycle trim, or that developed after the cycle trim. Customer requests can also include the need to remove trees near OG&E lines which affect customer construction projects.[28]

Q. PLEASE DESCRIBE OG&E'S REQUEST FOR NON-CYCLE TRIMMING?

A. The test year budget for Distribution Non-Cycle Trimming is $2,249,397, and OG&E's request in this Cause for Distribution Non-Cycle Trimming is $2,073,523. This represents a decrease of $175,874.

Q. DO YOU AGREE WITH THE PROPOSED AMOUNT FOR NON-CYCLE TRIMMING?

A. No. The five-year average cost for Distribution Non-Cycle Trimming of $1,416,496 is based on OG&E's response to AG Data Request 7-15, which included the following table:

[28] AG DR 7-7 Att. – App. E, 29.

Year	Distribution Non Cycle
2010	$ 1,204,056
2011	$ 1,214,410
2012	$ 793,084
2013	$ 1,494,018
2014	$ 2,376,914

5 Year Average $ 1,416,496

The significant increase in costs for 2014 and 2015 is not adequately explained to justify the increase. It is my belief that the increase is directly related to OG&E not completing a four-year trim cycle. Many of OG&E's distribution lines have not been trimmed in more than eight years. This results in an increase in non-cycle work. As stated previously in my testimony, OG&E should adhere to the four-year trim cycle. By moving to a four-year trim cycle, the amount of non-cycle work will be greatly reduced.

Q. WHAT ADJUSTMENT WOULD YOU RECOMMEND FOR THE NON-CYCLE WORK?

A. I would recommend adopting the five-year average actual non-cycle expense value of $1,416,496. This lower value can be justified when the trim cycle is maintained at four years. The non-cycle work for 2011 to 2013 was significantly lower than for 2014 and 2015, which is, in my opinion, directly related to OG&E's inability to maintain a four-year trim cycle.

Q. ARE YOU RECOMMENDING ANY CHANGES TO THE VEGETATION MANAGEMENT AT DISTRIBUTION SUBSTATIONS?

A. No.

Q. ARE YOU RECOMMENDING ANY CHANGES TO THE VEGETATION MANAGEMENT FOR OG&E'S TRANSMISSION SYSTEM?

A. No.

Q. WHAT IS YOUR UNDERSTANDING OF OG&E'S PROPOSED VEGETATION MANAGEMENT TRACKER?

A. Mr. Rowlett in his Direct Testimony discussed OG&E's proposed vegetation management tracker. He described the purpose of the tracker is to account for variances above or below the level recovered in base rates. According to witness Rowlett, the accumulated balance of the tracker will be refunded or recovered as determined in the next general rate case.[29]

Q. DO YOU AGREE WITH THE PROPOSED VEGETATION MANAGEMENT TRACKER?

A. No. Vegetation management is a core competency for electric utilities. It is a daily activity with known costs and known challenges. The challenges faced each year include storms, wind, rain, and ice. OG&E witnesses Cassada in 2015, and Turnipseed in 2008, testified to the challenges faced by OG&E, which I noted have not changed significantly. These challenges can be handled with proper planning of resources, rather than the introduction of a tracker.

Each year there will be variances in the cost for right-of-way maintenance, just as there will be variances in costs for pole inspections and pole replacements. The tracker

[29] Rowlett Dir. Test. 12:2-6.

mechanism reduces the pressure on an electric utility to efficiently use ratepayer dollars. Adhering to fixed budgets coupled with annual or even quarterly reporting, as I have recommended, will provide the incentives for cost-effective use of vegetation management dollars.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes.

IV. SUMMARY AND CONCLUSIONS

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A.
1. OG&E should adhere to the OCC-mandated four-year trim cycle.
2. OG&E should maintain the two-tier trimming system to reduce the need to increase the Company's trimming budget.
3. OG&E should be required to file quarterly reports during each year to report the progress of the Company's Vegetation Management Plan.
4. The budget for distribution cycle trimming should be reduced by $4,354,171.
5. The budget for the non-cycle distribution trimming should be reduced by $657,027.
6. The proposed vegetation management tracker should be disallowed.

Q. DOES THIS CONCLUDE YOUR RESPONSIVE TESTIMONY?

A. Yes, it does. However, I reserve the right to supplement this testimony as needed to respond to any new information OG&E may present on these issues.

APPENDIX A – RÈSUMÈ OF KEVIN J. MARA

EDUCATION: BS Electrical Engineering, Georgia Institute of Technology, 1982

PROFESSIONAL MEMBERSHIPS:
Institute of Electrical and Electronic Engineers
Power Engineering Society
Past Member - Insulated Conductor Committee

PROFESSIONAL REGISTRATION:
Registered Professional Engineer in Kentucky, Alabama, Georgia, Florida, South Carolina, North Carolina, Louisiana, Tennessee, Indiana, Virginia, Ohio, Texas, Mississippi, Michigan, Missouri, Kansas, South Dakota, Idaho, and Arkansas.

AREAS OF EXPERTISE:

Overhead and Underground Distribution Design, Distribution System Planning, Power System Modeling and Analysis

EXPERIENCE:

Mr. Mara has over 30 years of experience as a distribution engineer. He worked six years at Savannah Electric as a Distribution Engineer and ten years with Southern Engineering Company as a Project Manager. At Savannah Electric, Mr. Mara gained invaluable field experience in the operation, maintenance, and design of transmission and distribution systems. While at Southern Engineering, Mr. Mara performed planning studies, general consulting, underground distribution design, territorial assistance, and training services. Presently, Mr. Mara is a Vice President at GDS Associates, Inc. and serves as the Principal Engineer for GDS Associates' engineering services company known as its trade name Hi-Line Engineering.

OVERHEAD DISTRIBUTION SYSTEM DESIGN:

Mr. Mara is in charge of the design of distribution lines for many different utilities located in variety of different terrain and loading conditions. For the last 5 years, he has been responsible for over 100 miles of distribution line conversions each year. Many of these projects include acquisition of right-of-way and obtaining easements. The following is a representative list of projects:

- Electric Utilities throughout the southeast
  - 2006: 50 miles of copper replacement
  - 2006: 82 miles of 12kV reconductor projects
  - 2006: 35 miles of conversion projects designed to meet Grade B
  - 2007: 38 miles of conversion projects designed to meet Grade B
  - 2007: Developed 260 construction specifications
  - 2007: 4.5 miles of double circuit 35 kV line
  - 2007: 60 miles of copper replacement
  - 2007: 70 miles of 12kV reconductor projects

UNDERGROUND DISTRIBUTION SYSTEM DESIGN:

Mr. Mara has developed underground specifications for utilities and was an active participant on the Insulated Conductor Committee. He has designed underground service to many subdivisions and commercial areas. These designs include concrete-encased ductlines, direct-burial, bridge attachments, long-bores, and tunneling projects. He has developed overcurrent and overvoltage protection schemes for underground systems for a variety of clients with different operating parameters. The following is a representative list of specific projects:

- Shelby Energy Cooperative, Inc.
  - Underground design for Outlet Mall at Lexington
  - Large commercial mall
  - 350 MCM HDPE backbone, VFI switchgear, 2 Road bores
- Clemson Board of Trustees
  - Design of various underground projects on campus of Clemson University
    - Primary service to buildings
    - Voltage conversion from 4 kV to 12 kV.
  - Inspection of installed underground facilities before cover-up.
- City of Fort Pierce, FL
  - Prepared study of the cost effectiveness of undergrounding
  - Study considered costs, storm restoration, right-of-way maintenance, etc
  - Final study presented to City Council
- Union Electric, OH
  - Underground design to Coleman's Crossing
  - Large commercial mall
  - 500 MCM backbone, VFI switchgear, Interstate Bore
- Blue Ridge ECI, SC
  - Underground design for Cliff's at Mountain Park
  - 1,800 lots with homes averaging 8,000 sq ft
  - 750 MCM backbone, Vista switchgear, contingency analysis
- Leavenworth-Jefferson EC, KS
  - Underground design to Housing at Fort Leavenworth
    - Initial construction estimate within 5% of actual construction cost
  - Underground design to new Regional Correctional Facility
    - $1.4 M project
  - Underground design of PILC cable replacement at Ft. Leavenworth.
- Baldwin EMC, AL
  - Conversion from overhead to underground along 2 miles of commercial highway at Gulf Shores
  - Design of new street lighting for the highway to meet state requirements for illumination
- Baldwin EMC, AL
  - Justified new 1.0 mile long double circuit 12kV submarine cable
  - Obtained easements and permits for the crossing
  - Cable system has survived 3 tropical storms and 2 hurricanes

- Baldwin EMC, AL
  - Designed triple circuit ductline along Highway 161
  - Project included design of break-away street poles for highway lighting
- Little River ECI, SC
  - Engineering support for the design of Savannah Lakes Subdivision
  - 6,000 lot development
  - Master planning and inspection services
- City of Fayetteville, NC
  - Underground cable replacement at Cross Creek Mall

PLANNING:

Mr. Mara has prepared numerous planning studies for electric cooperatives and municipal systems. The following is a representative list of specific projects:

- Little River Electric Cooperative, SC
  - Long Range Plan
  - Four Construction Work Plan
- Maxwell AFB, AL - Long Range Plan
- Chugach Electric, AK - Long Range Plan
- Newberry Electric Cooperative, SC - Construction Work Plan, Long Range Plan
- Lackland AFB, TX - Long Range Plan
- Rio Grande ECI, TX - Construction Work Plan, Long Range Plan
- Northern Virginia Electric Cooperative, VA - Construction Work Plan
- BARC Electric Cooperative - Construction Work Plan
- Dixie Electric Cooperative - Construction Work Plan
- Joe Wheeler Electric Cooperative - Construction Work Plan
- Cullman Electric Cooperative - Long Range Plan, Construction Work Plan

TRAINING SEMINARS:

Mr. Mara has developed engineering training courses on the general subject of distribution power line design. These seminars have become extremely popular with more than 25 seminars being presented annually and with more than 4,000 people having attended seminars presented by Mr. Mara. A 3-week certification program is offered by Hi-Line Engineering in eleven states. The following is a list of the training material developed and/or presented:

- Application and Use of the National Electric Safety Code
- How to Design Service to Large Underground Subdivisions
- Cost-Effective Methods for Reducing Losses/Engineering Economics
- Underground System Design
- Joint-Use Contracts – Anatomy of Joint-Use Contract
- Overhead Structure Design
- Easement Acquisition
- Transformer Sizing and Voltage Drop

CONSTRUCTION SPECIFICATIONS FOR ELECTRIC UTILITIES:

Mr. Mara has developed overhead construction specifications including overhead and underground systems for several different utilities. The design included overcurrent protection for padmount and pole mounted transformers. The following is a representative list of past and present clients:

- Cullman EMC, Alabama
- Blue Ridge EMC, South Carolina
- Buckeye Rural Electric Cooperative, Ohio
- Three Notch EMC, Georgia
- Little River ECI, South Carolina
- Lackland Air Force Base
- Maxwell Air Force Base

PUBLICATIONS:

- Co-author of the NRECA "Simplified Overhead Distribution Staking Manual" including editions 2, 3 and 4.
- Author of "Field Staking Information for Overhead Distribution Lines"
- Author of four chapters of "TVPPA Transmission and Distribution Standards and Specifications"

TESTIMONIES & DEPOSITIONS:

Mr. Mara has testified many times as an expert at trial or by deposition within the preceding four years.

- Deposition related to condemnation of property
  Newberry ECI v. Fretwell, 2005
  State of South Carolina

- Testimony in Arbitration regarding territory dispute
  Newberry ECI v. City of Newberry, 2003
  State of South Carolina
  Civil Action No. 2003-CP-36-0277

- Expert Report and Deposition, 2005
  United States of America v. Southern California Edison Company
  Case No CIV F-o1-5167 OWW DLB

- Expert Report and Deposition, 2005
  Contesting a transmission condemnation
  Moore v. South Carolina Electric and Gas Company
  United States District Court of South Carolina
  Case No. 1:05-1509-MBS

- Affidavit October 2007
  FERC Docket No. ER04-1421 and ER04-1422
  Intervene in Open Access Transmission Tariff filed by Dominion Virginia Power

- Affidavit February 26, 2008
  FERC Docket No. ER08-573-000 and ER08-574-000
  Service Agreement between Dominion Virginia Power and WM Renewable Energy, LLC

- Direct Filed Testimony date December 15, 2006
  Before the Public Utility Commission of Texas
  SOAH Docket No 473-06-2536
  PUC Docket No. 32766

- Expert Report and Direct Testimony April 2008
  United States Tax Court
  Docket 25132-06
  Entergy Corporation v. Commissioner Internal Revenue

- Direct Testimony September 17, 2009
  Public Service Commission of the District of Columbia
  Formal Case 1076
  Reliability Issues

- Filed Testimony regarding the prudency of hurricane restoration costs on behalf of the City of Houston, TX, 2009
  Cozen O'Connor P.C.
  TX PUC Docket No. 32093 – Hurricane Restoration Costs

- Technical Assistance and Filed Comments regarding line losses and distributive generation interconnection issues, 2011
  Office of the Ohio Consumer's Counsel
  OCC Contract 1107, OBM PO# 938 for Energy Efficiency T & D

- Technical Assistance, Filed Comments, and Recommendations evaluating Pepco's response to Commission Order 15941 concerning worst reliable feeders in the District of Columbia.
  2011, 2012 Office of the People's Counsel of the District of Columbia
  Formal Case No. 766

- Technical Assistance, Filed Comments, and Recommendations on proposed rulemaking by the District of Columbia PSC amending the Electric Quality of Service Standards (EQSS), 2011.
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 766

- Yearly Technical Review, Filed Comments, and Recommendations evaluating Pepco's Annual Consolidated Report for 2011, 2012 and 2013.
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 766

- Technical Evaluation, Filed Comments, and Recommendations evaluating Pepco's response to a major service outage occurring May 31, 2011. (2011)
  Office of the People's Counsel of the District of Columbia
  Formal Case Nos. 766 and 1062

- Technical Assistance, Filed Comments, and Recommendations evaluating Pepco's response to Commission Order 164261 concerning worst reliable neighborhoods in the District of Columbia, 2011.
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 766

- Technical Review, Filed Comments, and Recommendations on Pepco's Incident Response Plan (IRP) and Crisis Management Plan (CMP), 2011.
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 766

- Technical Assistance, Filed Comments, and Recommendations assessing Pepco's Vegetation Management Program and trim cycle in response to Oder 16830, 2012.
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 766

- Technical Review, Filed Comments, and Recommendations on Pepco's Secondary Splice Pilot Program in response to Order 16426, 2012.
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 766 and 991

- Technical Review, Filed Comments, and Recommendations on Pepco's Major Storm Outage Plan (MSO), 2012 - active.
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 766

- Technical Assistance and Direct Filed Testimony for fully litigated rate case, 2011-2012.
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 1087 – Pepco 2011 Rate Case

- Evaluation of and Filed Comments on Pepco's Storm Response, 2012.
  Office of the People's Counsel of the District of Columbia
  Storm Dockets SO-02, 03, and 04-E-2012

- Technical Assistance and Direct Filed Testimony for fully litigated rate case, 2013.
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 1103 – Pepco 2013 Rate Case

- Evaluation of and Filed Comments on Prudency of 2011 and 2012 Storm Costs, 2013 - 2014
  State of New Jersey Division of Rate Counsel
  BPU Docket No. AX13030196 and EO13070611

- Engineering Services and Testimony to review and evaluate the Triennial Plan for undergrounding of electrical lines in the District of Columbia
  2014 - active
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 1116

- Technical Assistance and Direct Filed Testimony in the matter of the proposed merger of Exelon Corporation and Pepco Holdings, et. al., in the District of Columbia.
  2014 - 2016
  Office of the People's Counsel of the District of Columbia
  Formal Case No. 1119

Exhibit KJM-1
2 Pages including Cover

OG&E Pro Forma Adjustment – Operating Income – Vegetation Management Distribution Cycle

OKLAHOMA GAS AND ELECTRIC COMPANY
PRO FORMA ADJUSTMENT - OPERATING INCOME
VEGETATION MANAGEMENT DISTRIBUTION CYCLE
TEST YEAR ENDING 6/30/15
CAUSE NO. PUD 201500273

Line No.	Description	# Miles	Avg. Cost per Mile		FERC Account		Amount
	Oklahoma- Direct Assigned						
1	Test Year Expense - Distribution Cycle Trimming	3175	3,683		593		11,694,446
2	Test Year Expense - Distribution Non Cycle/Hardening				593		2,249,397
3	Test Year Expense - Distribution Substations				592		328,535
4	**Total Test Year**					**$**	**14,272,378**
5	Distribution Cycle Trimming: 2015-2016 Category 1	1162	5,921	4 year	593		6,877,242
6	Distribution Cycle Trimming: 2015-2016 Category 2	3485	3,481	4 year	593		12,128,090
7	Distribution Cycle Trimming: 2015-2016	4646	4,091	4 year	593	$	19,005,331
8	Distribution Non Cycle				593		1,416,496
9	Distribution Substations				592		357,877
10	Total OK Pro Forma Distribution Expense					$	20,779,704
12	**Pro Forma Adjustment - Increase in O&M Expense**				**Direct Assign-OK**	**$**	**6,507,326**

PURPOSE: Compliance with OAC 165:35-25-15
Each utility shall, at a minimum, perform vegetation management on a 4-year cycle, unless needed otherwise or unless otherwise ordered by the Commission. The utility may request an exemption from this requirement by submitting an alternative(s) to the 4-year cycle to the Commission in its annual vegetation management plan for review and hearing. This adjustment is made to include the cost of distribution related vegetation management.

Exhibit KJM-2
2 Pages including Cover

Recommended Changes to the Distribution Vegetation Management Expense Levels

Section H - Operating Income Statement
W/P H-2-43

OKLAHOMA GAS AND ELECTRIC COMPANY
PRO FORMA ADJUSTMENT - OPERATING INCOME
VEGETATION MANAGEMENT DISTRIBUTION CYCLE
TEST YEAR ENDING 6/30/15
CAUSE NO. PUD 201500273

Line No.	Description	# Miles	Avg. Cost per Mile		FERC Account		Amount
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1	Test Year Expense - Distribution Cycle Trimming	3175	3,683		593		11,694,446
2	Test Year Expense - Distribution Non Cycle/Hardening				593		2,249,397
3	Test Year Expense - Distribution Substations				592		328,535
4	**Total Test Year**					**$**	**14,272,378**
5	Distribution Cycle Trimming: 2015-2016	1670	3,376	4 year	593		5,637,438
6	Distribution Cycle Trimming: 2015-2016	18	4,544	4 Yr. Mod.	593		83,376
7	Distribution Cycle Trimming: 2015-2016	2890	6,103	4 Yr. Mod.	593		17,638,689
8	Distribution Cycle Trimming: 2015-2016	4578	5,102	4 Yr. Mod.	593	$	23,359,503
9	Distribution Non Cycle				593		2,073,523
10	Distribution Substations				592		357,877
11	Total OK Pro Forma Distribution Expense					$	25,790,903
12	**Pro Forma Adjustment - Increase in O&M Expense**				**Direct Assign-OK**	**$**	**11,518,525**

PURPOSE: Compliance with OAC 165:35-25-15
Each utility shall, at a minimum, perform vegetation management on a 4-year cycle, unless needed otherwise or unless otherwise ordered by the Commission. The utility may request an exemption from this requirement by submitting an alternative(s) to the 4-year cycle to the Commission in its annual vegetation management plan for review and hearing. This adjustment is made to include the cost of distribution related vegetation management.

Exhibit KJM-3
82 Pages including Cover

Certain OG&E Responses to AG Data Requests

Attorney General
Data Request AG-7
Cause No. PUD 201500273

7-7 **Vegetation Management: Provide a copy of the Company's current Vegetation Management plan. Please explain how the Company complies with Oklahoma Administrative Code 165:35-15-14 Reliability Program regarding the Company's program to address all the factors that impact reliability including "location and density of trees on the system".**

Response*: Please refer to **AG 7-7_Att,** the OG&E Annual reliability report, that will be submitted to the Oklahoma Corporation Commission Pursuant to OAC 165:35-25 on February 29, 2016.

Response provided by: Jarod Cassada
Response provided on: February 26, 2016
Contact & Phone No: Sheri Richard 405-553-3747

*By responding to these Data Requests, OG&E is not indicating that the provided information is relevant or material and OG&E is not waiving any objection as to relevance or materiality or confidentiality of the information or documents provided or the admissibility of such information or documents in this or in any other proceeding.

OG&E ANNUAL RELIABILITY REPORT

SUBMITTED TO

THE OKLAHOMA CORPORATION COMMISSION

PURSUANT TO OAC 165:35-25

February 29, 2016

Executive Summary

This document, submitted by OG&E to the Oklahoma Corporation Commission, serves as both the Annual Reliability Report (per OAC 165:35-25-20) and the Annual Vegetation Management Plan (per OAC 165:35-25-15) for the year 2016. All reliability calculations and documentation of program results apply to the calendar year 2015, while all submitted plans apply to 2016.

In 2015, OG&E Oklahoma SAIDI was 137 minutes, with 141 for the entire OG&E service area. Oklahoma SAIFI was 0.87 while the entire OG&E service area was 0.89 (see Appendix A: Reliability Indices Definitions for index descriptions). SAIDI performance of 137 was a decline from the performance of 2014 primarily due to the record breaking rainfall and weather in the month of May. SAIFI remained stable from the prior year of 0.90. These indices remain within the five-year minimum performance levels of 152 and 1.23 for SAIDI and SAIFI respectively. Additionally, the occurrence of several extreme storm events have been excluded from reported reliability indices per OAC rules (see Table 3: Major Events Excluded in 2015).

Any correspondence regarding this report or the reliability programs should be directed to:

David Dyke

Manager, Regulatory Relations
and Compliance

PO Box 321 M/C 1212
Oklahoma City, OK 73101

(405) 553-3269

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LIST OF FIGURES

LIST OF TABLES

1. SYSTEM DESCRIPTION

Pursuant to OAC 165:35-25-20(b)(6)

In 2015 Oklahoma Gas and Electric Company (OG&E) served approximately 820,000 customers in Oklahoma and western Arkansas (over 751,000 in Oklahoma). The transmission and distribution system to serve these customers covers 30,000 square miles. The OG&E service territory in Oklahoma is divided into 26 operating districts, as shown below in Figure 1. Furthermore, the entire OG&E system is comprised of more than 1,000 distribution circuits.

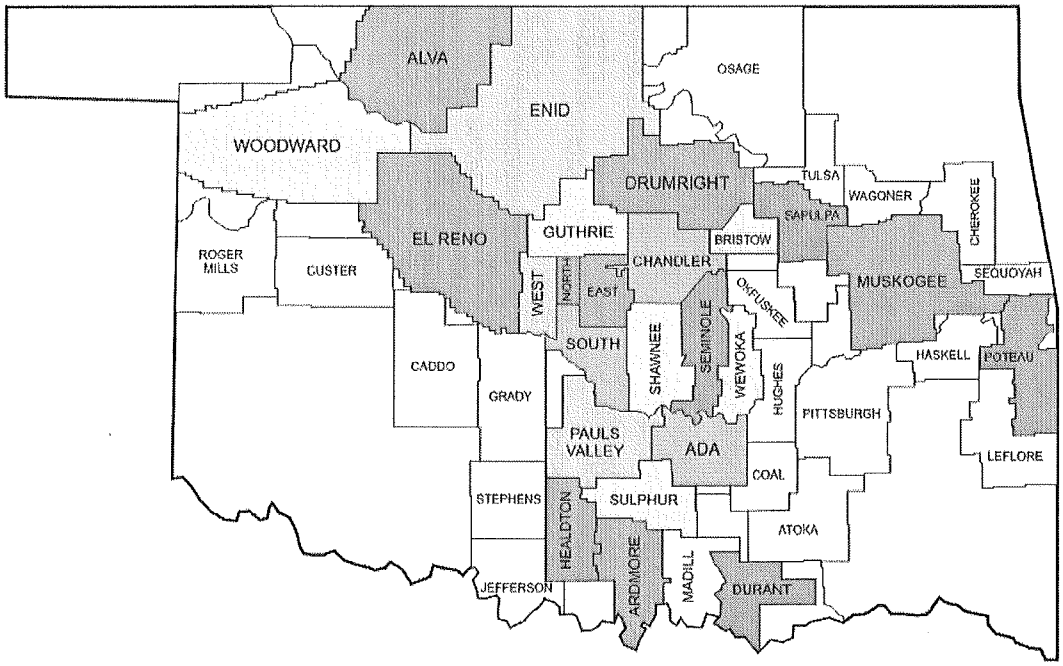


Figure 1: Map of OG&E Operating Districts in Oklahoma

2. System Reliability

The following sections present reliability indices measuring the relative performance of the distribution system under normal operating conditions (see Appendix A: Reliability Indices Definitions for details). As such, major weather events that would significantly skew the measurements as defined in OAC 165:35-25-13 have been excluded (see Table 3: Major Events). Two important principles must be considered in interpretation of these indices. First, reliability indices are useful for benchmarking portions of the system over time for the purpose of improvement but tend not to be an effective metric for comparison with other utilities due to differences in environment, configuration and customer density. Second, measures of availability and reliability are relative in terms of being sufficient or satisfactory to customers.

2.1. Reliability Indices

Pursuant to OAC 165:35-25-20(b)(2)&(3)

Table 1: SAIDI & SAIFI Values for Oklahoma Service Territory in 2015

TERRITORY	SAIDI	SAIFI
Oklahoma	137	0.87

Table 2: SAIDI & SAIFI Values in 2015 by Oklahoma District

DISTRICT	SAIDI	SAIFI
ADA	132	1.19
ALVA	173	1.02
ARDMORE	182	1.10
BRISTOW	144	1.26
CHANDLER	201	1.30
DRUMRIGHT	392	1.47
DURANT	185	1.42
EAST	131	0.68
EL RENO	135	0.88
ENID	118	0.97
GUTHRIE	85	0.56
HEALDTON	351	1.48
MADILL	181	0.70

DISTRICT	SAIDI	SAIFI
MUSKOGEE	234	1.64
NORTH	151	0.88
PAULS VALLEY	132	0.77
POTEAU	125	0.97
SAPULPA	141	1.11
SEMINOLE	224	1.02
SHAWNEE	107	0.52
SOUTH	113	0.62
SOUTH CENTRAL	48	0.38
SULPHUR	397	2.02
WEST	121	0.92
WEWOKA	360	1.13
WOODWARD	134	1.28

2.2.MAIFI

MAIFI is a measure of the frequency of momentary interruptions (less than 5 minutes). Typically these interruptions are limited to a few seconds due to the operation of protective equipment responding to brief events on a circuit. These blinks are unavoidable on systems designed and operated for high reliability. At the present time technical barriers prevent OG&E from reporting this measure.

2.3.MAJOR EVENTS EXCLUDED FROM INDICES

Pursuant to OAC 165:35-25-20(b)(4)

Table 3: Major Events Excluded in 2015

Date of Event	District (s) Affected	Cause of Event	Customers Affected	Time of Last Restoration	Time (hours)	Longest Outage (Minutes)
03/25/2015	El Reno	Storms, Tornado	2,419	3/27/15 3:00 PM	45	1,670
03/25/2015	South Central	Storms, Tornado	16,065	3/28/15 10:00 AM	64	1,481
03/25/2015	West	Storms, Tornado	15,683	3/27/15 8:00 PM	50	1,083
05/06/2015	South	Storms, Tornado	13,097	5/9/15 11:00 PM	78	1,637
05/06/2015	South Central	Storms, Tornado	12,123	5/9/15 10:00 PM	76	3,169
05/08/2015	Shawnee	Storms, Tornado	2,187	5/9/15 7:00 PM	25	1,507
05/10/2015	Ardmore	Storms, Tornado	5,517	5/11/15 12:00 PM	29	892
05/10/2015	Durant	Storms, Tornado	2,316	5/11/15 5:00 PM	34	705
05/10/2015	Ft Smith	Storms, Tornado	6,864	5/11/15 4:00 PM	38	2,276
05/10/2015	Poteau	Storms, Tornado	2,652	5/11/15 6:00 PM	41	2,001
05/25/2015	Poteau	High Winds, flooding	4,023	5/27/15 1:00 PM	44	2,622
05/27/2015	Muskogee	High Winds, flooding	6,262	5/28/15 5:00 PM	40	2,403
11/27/2015	All Districts	Ice, Wind	198,000	12/6/15 10:00 PM	229	11,800
12/26/2015	All Districts	Ice, Wind	119,500	1/2/16 5:00 PM	176	10,123

2.4.PERFORMANCE LEVELS

Pursuant to OAC 165:35-25-18

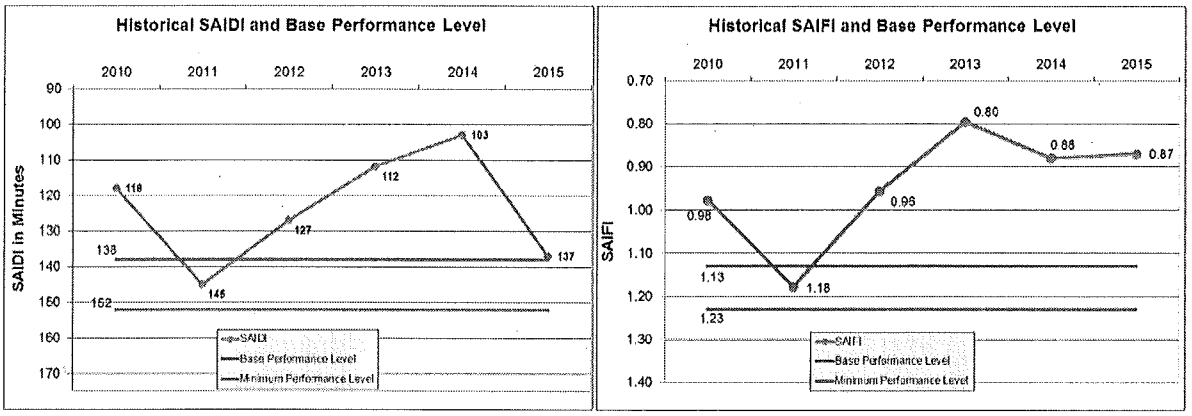
The Commission requests a recalculation of base and minimum reliability performance levels once every five years. The last change, according to OAC rules, occurred in 2015 to govern the reliability reports of 2015 through 2019. At OG&E, the base performance level was recalculated in 2015 using

the mean and standard deviation of the historical performance for the past 13 years beginning in 2002. The performance levels reflect a high degree of confidence that our current reliability maintenance execution is likely to remain at or better than 152 for SAIDI and 1.23 for SAIFI for the next 4 years, ending in 2019. This confidence reflects OG&E's commitment to system reliability and improvement. Table 4 compares the 2015 reliability figures to these performance levels. Furthermore, Figures 2 and 3 show historical reliability performances since these levels were set.

Table 4: Performance Level Comparison of 2015 Indices

Recalculated for 2015	SAIDI	SAIFI
2015 Performance	137	0.87
Base Performance Level	138	1.13
Minimum Performance Level	152	1.23

Figure 2: Historical SAIDI and SAIFI and Base Performance Levels



3. RELIABILITY PROGRAM

The reliability program at OG&E, as outlined in OAC 165:35-25, consists of two major efforts: a vegetation management program, which maintains distribution line clearances to prevent contact

with lines and an annual circuit reliability program, in which the worst 5% of circuits are identified and improved based upon the recommendations of analysts, inspectors and engineers.

3.1. VEGETATION MANAGEMENT PROGRAM

Pursuant to OAC 165:35-25-15(b)&(c)&(d), and OAC 165:35-25-20(b)(1)

Vegetation Management plays a key role in the protection and reliability of power systems. This section constitutes the OG&E vegetation management spending from 2015 and the plan for 2016.

Table 5: Vegetation Management Spending in 2015

Distribution Vegetation Costs	2015 Actual
Distribution Line	$15.1 M
OG&E Distribution Resources*	$1.3 M
Total	**$16.4 M**

*internal labor, vehicles, etc.

3.1.1. ACTIVITIES

Distribution vegetation management activities are performed in four primary ways:

- Cycle clearing
- Scheduled inspection and response clearing
- Non-cycle clearing
- Clearing for new construction or storms

The vegetation management guidelines outline procedures used in performance of these activities (see

Appendix E: Vegetation Management Guidelines). Guidelines include vegetation clearances, approved herbicide application methods and the notification process.

3.1.2 Calendar of Activities

Progress achieved during 2015 can be found in "Appendix C: Vegetation Management - 2015 Summary of Activity." The detailed schedule for 2016 can be found in "Appendix D: Vegetation Management - 2016 Detailed Plan."

3.1.3 Implementation Plan

In 2016, OG&E continues to categorize circuits in two ways:

- Category 1 circuits will continue to be cleared end-to-end on a 4-year cycle
- Category 2 circuits will be inspected for vegetation issues every 4 years and only immediate reliability concerns will be addressed at that time.

OG&E continues to leverage various contract methods to effectively implement the plan and control cost. Lump sum, hourly, and unit price contracting encourage competitive pricing and performance.

A percentage of expenditures are used to address vegetation work off-cycle. Addressing dead trees, cycle-busters (trees or vegetation that outgrow the clearance obtained) and other unscheduled work is often necessary to manage customer satisfaction or enhance the reliability of the system.

This often includes responsive work necessary to make trees safe for private arborists and government entities.

3.1.4 Criteria to Assess Results

The OG&E Vegetation Management Team audits contractor work at the crew level and at the circuit level. Corrective orders are issued to the contractors if deficiencies are noted.

In order to gauge the effectiveness of the Vegetation Management program, OG&E also monitors many reliability indicators or metrics. Adjustments to the schedule may be made to address any reliability issues.

3.1.5 Company Representative knowledgeable about the plan

David Dyke

Manager, Regulatory Relations
and Compliance

PO Box 321 M/C 1212
Oklahoma City, OK 73101

(405) 553-3269

3.2 Circuit Reliability Program

Pursuant to OAC165:35-25-19 and OAC 165:35-25-20(b)(5)

The circuit reliability program is executed annually to improve the reliability of the previous year's worst performing circuits. Five percent of operating circuits are selected using a combined score of both SAIDI and SAIFI. Analysis is performed on each circuit to identify the cause of the poor performance and determine if action is required. Then circuits are inspected and specific work is identified. This work may include tree trimming, protection coordination and equipment replacement.

3.2.1 *Worst Performing Circuits in 2015*

Table 6: Worst Performing Circuits in 2015

RANK	DISTRICT	SUBSTATION	CIRCUIT	CUSTOMERS	SAIDI	SAIFI
1	SULPHUR	5706 LAKE ARBUCKLE	570646	293	3048	9.06
2	SULPHUR	5706 LAKE ARBUCKLE	570621	134	1338	6.20
3	DRUMRIGHT	7629 CUSHING OILFIELD	762949	102	1061	8.03
4	NORTH	8248 SW 5TH ST	824864	876	1264	5.62
5	DURANT	5511 BOKCHITO	551121	870	936	6.58
6	MUSKOGEE	3325 WELLS	332549	1253	1111	4.88
7	SEMINOLE	7320 KOLACHE	732042	265	1505	3.82
8	ENID	4240 DEER CREEK	424046	210	835	5.54
9	HEALDTON	5319 FOX	531922	269	1347	3.47
10	SULPHUR	5708 DAVIS	570822	1123	783	5.13
11	ARDMORE	5907 RUSSETT	590764	2089	843	4.24
12	DRUMRIGHT	7632 OAK GROVE	763221	1276	1444	3.26
13	HEALDTON	5321 WILDHORSE	532122	46	773	4.35
14	DURANT	5508 BROWN OG&E	550861	486	730	4.55
15	HEALDTON	5322 DUNDEE	532222	1351	868	3.59
16	SULPHUR	5708 DAVIS	570821	949	745	4.20
17	WEST	8335 BETHANY	833528	2195	548	6.52
18	ADA	5808 HARDEN CITY	580821	156	843	3.24
19	NORTH	8336 TENNESSEE	833627	1498	606	4.21
20	ARDMORE	5906 TISHOMINGO	590621	1038	570	4.54
21	DRUMRIGHT	7605 DRUMRIGHT	760544	1293	610	3.84
23	CHANDLER	7117 JACKTOWN	711742	977	578	3.93
25	ADA	5807 AHLOSO	580721	218	438	9.04
26	ADA	5813 BYNG SPA	581322	670	567	3.51
27	WEWOKA	7506 SASAKWA	750629	366	1595	2.39
28	ALVA	4528 SALINE	452821	452	557	3.28
29	WOODWARD	4608 WOODWARD DISTRICT	460847	690	459	4.01
30	EL RENO	8921 JENSEN RD	892169	487	812	2.59
31	DURANT	5508 BROWN OG&E	550863	759	533	3.20
32	SHAWNEE	7410 MAUD TAP	741022	310	712	2.78
33	MUSKOGEE	3128 HANCOCK	312824	1991	469	3.36
34	HEALDTON	5322 DUNDEE	532224	0	634	2.75
35	MADILL	5409 LITTLE CITY	540921	742	716	2.43
36	DURANT	5505 DURANT	550522	826	463	3.15
37	DRUMRIGHT	7631 JENNINGS	763121	231	461	2.83
38	MUSKOGEE	3312 CHECOTAH	331222	1858	511	2.55
39	ALVA	4538 GOLTRY TAP	453822	241	365	3.42
40	EAST	8626 TROSPER	862623	520	1648	2.04
41	MUSKOGEE	3325 WELLS	332542	1555	512	2.41
42	WEST	8313 HAYMAKER	831371	1418	505	2.43
43	MUSKOGEE	3327 VIAN [NEW]	332722	984	347	3.46
44	NORTH	8361 WESTERN AVE	836128	923	388	3.07
45	ARDMORE	5907 RUSSETT	590762	16	593	2.27
46	CHANDLER	7118 KEY WEST	711846	604	756	2.14
47	NORTH	8248 SW 5TH ST	824866	2	503	2.33
48	ARDMORE	5122 DILLARD	512223	597	381	2.88
50	ENID	4239 OTOE	423922	181	403	2.54

105 *3.2.2 RELIABILITY PROGRAM RESULTS (2014 WORST PERFORMING CIRCUITS)*

106 **Table 7: Reliability Program Results for 2014 WPCs**

RANK	DISTRICT	SUBSTATION	CIRCUIT	Current Status
1	SOUTH	NORMAN	870523	Designed & Constructed
2	DRUMRIGHT	CUSHING OILFIELD	762949	Designed & Constructed
3	SOUTH	LITTLE AXE	871421	Designed & Constructed
4	SOUTH	CHERRY CREEK	872831	Designed & Constructed
5	ALVA	SALINE	452821	Designed & Constructed
6	SOUTH	NOBLE	872623	Designed & Constructed
7	GUTHRIE	PINE STREET	881424	Designed & Constructed
8	MUSKOGEE	WELLS	332549	Inspected
9	DRUMRIGHT	DRUMRIGHT	760544	Inspected
10	ARDMORE	DILLARD	512264	No inspection required
11	CHANDLER	KEY WEST	711846	Inspected
12	GUTHRIE	PINE STREET	881444	Inspected and Repaired
13	ENID	OTOE	423922	Inspected and Repaired
14	MUSKOGEE	JAMESVILLE	332641	Inspected and Repaired
15	SEMINOLE	BURNETT	731121	Inspected and repaired
16	DRUMRIGHT	PIPELINE	762843	No inspection required
17	DURANT	BODLE	550661	Inspection pending
18	WEWOKA	CROMWELL TAP	751247	No inspection required
19	ARDMORE	RUSSETT	590764	Inspected and Repaired
20	MUSKOGEE	CHECOTAH	331222	Inspected
21	SEMINOLE	KOLACHE	732042	No inspection required
22	ENID	FAIRMONT	415829	Inspected
23	ARDMORE	RUSSETT	590721	Inspected and Repaired
24	CHANDLER	WARWICK	711942	Inspected and Repaired
25	EL RENO	JENSEN RD	892169	Inspected and Repaired
26	ENID	DEER CREEK	424046	Inspected and Repaired
27	ALVA	GOLTRY TAP	453822	Inspected and Repaired
28	SEMINOLE	KOLACHE	732041	No inspection required
29	SHAWNEE	TRIBBEY	741721	Inspected and Repaired
30	MUSKOGEE	AGENCY	313769	Inspected and Repaired
31	WEST	HAYMAKER	831371	Inspected and Repaired
32	SHAWNEE	PEARSON	741221	Inspected and Repaired
33	ENID	DEER CREEK	424048	Inspected and Repaired
34	MADILL	LITTLE CITY	540921	Inspected and Repaired
35	MUSKOGEE	TENNYSON	311422	Inspected and Repaired
36	POTEAU	POTEAU	350522	Inspected and Repaired
37	DRUMRIGHT	JENNINGS	763121	Inspected and Repaired
38	MUSKOGEE	FIVE TRIBES	311129	Inspected and Repaired
39	SOUTH	ROSEDALE TAP	560721	Inspected and Repaired
40	ARDMORE	TISHOMINGO	590621	Inspected and Repaired
41	SEMINOLE	FIXICO	730624	Inspected and Repaired
42	SOUTH	LITTLE RIVER LAKE	870921	Inspected and Repaired
43	NORTH	LONE OAK	830863	Inspected and Repaired
44	WEST	WESTOAKS	829923	Inspected and Repaired
45	SULPHUR	DAVIS	570821	Inspected and Repaired
46	GUTHRIE	CRESCENT	880721	Inspection pending
47	SULPHUR	LAKE ARBUCKLE	570621	Inspected and Repaired
48	ENID	OTTER	435341	Inspected and Repaired
49	ENID	KREMLIN TAP	412321	Inspected and Repaired
50	SOUTH	PAULS VALLEY	560522	Inspected and Repaired

APPENDIX A: RELIABILITY INDICES DEFINITIONS

The following definitions and terms are from the IEEE Guide for Electric Power Distribution Reliability Indices, IEEE Std. 1366-1998. The guide contains other definitions and terms as well as the methodology to calculate reliability indices in a manner that promotes uniformity and consistency among utilities.

SAIFI-System Average Interruption Frequency Index

This index is an indication of how often the average customer experiences a sustained interruption over a defined period of time. Mathematically, this is obtained by dividing the total number of customers interrupted by the total number of customers served.

$$SAIFI = \frac{\sum \text{Total Number of Customers Interrupted}}{\text{Total Number of Customers Served}}$$

SAIDI-System Average Interruption Duration Index

This index is an indication of the total duration of sustained interruptions for the average customer during a defined period of time. It is commonly measured in minutes. Mathematically, this is obtained by dividing the total of all customer interruption durations by the total number of customers served. Customer interruption durations are denoted as 'Customer-Minutes Interrupted,' or CMI.

$$SAIDI = \frac{\sum \text{Customer Interruption Durations}}{\text{Total Number of Customers Served}}$$

CAIDI-Customer Average Interruption Duration Index

CAIDI indicates the average duration of a single sustained interruption. This represents the average time required to restore service.

$$CAIDI = \frac{\sum \text{Customer Interruption Durations}}{\text{Total Number of Customers Interrupted}}$$

The same calculation can be accomplished by dividing SAIDI by SAIFI.

$$CAIDI = \frac{SAIDI}{SAIFI}$$

APPENDIX B: TABLE OF 2015 RELIABILITY INDICES

Table 8: Oklahoma Reliability Indices 2015

REGION		DISTRICT	Interrupted Customers	Customers served	CMI	SAIDI	SAIFI	CAIDI
Reference for Calculations			A	B	C	C/B	A/B	C/A
Metro Region	North	GUTHRIE	10,489	18,631	1,581,577	85	0.56	151
	North	NORTH	116,778	133,168	20,090,373	151	0.88	172
	North Total		**127,267**	**151,798**	**21,671,950**	**143**	**0.84**	**170**
	South	SOUTH	35,079	56,546	6,374,426	113	0.62	182
	South	SOUTH CENTRAL	33,219	88,188	4,198,021	48	0.38	126
	South Total		**68,298**	**144,734**	**10,572,447**	**73**	**0.47**	**155**
	East	EAST	52,354	76,689	10,047,785	131	0.68	192
	East Total		**52,354**	**76,689**	**10,047,785**	131	0.68	192
	West	EL RENO	9,144	10,342	1,391,928	135	0.88	152
	West	WEST	96,705	105,181	12,682,929	121	0.92	131
	West Total		**105,849**	**115,523**	**14,074,857**	**122**	**0.92**	**133**
	Shawnee	SEMINOLE	11,826	11,642	2,607,669	224	1.02	221
	Shawnee	WEWOKA	3,819	3,365	1,213,100	360	1.13	318
	Shawnee	CHANDLER	10,700	8,217	1,655,337	201	1.30	155
	Shawnee	SHAWNEE	11,119	21,552	2,313,204	107	0.52	208
	Shawnee Total		**37,464**	**44,776**	**7,789,310**	**174**	**0.84**	**208**
Metro Region	**Totals**		**391,232**	**533,520**	**64,156,349**	**120**	**0.73**	**164**
South Region	Ardmore	ARDMORE	30,001	27,213	4,955,357	182	1.10	165
	Ardmore	DURANT	20,277	14,274	2,636,678	185	1.42	130
	Ardmore	HEALDTON	8,421	5,678	1,990,442	351	1.48	236
	Ardmore	MADILL	2,718	3,866	699,622	181	0.70	257
	Ardmore	SULPHUR	13,400	6,621	2,626,210	397	2.02	196
	Ardmore	ADA	13,553	11,372	1,501,525	132	1.19	111
	Ardmore	PAULS VALLEY	4,814	6,216	820,155	132	0.77	170
South Region	**Totals**		**93,184**	**75,240**	**15,229,989**	**202**	**1.24**	**163**
Northwest Region	Enid	ALVA	7,031	6,879	1,192,536	173	1.02	170
	Enid	ENID	36,113	37,065	4,369,884	118	0.97	121
	Enid	WOODWARD	13,626	10,606	1,420,209	134	1.28	104
Northwest Region	**Totals**		**56,770**	**54,550**	**6,982,629**	**128**	**1.04**	**123**
Northeast Region	Sapulpa	BRISTOW	4,696	3,731	536,231	144	1.26	114
	Sapulpa	DRUMRIGHT	11,169	7,580	2,973,578	392	1.47	266
	Sapulpa	SAPULPA	30,326	27,231	3,849,688	141	1.11	127
	Sapulpa Total		**46,191**	**38,541**	**7,359,497**	**191**	**1.20**	**159**
	Muskogee	MUSKOGEE	54,205	33,027	7,718,059	234	1.64	142
	Muskogee Total		**54,205**	**33,027**	**7,718,059**	**234**	**1.64**	**142**
Northeast Region	**Totals**		**100,396**	**71,569**	**15,077,556**	**211**	**1.40**	**150**
Arkansas Region	Fort Smith	POTEAU	12,989	13,434	1,676,714	125	0.97	129
Arkansas Region (Oklahoma Only)	Totals		12,989	13,434	1,676,714	125	0.97	129
Oklahoma Region Totals			**654,571**	**751,568**	**103,123,237**	**137**	**0.87**	**158**

APPENDIX C: VEGETATION MANAGEMENT - 2015 SUMMARY OF ACTIVITY

Pursuant to OAC 165:35-25-20(b)(1)

Table 9: Summary of Activity, Vegetation Management 2015

District	Circuit #	Circuit Name	Completion Date	Category	Miles
Muskogee	311024	RIVERSIDE 24	7/24/2015	1	16.41
Muskogee	311421	TENNYSON 21	9/1/2015	1	14
Sapulpa	320929	BIXBY 29	12/31/2015	2	56.84
Sapulpa	321321	BOWDEN 21	8/1/2015	1	25.18
Sapulpa	321329	BOWDEN 29	8/1/2015	2	64.79
Sapulpa	321421	LONE STAR 21	8/1/2015	1	21
Sapulpa	321626	BEELINE 26	10/1/2015	1	26.96
Sapulpa	321628	BEELINE 28	12/31/2015	1	15.47
Sapulpa	322029	KELLYVILLE 29	11/1/2015	2	54.93
Muskogee	331421	PORUM 21	12/31/2015	2	64.93
Muskogee	332542	WELLS 42	12/30/2015	1	32.07
Poteau	350521	POTEAU 21	10/1/2015	1	6.09
Poteau	351421	HEAVENER 21	12/31/2015	1	14.62
Enid	410521	ENID 21	5/1/2015	1	7.76
Enid	410522	ENID 22	3/2/2015	1	2.47
Enid	410621	HEMLOCK 21	5/1/2015	1	14.42
Enid	410622	HEMLOCK 22	7/1/2015	1	15.41
Enid	410623	HEMLOCK 23	9/1/2015	1	18.36
Enid	410624	HEMLOCK 24	9/1/2015	1	18.14
Enid	410722	CLEVELAND AVE 22	12/31/2015	1	10.65
Enid	410724	CLEVELAND AVE 24	12/1/2015	1	8.4
Enid	411222	CHESTNUT 22	7/1/2015	1	18.52
Enid	411929	GLENWOOD 29	6/1/2015	1	5.8
Enid	415322	IMO 22	3/31/2015	2	20.95
Enid	421022	MEDFORD 22	5/11/2015	2	31.96
Woodward	460624	CEDAR AVE 24	10/1/2015	1	30.91
Ardmore	510530	ARDMORE 30	2/25/2015	1	6.96
Ardmore	510622	HARRIS ST 22	11/23/2015	2	53.43
Ardmore	510623	HARRIS ST 23	2/10/2015	1	8.95
Ardmore	510931	ARDMORE WEST 31	1/20/2015	2	41.31
Ardmore	511722	MARIETTA 22	8/21/2015	2	28.97
Pauls Valley	560522	PAULS VALLEY 22	5/9/2015	2	80.43
Pauls Valley	560523	PAULS VALLEY 23	2/2/2015	2	0.76
Pauls Valley	561121	MAYSVILLE 21	6/6/2015	1	13.05

District	Circuit #	Circuit Name	Completion Date	Category	Miles
Pauls Valley	561122	MAYSVILLE 22	8/20/2015	2	47.72
Pauls Valley	561921	RUSH CREEK 21	9/2/2015	1	16.51
Ardmore	512241	DILLARD 41	12/31/2015	2	1.91
Ardmore	512521	LONE GROVE 21	12/29/2015	2	38.03
Healdton	530521	HEALDTON 21	4/29/2015	2	102.52
Durant	550431	BUTTERFIELD 31	1/12/2015	1	2.68
Durant	550502	DURANT 02	12/31/2015	2	0.14
Durant	550521	DURANT 21	1/22/2015	1	2.12
Durant	550523	DURANT 23	7/28/2015	1	3.14
Durant	550622	BODLE 22	9/14/2015	1	7.62
Durant	550626	BODLE 26	6/11/2015	1	12.75
Durant	551221	COLBERT 21	1/26/2015	1	26.83
Sulphur	570521	SULPHUR 21	8/26/2015	2	24.11
Sulphur	570723	MILL CREEK 23	9/11/2015	2	17.95
Sulphur	570822	DAVIS 22	7/15/2015	1	32.18
Sulphur	571262	JOLLYVILLE 62	10/8/2015	2	22.96
Ada	581322	BYNG SPA 22	12/1/2015	2	41.03
Ada	581923	BLUE RIVER 23	5/5/2015	2	32.25
Sulphur	571264	JOLLYVILLE 64	10/6/2015	2	59.58
Madill	590621	TISHOMINGO 21	10/12/2015	1	24.46
Madill	590623	TISHOMINGO 23	12/31/2015	1	1.54
Madill	590764	RUSSETT 64	12/31/2015	2	119.13
Wewoka	720822	CYPRESS 22	6/9/2015	1	26.98
Shawnee	740505	SHAWNEE 05	2/11/2015	1	0.1
Shawnee	740722	REMINGTON 22	2/3/2015	2	10.35
Shawnee	743024	INGLEWOOD 24	9/25/2015	1	17.9
Shawnee	743322	ROCK CREEK 22	3/2/2015	1	12.53
Wewoka	750524	WEWOKA 24	12/31/2015	1	45.89
Bristow	770626	BRISTOW 26	12/31/2015	2	7.94
Metro South	812921	SW 64TH ST 21	9/1/2015	1	10.85
Metro South	812923	SW 64TH ST 23	12/1/2015	1	9.62
Metro South	813221	KENTUCKY 21	11/1/2015	1	15.46
Metro South	814121	SAGE 21	9/1/2015	1	9.2
Metro West	815521	WILL ROGERS 21	12/31/15	2	2.97
Metro West	815721	MACARTHUR 21	12/30/15	2	4.35
Metro South	816322	SOUTHGATE 22	2/28/2015	2	5.17
Metro North	822021	MAY AVE 21	12/31/2015	1	8.53
Metro North	822022	MAY AVE 22	12/31/2015	1	15.73
Metro North	822023	MAY AVE 23	8/5/2015	1	7.32

District	Circuit #	Circuit Name	Completion Date	Category	Miles
Metro North	822121	MERIDIAN 21	5/5/2015	1	4.1
Metro North	822126	MERIDIAN 26	5/5/2015	2	6.62
Metro North	822135	MERIDIAN 35	6/1/2015	2	6.88
Metro West	829729	MORGAN ROAD 29	12/3/2015	2	4.09
Metro North	831235	BELLE ISLE STA 35	6/1/2015	2	4.28
Metro North	831724	SKYLINE 24	6/1/2015	2	1.25
Metro North	831729	SKYLINE 29	6/1/2015	2	5.42
Metro West	832321	RICHARDS 21	1/21/2015	2	6.32
Metro West	833526	BETHANY 26	9/7/2015	1	14.97
Metro West	834033	SILVER LAKE 33	12/3/15	2	1.92
Metro West	838122	DIVISION AVE 22	12/31/15	2	3.16
Metro West	838123	DIVISION AVE 23	12/30/15	2	3.69
Metro North	847429	STONEWALL 29	9/1/2015	1	11.24
Metro East	851926	NE 10TH ST 26	5/21/2015	1	23.68
Metro East	861721	SUNNYLANE 21	12/31/2015	1	4.99
Metro East	861722	SUNNYLANE 22	2/12/2015	1	9.48
Metro South	862621	TROSPER 21	11/1/2015	1	17.98
Metro South	865431	MOORE 31	5/21/2015	1	10.91
Norman	870523	NORMAN 23	7/19/2015	2	0.51
Norman	870629	BOYD 29	2/9/2015	2	9.6
Norman	870821	CEDAR LANE 21	1/14/2015	2	7.36
Norman	870824	CEDAR LANE 24	1/19/2015	2	10.54
Norman	871922	PLEASANT VALLEY 22	4/10/2015	1	4.13
Norman	872122	SPRING HILL 22	9/16/2015	2	7.08
Norman	872229	MILLENNIUM 29	8/5/2015	1	11.48
Norman	872231	MILLENNIUM 31	5/27/2015	1	25.39
Norman	872621	NOBLE 21	11/7/2015	1	10.96
Norman	872623	NOBLE 23	12/8/2015	2	9.01
Norman	872723	STUBBEMAN 23	4/8/2015	2	6.06
Norman	872824	CHERRY CREEK 24	1/13/2015	2	2.1
Guthrie	880623	COTTONWOOD CREEK 23	7/26/2015	1	37.16
Guthrie	881342	FITZGERALD CREEK 42	4/16/2015	1	29.46
Guthrie	881424	PINE STREET 24	5/5/2015	2	17.91
El Reno	890646	SOUTHARD 46	5/1/2015	2	31.87
El Reno	892122	JENSEN RD 22	5/4/2015	1	10.29

APPENDIX D: VEGETATION MANAGEMENT - 2016 DETAILED PLAN

Pursuant to OAC 165:35-25-15

Table 10: Vegetation Management Detailed Plan 2016

District	Circuit Number	Circuit Name	Completion Date	Miles
Muskogee	310921	HONOR HEIGHTS 21	2016	52.74
Muskogee	311021	RIVERSIDE 21	2016	10.26
Muskogee	311022	RIVERSIDE 22	2016	10.56
Muskogee	311023	RIVERSIDE 23	2016	5.54
Muskogee	311025	RIVERSIDE 25	2016	1.49
Muskogee	311624	CALLERY 24	2016	18.31
Muskogee	313624	EUCLID 24	2016	3.46
Sapulpa	320521	SAPULPA 21	2016	20.1
Sapulpa	320524	SAPULPA 24	2016	0.91
Sapulpa	320529	SAPULPA 29	2016	6.11
Sapulpa	320721	HILL TOP 21	2016	2.02
Sapulpa	320723	HILL TOP 23	2016	1.54
Sapulpa	320821	TIBBENS ROAD 21	2016	18.38
Sapulpa	321021	HICKORY HILL 21	2016	21.42
Sapulpa	321323	BOWDEN 23	2016	15.41
Muskogee	332124	ROSS LAKE 24	2016	22.74
Muskogee	332131	ROSS LAKE 31	2016	93.61
Muskogee	332641	JAMESVILLE 41	2016	29.02
Poteau	350621	CAVANAL MTN 21	2016	14.86
Poteau	350622	CAVANAL MTN 22	2016	36.06
Poteau	350821	SPIRO COAL 21	2016	23.14
Poteau	350921	PANAMA 21	2016	32.88
Poteau	350923	PANAMA 23	2016	19.36
Poteau	350941	PANAMA 41	2016	41.96
Poteau	351625	TARBY 25	2016	93.01
Poteau	360821	MULDROW 21	2016	31.67
Poteau	360822	MULDROW 22	2016	0.66
Poteau	360823	MULDROW 23	2016	24.88
Poteau	360824	MULDROW 24	2016	18.53
Enid	410923	WAUKOMIS 23	2016	121.73
Enid	410924	WAUKOMIS 24	2016	88.09
Enid	412321	KREMLIN TAP 21	2016	99.77
Enid	415122	VANCE AFB 22	2016	13.45
Enid	421022	MEDFORD 22	2016	31.96
Enid	435341	OTTER 41	2016	139.78
Enid	441423	HENNESSEY 23	2016	72.63
Enid	441424	HENNESSEY 24	2016	55.57

District	Circuit Number	Circuit Name	Completion Date	Miles
Enid	446123	TURKEY CREEK 23	2016	7.73
Woodward	460946	GLASS MTNS 46	2016	24.2
Woodward	461141	DEWEY 41	2016	94.15
Woodward	461143	DEWEY 43	2016	20.96
Woodward	461621	NEWMAN AVE 21	2016	7.2
Woodward	461641	NEWMAN AVE 41	2016	110.26
Woodward	462329	TANGIER 29	2016	0.24
Ardmore	512222	DILLARD 22	2016	25.12
Madill	541022	GLASSES 22	2016	22.41
Durant	550424	BUTTERFIELD 24	2016	8.6
Durant	550503	DURANT 03	2016	0.99
Durant	550624	BODLE 24	2016	10.55
Durant	551121	BOKCHITO 21	2016	33.75
Pauls Valley	560502	PAULS VALLEY 02	2016	2.44
Pauls Valley	560521	PAULS VALLEY 21	2016	9.4
Pauls Valley	560524	PAULS VALLEY 24	2016	6.44
Pauls Valley	560722	ROSEDALE TAP 22	2016	21.02
Pauls Valley	560821	SHELL ELMORE CITY TAP	2016	34.86
Pauls Valley	561924	RUSH CREEK 24	2016	5.15
Pauls Valley	562021	PRAIRIE POINT 21	2016	34.84
Sulphur	562022	PRAIRIE POINT 22	2016	15.02
Sulphur	570521	SULPHUR 21	2016	24.11
Sulphur	570722	MILL CREEK 22	2016	11.25
Sulphur	570821	DAVIS 21	2016	39.12
Ada	580621	VALLEY VIEW 21	2016	1.42
Ada	580622	VALLEY VIEW 22	2016	15.56
Ada	580623	VALLEY VIEW 23	2016	11.82
Ada	580624	VALLEY VIEW 24	2016	19.8
Ada	580721	AHLOSO 21	2016	9.66
Ada	580722	AHLOSO 22	2016	29.45
Ada	580723	AHLOSO 23	2016	16.93
Ada	580724	AHLOSO 24	2016	18.11
Ada	580821	HARDEN CITY 21	2016	21.03
Ada	581621	PARK LANE 21	2016	23.89
Ada	581623	PARK LANE 23	2016	21.95
Chandler	710421	BELLCOW 21	2016	53.46
Chandler	710423	BELLCOW 23	2016	29.75
Chandler	710431	BELLCOW 31	2016	16.34
Chandler	710442	BELLCOW 42	2016	9.82
Seminole	730624	FIXICO 24	2016	24.11
Seminole	730646	FIXICO 46	2016	34.5

District	Circuit Number	Circuit Name	Completion Date	Miles
Seminole	730647	FIXICO 47	2016	19.58
Seminole	731225	JUMPER CREEK 25	2016	70.55
Seminole	731227	JUMPER CREEK 27	2016	55.98
Seminole	732042	KOLACHE 42	2016	25.83
Seminole	732122	LETHA 22	2016	56.45
Shawnee	743021	INGLEWOOD 21	2016	16.42
Shawnee	743023	INGLEWOOD 23	2016	75.28
Wewoka	750821	EMAHAKA 21	2016	49.73
Drumright	761121	MORRISON TAP 21	2016	30.31
Drumright	762841	PIPELINE 41	2016	0.7
Drumright	762951	CUSHING OILFIELD 51	2016	3.63
Drumright	763221	OAK GROVE 21	2016	60.31
Bristow	770501	NINTH STREET 01	2016	1.08
Bristow	770622	BRISTOW 22	2016	123.95
Metro South	813321	WR AIRPORT 21	2016	9.56
Metro South	813323	WR AIRPORT 23	2016	1.81
Metro West	815521	WILL ROGERS 21	2016	2.97
Metro West	815721	MACARTHUR 21	2016	4.35
Metro West	815862	SARA 62	2016	39.29
Metro South	816328	SOUTHGATE 28	2016	10.05
Metro South	819424	WESTMOORE 24	2016	8.24
Metro North	820673	ROBINSON AVE 73	2016	16.47
Metro North	820921	CLASSEN 21	2016	4.52
Metro North	820922	CLASSEN 22	2016	1.44
Metro North	820923	CLASSEN 23	2016	10.05
Metro North	820961	CLASSEN 61	2016	6.26
Metro North	820965	CLASSEN 65	2016	9.04
Metro North	822024	MAY AVE 24	2016	13.3
Metro North	822124	MERIDIAN 24	2016	7.77
Metro North	822131	MERIDIAN 31	2016	4.46
Metro North	822133	MERIDIAN 33	2016	4.8
Metro West	822221	CZECH HALL 21	2016	3.23
Metro West	822222	CZECH HALL 22	2016	3.13
Metro West	822223	CZECH HALL 23	2016	3.22
Metro West	822224	CZECH HALL 24	2016	8.69
Metro West	824524	COUNCIL 24	2016	9.43
Metro West	824526	COUNCIL 26	2016	5.64
Metro West	824529	COUNCIL 29	2016	6.75
Metro West	824533	COUNCIL 33	2016	15.84
Metro West	826629	MUSTANG STA 29	2016	0.67
Metro West	829731	MORGAN ROAD 31	2016	10.11

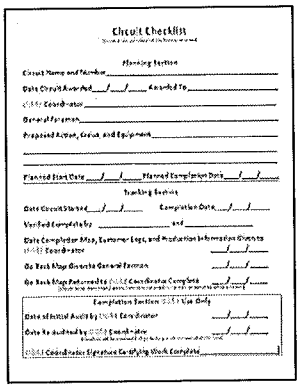
District	Circuit Number	Circuit Name	Completion Date	Miles
Metro West	829929	WESTOAKS 29	2016	6.69
Metro North	830863	LONE OAK 63	2016	2.54
Metro North	830866	LONE OAK 66	2016	10.63
Metro North	830869	LONE OAK 69	2016	8.45
Metro North	831221	BELLE ISLE STA 21	2016	8.7
Metro North	831224	BELLE ISLE STA 24	2016	2.37
Metro North	831231	BELLE ISLE STA 31	2016	5.24
Metro North	831722	SKYLINE 22	2016	8.25
Metro North	831731	SKYLINE 31	2016	3.87
Metro North	832227	THIRTY EIGHTH ST 27	2016	7.29
Metro North	833627	TENNESSEE 27	2016	3.64
Metro North	833628	TENNESSEE 28	2016	4.33
Metro North	833631	TENNESSEE 31	2016	10.77
Metro North	833635	TENNESSEE 35	2016	8.97
Metro North	833721	EIGHTY FOURTH ST 21	2016	8.26
Metro North	833722	EIGHTY FOURTH ST 22	2016	11.41
Metro North	833921	TULSA AVE 21	2016	2.97
Metro North	833924	TULSA AVE 24	2016	7.02
Metro North	833926	TULSA AVE 26	2016	9.69
Metro West	834022	SILVER LAKE 22	2016	2.62
Metro West	834026	SILVER LAKE 26	2016	6.24
Metro West	834028	SILVER LAKE 28	2016	3.58
Metro West	834029	SILVER LAKE 29	2016	2.94
Metro West	834031	SILVER LAKE 31	2016	5.67
Metro West	834033	SILVER LAKE 33	2016	1.92
Metro West	834035	SILVER LAKE 35	2016	4.07
Metro West	834223	BRADEN PARK 23	2016	4.23
Metro North	834721	WILSHIRE 21	2016	7.38
Metro North	834723	WILSHIRE 23	2016	10.62
Metro North	834724	WILSHIRE 24	2016	8.31
Metro North	835221	QUAIL CREEK 21	2016	2.7
Metro North	835222	QUAIL CREEK 22	2016	3.83
Metro North	835223	QUAIL CREEK 23	2016	2.02
Metro North	835224	QUAIL CREEK 24	2016	2.95
Metro North	835229	QUAIL CREEK 29	2016	0.92
Metro North	835231	QUAIL CREEK 31	2016	3.69
Metro West	835921	YUKON 21	2016	5.35
Metro West	835923	YUKON 23	2016	16.98
Metro West	835924	YUKON 24	2016	8.44
Metro West	836021	WOODLAWN 21	2016	14.1
Metro West	836024	WOODLAWN 24	2016	23.39

District	Circuit Number	Circuit Name	Completion Date	Miles
Metro North	836122	WESTERN AVE 22	2016	5.08
Metro North	836123	WESTERN AVE 23	2016	9.21
Metro North	836125	WESTERN AVE 25	2016	10.24
Metro North	836126	WESTERN AVE 26	2016	4.68
Metro North	836128	WESTERN AVE 28	2016	8.06
Metro West	836521	LAKESIDE 21	2016	10.17
Metro West	836522	LAKESIDE 22	2016	7.78
Metro West	836523	LAKESIDE 23	2016	6.49
Metro West	838121	DIVISION AVE 21	2016	9.51
Metro West	838122	DIVISION AVE 22	2016	3.16
Metro West	838123	DIVISION AVE 23	2016	3.69
Metro North	843022	REMINGTON PARK 22	2016	16.68
Metro North	843024	REMINGTON PARK 24	2016	5.92
Metro East	843422	DEEP FORK 22	2016	36.23
Metro East	845821	GREEN PASTURES 21	2016	41.45
Metro East	845822	GREEN PASTURES 22	2016	41.62
Metro East	845824	GREEN PASTURES 24	2016	64.18
Metro East	846421	BRYANT 21	2016	28.7
Metro North	846921	MEMORIAL 21	2016	9.48
Metro North	846922	MEMORIAL 22	2016	16.25
Metro North	846924	MEMORIAL 24	2016	4.81
Metro East	846963	MEMORIAL 63	2016	7.93
Metro North	847422	STONEWALL 22	2016	13.46
Metro North	847431	STONEWALL 31	2016	6.8
Metro North	850623	PARK PLACE 23	2016	3.15
Metro North	850623	PARK PLACE 23	2016	3.15
Metro North	851101	TWENTY FIRST ST 01	2016	3.88
Metro East	851931	NE 10TH ST 31	2016	17.24
Metro East	851933	NE 10TH ST 33	2016	9.21
Metro North	853621	WASHINGTON PARK 21	2016	23.97
Metro North	853624	WASHINGTON PARK 24	2016	7.75
Metro East	861723	SUNNYLANE 23	2016	6.58
Metro East	861724	SUNNYLANE 24	2016	6
Metro South	862022	LIGHTNING CREEK 22	2016	14
Metro East	862171	DRAPER LAKE 71	2016	170.05
Metro East	865023	GLENDALE 23	2016	10.38
Metro East	865029	GLENDALE 29	2016	10.87
Metro South	865422	MOORE 22	2016	9.66
Metro East	866221	SE 15TH ST 21	2016	8.15
Metro East	866224	SE 15TH ST 24	2016	23.12
Norman	870771	WILKINSON 71	2016	65.77

District	Circuit Number	Circuit Name	Completion Date	Miles
Metro South	871721	TURNER 21	2016	4.72
Norman	872123	SPRING HILL 23	2016	7.37
Norman	872323	INDIAN HILL 23	2016	10.38
Norman	872724	STUBBEMAN 24	2016	12.2
Norman	872729	STUBBEMAN 29	2016	8.1
Norman	872731	STUBBEMAN 31	2016	10.52
Guthrie	880624	COTTONWOOD CREEK 24	2016	37.93
Guthrie	881921	LIBERTY LAKE 21	2016	52.79
Metro North	888850	EDMOND DIST	2016	0.16
Metro North	888851	EDMOND DIST	2016	0.07
Metro North	888853	EDMOND DIST	2016	0.1
Metro North	888854	EDMOND DIST	2016	0.18
Metro North	888855	EDMOND DIST	2016	0.13
Metro North	888856	EDMOND DIST	2016	0.22
Metro North	888857	EDMOND DIST	2016	0.18
Metro North	888858	EDMOND DIST	2016	0.09
Metro North	888859	EDMOND DIST	2016	0.07
Metro North	888861	EDMOND DIST	2016	0.14
Metro North	888862	EDMOND DIST	2016	0.32
Metro North	888864	EDMOND DIST	2016	0.33
Metro North	888881	EDMOND DIST	2016	0.41
Metro North	888882	EDMOND DIST	2016	1.57
Metro North	888883	EDMOND DIST	2016	0.67
Metro North	888884	EDMOND DIST	2016	0.49
Metro North	888886	EDMOND DIST	2016	0.16
Metro North	888887	EDMOND DIST	2016	0.47
Metro North	888888	EDMOND DIST	2016	1.82
El Reno	890521	EL RENO 21	2016	24.87
El Reno	890647	SOUTHARD 47	2016	82.41
El Reno	890649	SOUTHARD 49	2016	79.28
El Reno	890701	CANTON 01	2016	4.07
El Reno	890702	CANTON 02	2016	8.8
El Reno	890847	ROMAN NOSE 47	2016	157.61

APPENDIX E: VEGETATION MANAGEMENT GUIDELINES

The purpose of these guidelines is to outline OG&E line-clearance procedures. In order to assure OG&E and its' customers safe, reliable electric service, the following guidelines should be practiced. OG&E's goal is to maintain good customer relations and balance this with efficient and effective line clearance. These guidelines are not to be reproduced or distributed without OG&E's written permission. These guidelines are not to supersede (replace) any contractual agreements between OG&E and Contractor.


Circuit Checklist

Planning Section

Circuit Name and Number _____

Date Circuit Awarded ___/___/___ Awarded To _____

Coordinator _____

General Foreman _____

Proposed Action, Crew, and Equipment _____

_____

_____

Planned Start Date ___/___/___ Planned Completion Date ___/___/___

Tracking Section

Date Circuit Started ___/___/___ Completion Date ___/___/___

Verified Complete by _____ and _____

Date Completion Map, Customer Logs, and Mitigation Information Given to Coordinator ___/___/___

Go Back Map Given to General Foreman ___/___/___

Go Back Map Returned to Coordinator Complete ___/___/___

Completion Section: For Use Only

Date of Initial Audit by Tree Crew Inspector ___/___/___

Date to Audited by Coordinator ___/___/___

Coordinator Signature Certifying Work Complete _____

PLANNING AND REPORTING

BIO SHEETS

Circuit Bio Sheets shall be completed and submitted to appropriate coordinator before beginning any cycle work on a circuit.

Circuit Completion: Contractor shall have at least 2 representatives sign off on circuit completion before submitting the circuit as complete to the appropriate coordinator.

CIRCUIT LETTERS

Before beginning cycle work on a circuit, contractor shall request Circuit Letters to be sent. This request shall be done by e-mail to the appropriate Coordinator and shall be copied to the OG&E Forester or Administrator. Requests for Circuit Letters shall be sent at least 5 business days prior to starting work on a circuit.

CONTRACTOR REPORTING REQUIREMENTS

1. The Contractor shall supply production data in an electronic format with invoicing unless otherwise agreed upon by contractor and OG&E.

   Production Data shall be reported (by circuit and week-ending date) as follows:

   - Removals — Every tree over 4" DBH is considered 1 unit
   - Trims — Every tree over 4" trimmed is considered 1 unit
   - Brush Cut/Spray — 30 linear feet is considered 1 unit (drip line to drip line)
   - Herbicide — See "Herbicide – reporting"
   - Man Hours — # Man hours including supervisor &/or general foreman
   - Giraffe — Measured in Footage
   - Mowing — Measured in Acreage (+ Start/Stop GPS Coordinates)

2. The Contractor shall supply information to OG&E upon request and aid in the preparation of required reports to the jurisdictional agencies of OG&E.

3. For Cycle Work, Contractor shall provide written progress reports on a monthly basis to the appropriate OG&E coordinator and copy VM Supervisor.
4. Contractor shall submit customer contact log sheet with each circuit completed.
5. Crew caused outages, incidents, and accidents shall be reported as they occur. Incident specific reporting forms may be supplied for completion.

PRUNING METHODS

PROPER PRUNING TECHNIQUE

Proper pruning techniques shall be utilized. These proper pruning techniques are recommended by nationally recognized arboricultural associations and practiced throughout the utility industry. For detailed information and illustration on these pruning techniques reference Dr. Alex Shigo's Pruning Trees Near Electric Utility Lines booklet or the ISA's Best Management Practices "Utility Pruning of Trees."

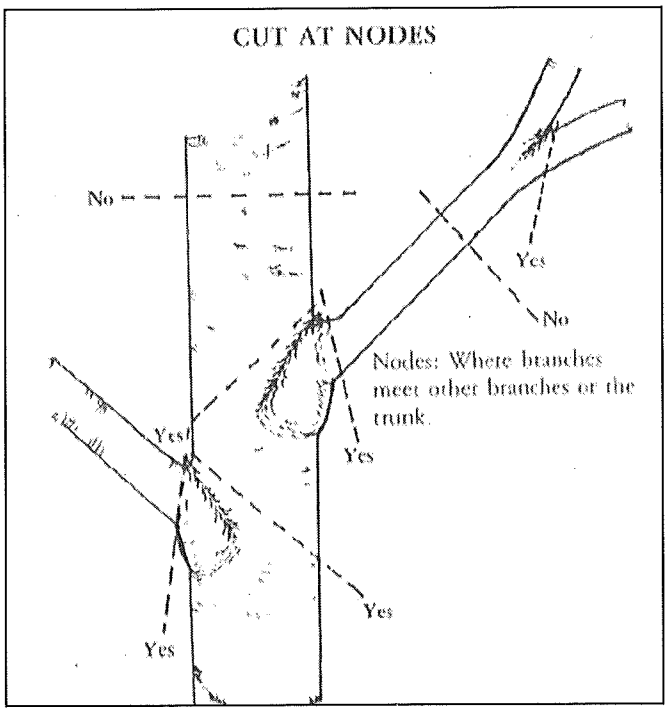
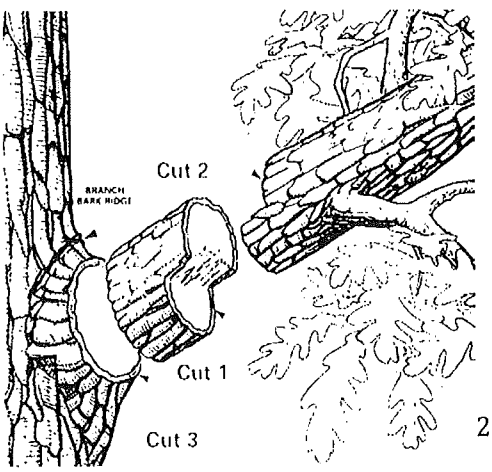


Figure 1: Proper Pruning Cuts

The Contractor shall perform in accordance with the recognized principles and practices of the ANSI 300 Standards, and applicable Federal, state and local laws, rules, regulations and ordinances.

TREE APPEARANCE

Safe, reliable electric service is the primary goal. As such, consideration is given first and foremost to achieving guideline clearance (see Table 1: Guideline Clearances). The arborist should next consider tree health. Proper pruning methods should be used at all times. In situations where customers are not in complete agreement with the directional pruning practices, proper pruning methods should be followed unless instructed otherwise by OG&E.



Branch hangers shall be removed from trees.

Figure 2: 3-Cut method

Use the 3 cut method to avoid peels and ensure the collar remains intact.

CLEARANCES FOR DISTRIBUTION LINES

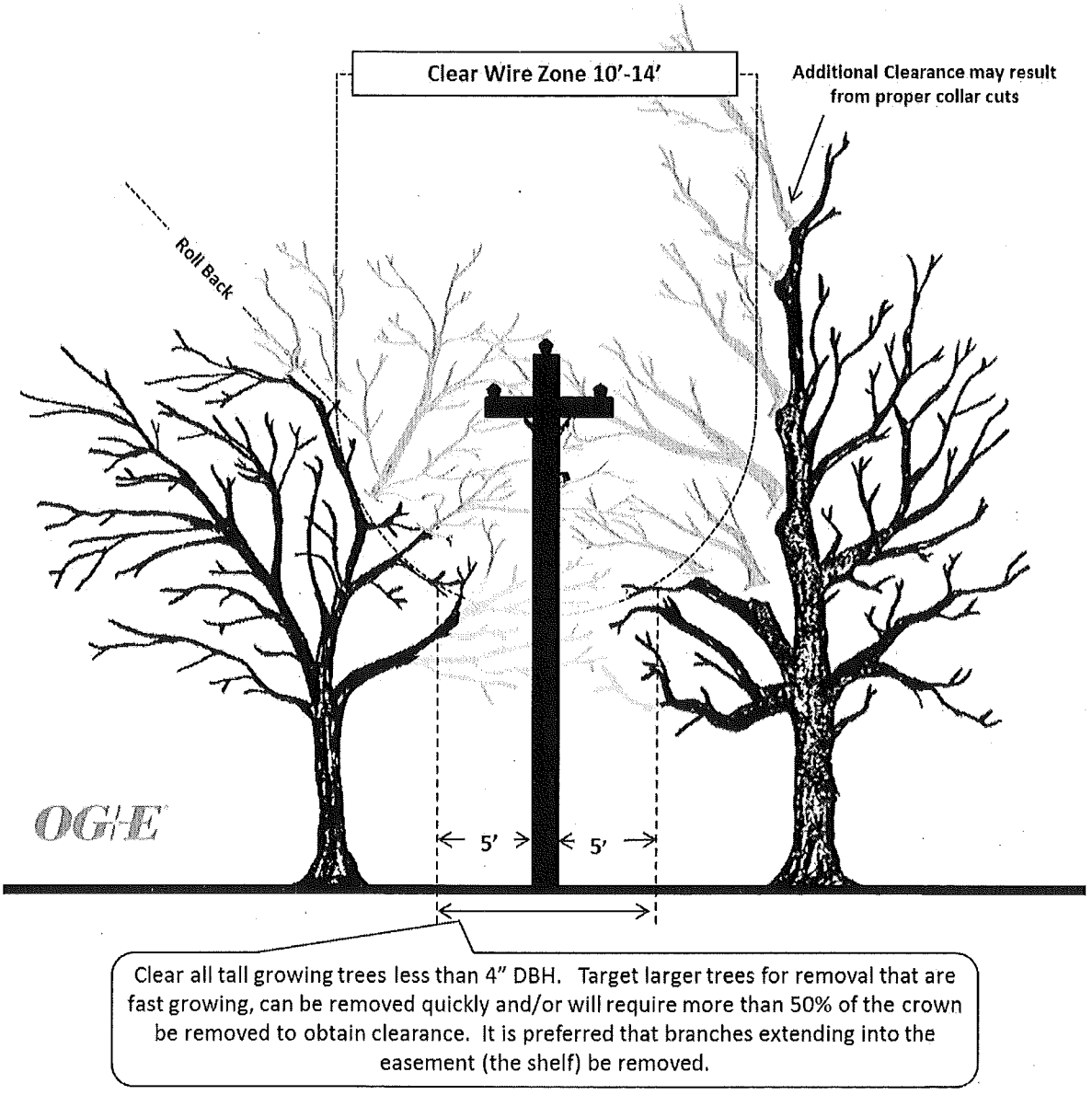
It is essential that good judgment be used in obtaining proper clearance. Consult the following table. Voltage, construction, tree species, and the proximity of the tree to overhead facilities shall be considered when determining the proper clearance. If there is no proper lateral cut at the required clearance guideline, limbs should be pruned back to the next proper lateral cut.

Table 1: Guideline Clearances

Guideline Clearances	
Primary (2.4 - 34.5 kV)	**Clearance**
Fast Growing Trees	10' Minimum 14' Preferred
Slow Growing Trees	10' Minimum*
Overhanging Limbs	Clear above wire zone and roll tops back
Secondary (120-480V)	**Clearance**
Pole to Pole Open Wire Secondaries	10' Minimum*
Pole to Pole SAC or Wrapped Sec.	6' Minimum*
Services & Street Wire Duplex	when necessary to relieve contact – 2'
Other	**Clearance**
Equipment & Switch Poles	10' Minimum
Non-Equipment Poles	6' Minimum
System Neutral	6' Minimum*
Guy Wires	2' or as necessary to avoid contact

* Clearances as low as 3' may be acceptable in cases where the tree is very slow growing or has come as close as can be reasonably expected for the species and conditions.

Figure 2: Clearing the Wire Zone and Floor



OTHER CLEARANCES

It is essential that good judgment be used in obtaining proper clearance. Refer to the items listed below.

Service Drops

Vegetation that presents an immediate potential hazard to service drops should be pruned. These immediate hazards may include:

Limbs laying directly on service drop putting strain on wires (no slack in wires).

Limbs rubbing on wires or pushing bare service wires together.

Broken limbs on or directly above service.

Limbs that may cause an outage before next trim cycle

Generally, it is the responsibility of the customer to maintain their service drop from the meter point to the first pole.

Utility Poles
Trees, vines and brush should be pruned, removed and/or treated around all OG&E poles. (See Table 1: Guideline Clearances) Vines shall be removed up to 6-7' high) and the base of the vines treated with an OG&E approved herbicide. No attempt should be made to remove vines from the pole above 8 feet high.

Street and Security Lights
Pruning should be limited to preventing limbs from damaging the light or electric wires feeding the light. Vegetation should not be trimmed for illumination of the customers' premises. This is the customers' responsibility. Vegetation around street lights may be pruned to illuminate the roadway if requested by a city or town.

Street Light Circuits
Street light conductors that are connected to or in the vicinity (generally within one block) of the distribution line circuit being trimmed shall be cleared.

Proper clearance on street light circuits should be determined by the type of circuit conductor. (See Table 1: Guideline Clearances)

Guy Wires (Anchor Wires)
Guy wires (both overhead and down guys) should be cleared of any limbs, vines, brush or trees that would cause damage, strain or displacement. (See Table 1: Guideline Clearances) Vines shall be removed up to 6-7' high) and the base of the vines treated with an OG&E approved herbicide. No attempt should be made to remove vines from the anchor wires above 8 feet high.

Overhanging Limbs
Limbs overhanging primary conductors will be removed. This includes directional pruning of the upper portion of the Tree. There will be no limbs encroaching into the wire zone above the primary conductors.

REMOVALS

VEGETATION TO BE CONSIDERED FOR REMOVAL

If possible, incompatible vegetation should be treated with an herbicide and left standing per *6. Herbicide/Notification*. If treatment is not an option, trees, brush, vines, etc., growing directly under or on the distribution circuit should be removed if one or more the following applies:

1) Large or Medium variety volunteer tree smaller than 8" DBH
2) Tree violates conductor clearance and can be removed as quickly as it can be pruned.
3) Fast growing tree (cycle buster) that trim clearance may not prevent outages between clearing cycles.
4) When proper line clearance will result in the removal of more than one half the Tree.
5) It violates the guideline clearance for poles or anchors (Table 1: Guideline Clearances)

NOTIFICATION

A signed agreement is required from the property owner, OG&E representative, or other land authority for trees greater than 8 inches DBH or trees more than 5' from center.

Vegetation may be removed by notification ONLY, provided:

1) It is volunteer vegetation less than 8 inches DBH, and
2) Has no aesthetic or ornamental value, and
3) Is located within 5 ft. from the utility pole center line.

All vegetation that is removed shall be cut as close to ground level as possible. The stumps are not to be removed unless otherwise specified and **shall be treated with an approved herbicide** with dye indicator that is visible after treatment.

HERBICIDE

The following guidelines are for Herbicide application on OG&E's distribution System. Any question concerning interpretation of the guidelines shall be addressed by the Coordinator assigned to the area where work is being performed.

COVERAGE

The expected coverage area for herbicide application is to include the previous width of any mechanical or manual clearing and/or within 10' of centerline. The target application shall be as follows:

a) Large variety volunteer vegetation less than 8' in height and within 10' of the utility pole center-line.
b) All volunteer vegetation within 10' of poles that may impede access or increase fire risk.
c) Vines on poles or structures – vines shall be removed 6-7' from ground and treated at source.

NOTIFICATION

Customer notification for Herbicide Application is similar to pruning and removal work. Standing vegetation may be treated after *reasonable notification effort,* provided:

1) It is volunteer vegetation less than 4 inches DBH,
2) Has no aesthetic or ornamental value,
3) Is located within 10 ft. from the utility pole center – line, and
4) Is 8' tall or less.

Written permission shall be requested from the property owner, OG&E, or other land authority for trees, vines or other vegetation that do not meet these criteria.

COMPLIANCE

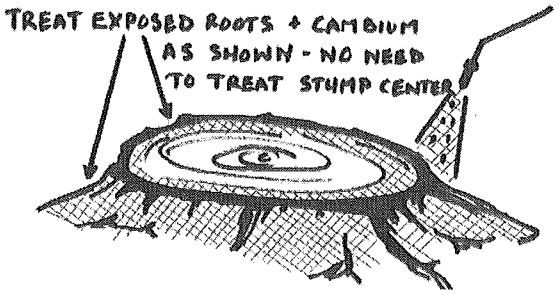
Only OG&E approved herbicides shall be used. Contractor is responsible for obtaining appropriate permits and/or agreements where appropriate.

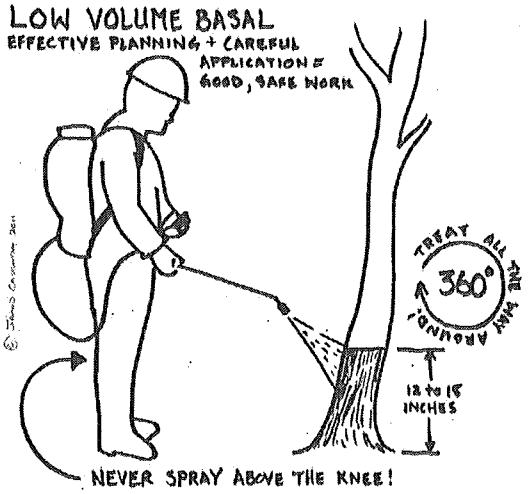
The applicator shall consider conditions, such as temperature, winds, sensitive vegetation in the immediate area and intertwining root systems when making any herbicide application and do their utmost to avoid off target damage.

APPLICATION OF SYSTEMIC HERBICIDES

Cut Stump

The low-volume basal mix with Garlon 4 Ultra may be used for Cut-Surface applications. Stump treatments provide excellent control of woody plant root systems. Application is made by treating the exposed cambium area next to the bark. It is important to treat the entire circumference of the tree!





Low Volume Basal

- Low-Volume Basal applications work best for control of relatively young trees that have smooth bark and few basal stems.
- Application can be made anytime during the year. Best results occur during the spring-summer growing season. The use of low-volume basal is very attractive during the dormant season (winter) because leaves simply don't come back out in spring.
- Never apply in snow or rain or when the bark of the tree is wet.

POLICING JOB SITE

Contractor shall be responsible for the condition of the job site through completion. All waste and debris (wood chips, wood, chemicals, and chemical containers) generated in clearance work shall be disposed of in compliance with all applicable governmental laws and ordinances. Crew members should take special care to avoid littering and are encourage to police the refuse of others to encourage good community relations.

BRUSH

Brush shall not be left on a customer's property (front yard or back yard). If it exceeds more than 1 working day, written permission must be obtained from the property owner. (Example: Brush cut on Friday must be removed from customer's property if crew will not return until Monday unless contractor gets signed permission from customer). Brush shall not be left on road or street rights-of-way or utility rights-of-way.

WOOD

Wood may be cut to firewood length and stacked neatly for the customer unless otherwise specified by OG&E or by agreement with the landowner.

NEW BUSINESS, REBUILDS JOBS, SPECIAL TRIM REQUESTS

NEW BUSINESS

OG&E shall obtain required easements, rights of way, permits or customer permission for requested Vegetation Management.

If a request for work by OG&E does not contain sufficient information as to the easements, rights of way, permits or customer permission, notice shall be given to the appropriate OG&E representative and no work shall be commenced until such easements, rights of way, permits or customer permission is obtained. Staking of the job location by OG&E shall be completed before work commences.

EXTERNAL REQUESTS

Requests from customers to trim or clear trees "off-cycle" should be pushed to the next scheduled cycle trim except in the following situations:

- Trees smoking, sparking, arcing or threatening life should be worked
- Tree threatens OG&E facilities or safety of public
- Tree must be made safe for non-oge work, i.e. "make-safe."
- Community Relations (i.e. city, county, goodwill) should be considered, and must be approved by Coordinator 1st.

MAKE-SAFES

When OG&E receives a request from a customer, public entity or private tree contractor to assist in the removal of vegetation near power lines, if possible OG&E personnel will disconnect and temporarily remove service lines and reconnect the lines after the customer's arranged work is complete. If the vegetation to be removed involves power lines that cannot easily be dropped, only the vegetation necessary to "make-safe" the power lines shall be removed. Any brush resulting from the "make-safe" will be the responsibility of the customer.

REPORTING

For Non-cycle Work, completed tickets shall be resolved and/or noted and sent to the appropriate OG&E's Coordinator weekly.

When working outages, requests for tree work must be accompanied with an SAP# for each call.

STORM DAMAGE BRUSH

All brush that is cut from a tree that is dead, has been uprooted, sustained any act of nature damage or received any kind of outside damage will be the customers' responsibility. Owner or its Contractor will work only to safeguard the line, i.e. removal of hazardous limbs or drop the lines for the customer may be necessary.

CUSTOMER RELATIONS

Customers shall be treated courteously at all times and their property respected. Negative discussion with the customer shall be avoided.

NOTIFICATION

For cycle work, circuit letters shall first be requested per Section 2: Planning and Reporting.

Notification may take the form of door cards, phone calls or personal contact. The contractor

OAC 165:35 CORPORATION COMMISSION

When trimming trees and trimming or removing other vegetation in electric line right-of-way maintenance in urban areas, the utility shall make a reasonable attempt to contact the landowner, customer, or tenant at a minimum of twenty-four (24) hours prior to beginning work on the property. In rural areas the utility shall make a reasonable attempt to contact the landowner, customer or tenant, if known, a reasonable time prior to beginning work on the property. This contact may take the form of a written notice delivered to the landowner's, customer's, or tenant's residence; a telephone call to the landowner, customer, or tenant; or an in-person contact. Reasonable effort shall be made by the utility to accommodate a landowner's, customer's, or tenant's desire to be present when work is done on his or her property. Vegetation management related to emergency repairs is exempt from this notification requirement

[Source: Added at 21 Ok Reg 2093, eff 7-1-04]

may proceed with approved line clearance work 48 hours after the customer has been notified of the work to be completed. Contractor shall maintain a customer notification log that documents the date and location (street names or section of circuit) of notification. If the Contractor desires to start a crew on a circuit ahead of the 48 hrs notification, only properties where the customer has been personally notified may be worked. A customer notification log will be turned in to the OG&E Coordinator when notification of a circuit is complete or in such situations as OG&E may require evidence of notification. (See Figure 3: OCC Rule 165:35)

CUSTOMER

In some circumstances, a customer may object to guideline clearance. Good judgment shall be used to communicate the importance of obtaining proper line clearance with the customer. After 3 or more unsuccessful attempts at resolution, the appropriate OG&E representative shall be contacted. Timely written documentation, including date, name and address of the customer and description of situation should be provided.

CUSTOMER COMPLAINTS OR DAMAGE CLAIMS

Contractor shall resolve all complaints or damage claims at its expense within one week of receiving notice of the incident/claim. If Contractor is unable to resolve the claim within one week, the Contractor shall submit to OG&E a weekly written report describing the status of the unresolved complaint or claim and any other information requested by OG&E. Failure to resolve complaints in a timely manner and/or update OG&E with a status report may result in OG&E resolving the claim to their satisfaction and reducing future compensation to the contractor for costs associated with the resolution of the claim.

COMPENSATION

1. No payment shall be claimed for inoperative tools or equipment.
2. Equipment maintenance is to be performed on the Contractor's time and not at the expense of Owner. This is to include engine tune-ups, oil changes, changing of chipper blades and cutter bars and washing and waxing of vehicles. Minor equipment maintenance, such as the sharpening of saws or pruners and blowing out filters may be performed on Owners' time during Normal Working Hours.
3. Initial daily fueling of vehicles and equipment is to be done on Contractor's time before or after Normal Working Hours. Refueling of equipment may be done on Owners' time during periods of extended working hours.
4. Cycle Work
    a. No payment shall be made for corrective work performed on a circuit which is within the previously performed Cycle Work.
    b. Owner shall not be charged extended rates for Cycle Work unless otherwise approved.
5. Corrective Work (Go-backs) shall be completed with 2 weeks of notification.

DEFINITIONS

TYPE OF WORK

Customer Requested Work - work performed as a result of a request from OG&E customers, public or municipal groups, third parties which are not OG&E customers and which enhances the reliability of the system performance.

Vegetation Management - means the implementation and performance of Cycle Work and the performance of Non-Cycle Work to accomplish the trimming, control and removal of vegetation from the distribution system.

Work – the services to be performed.

Cycle Work - scheduled Vegetation Management Work.

Non-cycle Work - all work other than Cycle

Normal Work Hours (Standard Time) - the hours between 6:00 am and 9:00 pm seven days per week for Cycle and Non-Cycle Work except for emergencies and/or storm work at the Contractor's discretion provided Contractor obeys local ordinances. Owner reserves the right to change normal work hours.

Cycle - The time interval between scheduled line clearance events within a designated area.

TREE REFERENCES

Branch Collar - Rings of wood with living cells about the bases of branches. The collar is a place where bark and wood of branch and trunk come together (nodes). This is the area of the branch protection zone that compartmentalizes or grows a callus in response to trimming.

Callus - Hardened tissue that compartmentalizes a damaged or cut portion of a woody stem.

DBH – Diameter at Breast Height. Tree diameter taken at chest height or at 48 inches above the ground.

Mature Height - The maximum expected height for a particular tree species.

Tree Growth - The amount of growth that tree limbs will produce in a specified period of time.

Re-growth – The amount of growth expected between line clearance trimming events.

Pruning – Selective removal of branches to control the direction of growth and obtain line clearance.

Flush Cuts - Improper pruning cuts that remove the branch collar where the branch protection zone forms. Flush cuts should be avoided.

Peel – Damage occurring on the underside of a cut primarily caused by failure to use 3 cut method. Peels result in damage to the branch collar and should be avoided.

Natural Target Pruning - Pruning as close as possible to the branch collar without injuring or removing the branch collar.

Overhang - Tree limbs that extend over the conductors.

Removal - Any tree and/or brush which is cut as close as possible to ground level but does not necessarily include stump removal. Removal includes the application of an OG&E approved herbicide to the cut surface of the stump.

Round Over – The shearing and shaping of a tree in such a way that a uniform line is established. Also called a "hat-rack". Round overs are to be avoided.

Stubs - Limbs that are cut between nodes (branches) leaving branch stubs. Stub cuts are to be avoided

"V"-Cut - Removal of branches within the crown to allow conductors to pass through the tree.

Make-Safe – Trimming only that portion of a tree necessary to make the tree safe for a 3rd party to work it near power lines (10'). Typically on dead trees or trees someone may want to remove. All brush and debris is the responsibility of the party requesting the make safe.

Brush - Any undesirable woody vegetation less than four inches DBH (diameter breast height) and usually less than 15 feet tall.

Tree - A woody plant (4 inches DBH or greater), distinguished from a shrub by having comparatively greater height and, characteristically, a single trunk rather than several stems.

Unit - a single tree or a specified measure of linear feet of brush (30 linear feet) trimmed, removed and/or treated with herbicide)

Vegetation - means trees and/or brush, vines

HERBICIDE

Herbicide - A Vegetation Management tool that allows control of unwanted brush, trees, grass and weeds.

Basal Application Method - Selective application of a herbicide to the base of individual stems of trees, vines and/or brush using a sprayer under low pressure. Typical procedure at OG&E is to use Low Volume Basal Applications.

Foliar Application – Broadcast method of herbicide application to foliage of trees/brush.

Stump Treatment Method - Herbicide applied to the cut surface or root collar of a stump (Tree or Brush) after removal.

PRIMARY AND SECONDARY VOLTAGES

Secondary Conductor – On the OG&E system, a secondary conductor is a wire that carries (or the potential to carry) up to 480 volts.

Primary Conductors - On the OG&E system, a primary conductor is a wire that carries (or the potential to carry) a phase to ground voltage from 2.4 kV (2400 volts) of electricity up to 19.9 kV (19,920 volts) of electricity.

CLEARANCE AND TYPES OF CONDUCTORS

Wire Zone - The minimum clearance for maximum conductor voltage on each side of conductor plus the space occupied by the conductor. (See Table 1: Minimum Clearance on Page)

Clearance - The distance from the conductor to the part of the tree that will interfere with, or grow into the conductor. (See Table 1: Minimum Clearance)

Conductor - A wire that has a potential to carry electrical current.

Guy Wire - Cable(s) used to hold utility poles in proper alignment. Guy wires can extend from a pole to an anchor or extend from one structure to another.

Secondary Conductors – 480V or less. Includes Open Wire Conductors, SAC cable, street light conductor, security light drop and service drops.

Open Wire Secondary – Racked conductors that are bare or shielded and normally spaced on 12 inch centers.

Primary Neutral – In OG&E's system, a primary neutral is where the neutral conductor and a primary voltage conductor reside on the same pole.

SAC Cable – Wrapped secondary conductor that may be utilized in place of open wire secondary conductors.

Service Drop – The last span of secondary conductor before the meter.

GROWTH CHARACTERISTICS OF TREES

Low Growing Tree – A tree species (or shrub) with growth characteristics such that it will not normally exceed 15 ft. in height at maturity.

Tall Growing Tree – A tree species with growth characteristics such that it will normally exceed 15 ft. in height.

Slow Growing Tree – A tree species with annual re-growth of less than 4 ft. per growing season. Includes: Cedars, hard maples, fruit trees, white oaks, magnolia, pine, and etc.

Fast Growing Tree –A tree species with annual re-growth exceeding 4 ft. per growing season. Includes: Ash, Ailanthus, Boxelder, Black Gum, River Birch, Catalpa, Cottonwood, Elms, Hackberry, Locust, Silver Maple, Mulberry, Slash Pine, Osage Orange, Pecan, Persimmon, Poplar, Red Oak, Sweetgum, Sycamore, Tulip Tree, Willow, etc.

Attorney General
Data Request AG-7
Cause No. PUD 201500273

7-18 Vegetation Management: With regard to Section H – Operating Income Statement Work Paper H2-43 (distribution cycle), detail cost figures from lines items 5 through 10. Please explain the differences in the average cost per mile for line 5 through 7. Please explain why the Average Cost per mile in line 8 is significantly higher than in lines 5 through 7.

Response*: The average cost per mile is not the same across the entire system. With the expiration of system hardening, OG&E no longer has the resources to maintain all lines the same and moved to a 2-tier cycle program which categorized circuits in two ways: Circuits with high customer density and/or a high priority for restoration are categorized as category 1 and are maintained end-to-end including preventive brush control and pole clearing. Category 2 circuits are inspected on cycle and only vegetation interfering with reliability is addressed. Other trees and brush not of immediate concern are not cleared which contribute to a greater future maintenance requirement. Thus, the average cost per mile in WP H2.43 is based on expected cost of different line conditions. Line 5 indicates line miles that continue to be maintained as category 1. Line 6 and Line 7 indicate line miles that have only been cleared for reliability and the expected cost to clear them to category 1 guidelines. Line 8 is a weighted average of lines 5-7, not a direct average. It is OG&E's intent to eliminate the 2-tier cycle and clear all circuits the same.

Response provided by:	Jarod Cassada
Response provided on:	February 26, 2016
Contact & Phone No:	Sheri Richard 405-553-3747

*By responding to these Data Requests, OG&E is not indicating that the provided information is relevant or material and OG&E is not waiving any objection as to relevance or materiality or confidentiality of the information or documents provided or the admissibility of such information or documents in this or in any other proceeding.

Attorney General
Data Request AG-1
Cause No. PUD 201500273

1-3 General: At the time of filing direct testimony and exhibits in this Cause, please provide working copies of all computer models, spreadsheets, work papers and calculations used by each Company witness. The spreadsheets and models should be provided in Excel compatible format and be fully functional with all formulas intact.

Response*:

Please see https://secure.oge.com/OkRateCase2/Data%20Request%20Responses/AG%201-3/ for the working copies provided by Company witnesses Cash, Cassada, Rowlett, Spanos, Thenmadathil, Wai and Scott.

The cost of service study electronic file is proprietary software created by a third party vendor. In order for others to use it on a temporary basis during the term of a particular case, each party needs to sign a Temporary License Agreement.

Witness Wai – The file Unit Cost supports the direct testimony on p. 6, ln. 1-5. The File Revenue Allocation supports the direct testimony on p. 4, ln 10-13. The files Test Year KW and Riders for Schedule M support MFR M-4. Additionally, there are customer impact spreadsheet models that were used to generate Table 2 on page 10 and Table 4 on Page 12 of Wai's direct testimony. However, these customer impact spreadsheet models contain highly sensitive and confidential OG&E customer specific information, and therefore, can be viewed by appointment at OGE headquarters at 321 N. Harvey during normal business hours.

Witness Cassada - Please see www.spp.org/search?q=transmission%20build%20out for a list of Transmission projects used to estimate the future increase in line miles on the OG&E system.

Please also see **AG 1-3_Att1_ Hevert_Confidential.**

Response provided by: Donald Rowlett
Response provided on: January 13, 2016
Contact & Phone No: Sheri Richard 405-553-3747

*By responding to these Data Requests, OG&E is not indicating that the provided information is relevant or material and OG&E is not waiving any objection as to relevance or materiality or confidentiality of the information or documents provided or the admissibility of such information or documents in this or in any other proceeding.

Year	Average Cost Per Mile			Miles to Stay on 4 year cycle	Planned Circuit miles by age			Projected Funding
	4 years since worked	5 years since worked	6 years since worked		4	5	6	
2014	$ 3,310	$ 4,454	$ 5,983	6143	1482	2191		$ 14,934,072
2015	$ 3,343	$ 4,499	$ 6,043	8023	0	2962	213	$ 14,934,072
2016	$ 3,376	$ 4,544	$ 6,103	4655	1670	18	2890	$ 23,359,503
2017	$ 3,410	$ 4,589	$ 6,164	4655	1474	113	3068	$ 24,456,072
2018	$ 3,444	$ 4,635	$ 6,226	4655	2757	0	1920	$ 21,449,530
2019	$ 3,479	$ 4,681	$ 6,288	4655	1115	0	3600	$ 26,515,811

Cost Projection Model for Cycle Expenditures

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Muskogee	310501	CHEROKEE ST 01	9/21/2010	2017	2	91	0.92
Muskogee	310502	CHEROKEE ST 02	12/31/2011	2015	1	166	0.69
Muskogee	310921	HONOR HEIGHTS 21	12/9/2009	2016	2	1363	52.74
Muskogee	310922	HONOR HEIGHTS 22	10/9/2013	2017	2	26	1
Muskogee	311021	RIVERSIDE 21	2/21/2012	2016	1	1311	10.26
Muskogee	311022	RIVERSIDE 22	11/6/2008	2016	1	1106	10.56
Muskogee	311023	RIVERSIDE 23	7/28/2012	2016	2	146	5.54
Muskogee	311024	RIVERSIDE 24	7/15/2010	2018	1	1687	16.41
Muskogee	311025	RIVERSIDE 25	7/19/2012	2016	2	0	1.49
Muskogee	311121	FIVE TRIBES 21	3/9/2010	2017	2	846	28.31
Muskogee	311122	FIVE TRIBES 22	4/29/2011	2015	2	657	22.68
Muskogee	311129	FIVE TRIBES 29		2017	1	880	28.43
Muskogee	311131	FIVE TRIBES 31		2017	1	1023	31.13
Muskogee	311421	TENNYSON 21	2/23/2010	2018	1	1231	14
Muskogee	311422	TENNYSON 22	9/25/2010	2018	1	1431	24.7
Muskogee	311423	TENNYSON 23	4/23/2011	2015	1	2020	23.72
Muskogee	311424	TENNYSON 24	3/25/2011	2015	1	934	13.58
Muskogee	311621	CALLERY 21		2015	2	8	0.42
Muskogee	311623	CALLERY 23	9/19/2008	2015	2	223	19.85
Muskogee	311624	CALLERY 24	9/16/2008	2016	1	1247	18.31
Muskogee	311648	CALLERY 48	1/5/2007	2015	2	0	1.37
Muskogee	312821	HANCOCK 21	7/28/2010	2018	1	1630	12.67
Muskogee	312822	HANCOCK 22	5/12/2011	2015	1	1199	13.86
Muskogee	312823	HANCOCK 23	12/20/2010	2018	1	1674	17.6
Muskogee	312824	HANCOCK 24	7/6/2011	2015	1	1986	22.03
Muskogee	312869	HANCOCK 69	8/3/2010	2017	2	20	5.79
Muskogee	313224	MUSKOGEE PORT 24	3/21/2014	2018	1	262	7.75
Muskogee	313624	EUCLID 24	6/9/2009	2016	2	21	3.46
Muskogee	313629	EUCLID 29	7/9/2009	2017	1	829	11.69
Muskogee	313631	EUCLID 31	10/23/2014	2018	2	395	11.77
Muskogee	313769	AGENCY 69	10/8/2014	2018	2	170	6.72
Sapulpa	320521	SAPULPA 21	11/10/2008	2016	1	1463	20.1
Sapulpa	320522	SAPULPA 22	2/24/2014	2018	2	1	1.32
Sapulpa	320523	SAPULPA 23	12/10/2011	2015	1	1085	10.29
Sapulpa	320524	SAPULPA 24	1/6/2012	2016	2	0	0.91
Sapulpa	320529	SAPULPA 29	11/10/2008	2016	1	553	6.11
Sapulpa	320531	SAPULPA 31	11/1/2013	2017	2	2	0.97
Sapulpa	320721	HILL TOP 21	6/14/2012	2016	1	460	2.02
Sapulpa	320723	HILL TOP 23	6/21/2012	2016	2	414	1.54
Sapulpa	320821	TIBBENS ROAD 21	9/20/2012	2016	1	893	18.38
Sapulpa	320822	TIBBENS ROAD 22	6/12/2014	2018	2	1136	27.89
Sapulpa	320823	TIBBENS ROAD 23	8/20/2013	2017	2	930	33.75
Sapulpa	320824	TIBBENS ROAD 24	2/28/2013	2017	2	1094	24.81
Sapulpa	320922	BIXBY 22	3/26/2011	2015	1	1290	23.41
Sapulpa	320929	BIXBY 29	3/26/2011	2015	2	1317	56.84
Sapulpa	321021	HICKORY HILL 21	1/26/2012	2016	1	1722	21.42
Sapulpa	321024	HICKORY HILL 24	11/1/2013	2017	1	476	11.06
Sapulpa	321321	BOWDEN 21	1/14/2010	2018	1	976	25.18
Sapulpa	321323	BOWDEN 23	5/10/2008	2016	1	1098	15.41
Sapulpa	321329	BOWDEN 29	6/1/2010	2017	2	1720	64.79

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Sapulpa	321331	BOWDEN 31	5/10/2008	2015	2	114	4.93
Sapulpa	321421	LONE STAR 21	12/28/2010	2018	1	1518	21
Sapulpa	321422	LONE STAR 22	11/1/2010	2018	2	1692	40.29
Sapulpa	321626	BEELINE 26	8/26/2010	2018	1	1243	26.96
Sapulpa	321628	BEELINE 28	6/28/2010	2018	1	1329	15.47
Sapulpa	321629	BEELINE 29	5/19/2011	2015	1	1289	35.02
Sapulpa	321633	BEELINE 33	7/8/2011	2015	1	1511	12.82
Sapulpa	321824	BEGGS 24	3/25/2011	2015	2	1194	59.98
Sapulpa	321829	BEGGS 29	3/4/2011	2015	2	1073	50.32
Sapulpa	322024	KELLYVILLE 24	8/16/2011	2015	2	1819	117.26
Sapulpa	322029	KELLYVILLE 29	12/7/2010	2019	2	1140	54.93
Muskogee	331221	CHECOTAH 21	6/11/2011	2015	1	1557	33.09
Muskogee	331222	CHECOTAH 22	9/29/2010	2017	2	1851	78.65
Muskogee	331321	ILLINOIS RIVER 21	6/5/2010	2018	1	1098	29.78
Muskogee	331421	PORUM 21	5/7/2010	2017	2	766	64.93
Muskogee	331521	WARNER TAP 21	11/30/2011	2015	2	1071	39.48
Muskogee	331901	EUFAULA 01	8/24/2010	2017	2	361	4.55
Muskogee	332124	ROSS LAKE 24	6/11/2012	2016	1	1343	22.74
Muskogee	332129	ROSS LAKE 29	1/30/2011	2015	1	978	26.13
Muskogee	332131	ROSS LAKE 31	3/29/2012	2016	2	1604	93.61
Muskogee	332401	WEBBERS FALLS 01	6/4/2010	2017	2	159	2.19
Muskogee	332542	WELLS 42	3/4/2011	2015	1	1554	32.07
Muskogee	332543	WELLS 43	1/2/2014	2018	2	3	0.18
Muskogee	332549	WELLS 49	10/15/2014	2018	2	1252	82.58
Muskogee	332621	JAMESVILLE 21	3/25/2011	2015	2	327	64.51
Muskogee	332623	JAMESVILLE 23	12/31/2011	2015	2	538	27.01
Muskogee	332641	JAMESVILLE 41	12/7/2009	2016	2	282	29.02
Muskogee	332642	JAMESVILLE 42	8/18/2011	2015	1	904	24.06
Muskogee	332722	VIAN 22	9/14/2010	2018	1	981	20.32
Muskogee	333221	EUFAULA SPA 21		2019	1	135	3.57
Muskogee	333223	EUFAULA SPA 23	8/30/2007	2019	2	128	8.35
Poteau	350521	POTEAU 21	3/25/2011	2015	1	628	6.09
Poteau	350522	POTEAU 22	7/16/2014	2018	2	1345	51.66
Poteau	350523	POTEAU 23	3/25/2011	2015	1	162	4.61
Poteau	350621	CAVANAL MTN 21	3/13/2008	2016	1	1124	14.86
Poteau	350622	CAVANAL MTN 22	1/10/2008	2016	1	1470	36.06
Poteau	350623	CAVANAL MTN 23	1/2/2008	2015	2	306	3.21
Poteau	350721	HOWE 21	3/18/2014	2018	2	92	9.52
Poteau	350722	HOWE 22	6/9/2010	2017	2	560	24.28
Poteau	350821	SPIRO COAL 21	12/12/2009	2016	2	495	23.14
Poteau	350822	SPIRO COAL 22	3/31/2010	2017	2	1	3.47
Poteau	350921	PANAMA 21	12/31/2012	2016	1	1037	32.88
Poteau	350922	PANAMA 22	12/31/2013	2017	2	116	15.04
Poteau	350923	PANAMA 23	12/5/2009	2016	2	128	19.36
Poteau	350941	PANAMA 41	12/5/2009	2016	2	468	41.96
Poteau	350942	PANAMA 42		2019	2	478	42.09
Poteau	351421	HEAVENER 21	6/28/2010	2018	1	587	14.62
Poteau	351422	HEAVENER 22	4/26/2014	2018	2	1623	64.19
Poteau	351625	TARBY 25	11/1/2012	2016	2	1906	93.01
Poteau	360721	ROLAND ROAD 21	5/27/2011	2015	1	1319	27.84

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Poteau	360821	MULDROW 21	12/17/2008	2016	1	1449	31.67
Poteau	360822	MULDROW 22	9/29/2008	2016	1	21	0.66
Poteau	360823	MULDROW 23	5/28/2009	2016	2	553	24.88
Poteau	360824	MULDROW 24	5/20/2009	2016	2	546	18.53
Enid	410502	ENID 02	9/4/2010	2018	1	73	1.24
Enid	410508	ENID 08		2015	2	0	0.01
Enid	410521	ENID 21	10/25/2010	2018	1	708	7.76
Enid	410522	ENID 22	3/2/2015	2018	1	365	2.47
Enid	410523	ENID 23	10/25/2010	2018	1	743	8.76
Enid	410621	HEMLOCK 21	12/22/2010	2018	1	1083	14.42
Enid	410622	HEMLOCK 22	5/17/2011	2015	1	1797	15.41
Enid	410623	HEMLOCK 23	11/21/2010	2015	1	1626	18.36
Enid	410624	HEMLOCK 24	11/22/2010	2015	1	1491	18.14
Enid	410721	CLEVELAND AVE 21	11/6/2010	2018	1	1454	10.73
Enid	410722	CLEVELAND AVE 22	10/25/2010	2018	1	1388	10.65
Enid	410723	CLEVELAND AVE 23	11/6/2010	2018	1	1683	11.89
Enid	410724	CLEVELAND AVE 24	11/5/2010	2018	1	1131	8.4
Enid	410921	WAUKOMIS 21	8/29/2013	2017	2	226	33.14
Enid	410922	WAUKOMIS 22	3/11/2014	2018	1	270	3.22
Enid	410923	WAUKOMIS 23	11/14/2009	2016	2	701	121.73
Enid	410924	WAUKOMIS 24	12/5/2009	2016	2	583	88.09
Enid	411221	CHESTNUT 21	3/25/2014	2018	1	1154	16.06
Enid	411222	CHESTNUT 22	12/17/2010	2018	1	2271	18.52
Enid	411929	GLENWOOD 29	11/6/2010	2018	1	1811	5.8
Enid	411931	GLENWOOD 31	5/29/2010	2017	2	1483	66.22
Enid	412321	KREMLIN TAP 21	10/2/2009	2016	2	462	99.77
Enid	412322	KREMLIN TAP 22	8/15/2009	2015	2	15	5.87
Enid	413522	SO 4TH ST 22	8/1/2014	2018	1	1700	29.74
Enid	413524	SO 4TH ST 24	5/15/2014	2018	1	2138	21.39
Enid	415122	VANCE AFB 22	3/15/2012	2016	2	369	13.45
Enid	415322	IMO 22	3/31/2015	2017	2	511	20.95
Enid	415324	IMO 24	11/22/2010	2018	2	690	82.22
Enid	415721	NE ENID 21	10/1/2010	2018	2	258	56.29
Enid	415723	NE ENID 23	3/21/2013	2017	2	1826	83.8
Enid	415824	FAIRMONT 24		2015	2	9	0.65
Enid	415829	FAIRMONT 29	9/26/2010	2017	2	1669	145.55
Enid	421021	MEDFORD 21	6/17/2014	2018	2	73	11.72
Enid	421022	MEDFORD 22	10/23/2009	2016	2	844	31.96
Enid	421941	BUNCH CREEK 41	1/7/2011	2015	2	1093	109.99
Enid	422021	CLYDE 21	5/15/2014	2018	2	48	18.11
Enid	422023	CLYDE 23	5/15/2014	2018	2	494	67.93
Enid	422521	FOUR CORNERS 21	6/18/2014	2018	2	59	23.44
Enid	423021	THREE SANDS 21	8/20/2010	2017	2	47	18.05
Enid	423922	OTOE 22	8/2/2010	2017	2	180	26.52
Enid	424046	DEER CREEK 46	8/29/2009	2015	2	209	19.42
Enid	424048	DEER CREEK 48	4/25/2014	2018	2	625	75.77
Enid	425621	SINCLAIR BLACKWELL 21		2015	2	0	1.05
Enid	426121	WHITE EAGLE 21	8/14/2010	2017	2	287	36.41
Enid	435341	OTTER 41	12/5/2009	2016	2	973	139.78
Enid	441421	HENNESSEY 21	12/20/2014	2018	1	694	6.91

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Enid	441422	HENNESSEY 22	7/15/2009	2018	2	448	80.93
Enid	441423	HENNESSEY 23	12/12/2009	2016	2	280	72.63
Enid	441424	HENNESSEY 24	12/11/2009	2016	2	561	55.57
Enid	446121	TURKEY CREEK 21	9/26/2009	2015	2	429	44.1
Enid	446123	TURKEY CREEK 23	10/3/2009	2016	2	137	7.73
Alva	451821	MENO TAP 21	9/17/2010	2017	2	534	100.37
Alva	451822	MENO TAP 22	10/30/2010	2018	2	957	67.57
Alva	451922	CLEO 22	5/15/2014	2018	2	336	23.16
Alva	452221	ALINE 21	5/15/2014	2018	2	196	6.72
Alva	452821	SALINE 21	5/15/2014	2018	2	449	27.98
Alva	452823	SALINE 23	5/15/2014	2018	2	382	19.22
Alva	453821	GOLTRY TAP 21	9/17/2010	2017	2	22	13.49
Alva	453822	GOLTRY TAP 22	10/1/2010	2019	2	241	64.36
Woodward	460501	WOODWARD 01	7/8/2009	2017	2	120	1.67
Woodward	460502	WOODWARD 02	9/19/2009	2015	2	134	1.35
Woodward	460621	CEDAR AVE 21	9/2/2009	2017	1	1481	41.84
Woodward	460622	CEDAR AVE 22	9/19/2009	2017	1	205	2.1
Woodward	460623	CEDAR AVE 23	9/5/2009	2017	1	1623	17.87
Woodward	460624	CEDAR AVE 24	8/15/2009	2017	1	1713	30.91
Woodward	460629	CEDAR AVE 29	9/19/2009	2017	1	416	3.65
Woodward	460631	CEDAR AVE 31	9/19/2009	2017	1	818	7.39
Woodward	460846	WOODWARD DISTRICT 46	9/12/2009	2015	2	797	58.95
Woodward	460847	WOODWARD DISTRICT 47	9/12/2009	2015	2	689	13
Woodward	460946	GLASS MTNS 46	10/16/2009	2016	2	136	24.2
Woodward	460947	GLASS MTNS 47	9/26/2009	2015	2	2	2.13
Woodward	461141	DEWEY 41	12/5/2009	2016	2	730	94.15
Woodward	461143	DEWEY 43	10/13/2009	2016	2	364	20.96
Woodward	461201	SEILING 01	10/19/2009	2017	1	446	6.51
Woodward	461621	NEWMAN AVE 21	10/24/2009	2016	2	198	7.2
Woodward	461622	NEWMAN AVE 22	6/20/2009	2017	1	220	3.92
Woodward	461641	NEWMAN AVE 41	10/3/2009	2016	2	2008	110.26
Woodward	462329	TANGIER 29	11/2/2012	2016	2	1	0.24
Woodward	462331	TANGIER 31	7/2/2009	2017	2	92	24.23
Alva	470521	ALVA 21	5/15/2014	2018	2	1236	29.8
Alva	470522	ALVA 22	5/15/2014	2018	1	1492	30.63
Alva	470523	ALVA 23	5/15/2014	2018	1	643	90.27
Alva	470721	KNOBHILL 21	5/15/2014	2018	2	715	38.38
Alva	470722	KNOBHILL 22	5/15/2014	2018	2	570	121.16
Ardmore	510422	FOUNDATION 22	2/9/2010	2017	2	1861	135.52
Ardmore	510433	FOUNDATION 33	7/7/2009	2017	2	2241	91.58
Ardmore	510524	ARDMORE 24	2/27/2013	2017	1	1900	62.27
Ardmore	510526	ARDMORE 26	2/27/2013	2017	1	1917	21.87
Ardmore	510528	ARDMORE 28	11/24/2014	2018	1	1231	23.65
Ardmore	510530	ARDMORE 30	9/28/2011	2015	1	694	6.96
Ardmore	510621	HARRIS ST 21	2/24/2014	2018	1	61	1.24
Ardmore	510622	HARRIS ST 22	8/31/2010	2017	2	1163	53.43
Ardmore	510623	HARRIS ST 23	5/21/2010	2018	1	870	8.95
Ardmore	510721	TOWER HEIGHTS 21	4/8/2014	2018	1	718	7.3
Ardmore	510722	TOWER HEIGHTS 22	6/6/2014	2018	2	1317	11.09
Ardmore	510723	TOWER HEIGHTS 23	10/13/2014	2018	1	2135	19.14

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Ardmore	510724	TOWER HEIGHTS 24	7/31/2014	2018	1	1386	14.11
Ardmore	510821	WOLF CREEK 21	8/21/2010	2017	2	227	36.24
Ardmore	510822	WOLF CREEK 22	8/30/2010	2015	2	249	30.41
Ardmore	510929	ARDMORE WEST 29	5/25/2014	2018	1	571	11.37
Ardmore	510931	ARDMORE WEST 31	1/20/2015	2015	2	701	41.31
Ardmore	511721	MARIETTA 21	4/25/2013	2017	2	731	42.42
Ardmore	511722	MARIETTA 22	12/13/2011	2015	2	1071	28.97
Ardmore	511723	MARIETTA 23	4/20/2011	2015	2	0	0.61
Ardmore	512222	DILLARD 22	6/26/2009	2016	2	974	25.12
Ardmore	512223	DILLARD 23	3/9/2011	2015	2	603	68.72
Ardmore	512241	DILLARD 41	1/26/2011	2015	2	0	1.91
Ardmore	512264	DILLARD 64	8/7/2010	2017	2	0	5.03
Ardmore	512422	BERWYN 22	7/19/2013	2017	2	326	34.5
Ardmore	512423	BERWYN 23	10/30/2014	2018	2	865	103.02
Ardmore	512521	LONE GROVE 21	11/8/2010	2018	2	863	38.03
Ardmore	512522	LONE GROVE 22	5/6/2014	2018	2	515	48.55
Ardmore	512523	LONE GROVE 23	9/23/2014	2018	2		51.11
Ardmore	512524	LONE GROVE 24	5/25/2014	2018	2	1101	43.62
Healdton	530521	HEALDTON 21	4/29/2015	2015	2	1569	102.52
Healdton	530523	HEALDTON 23	6/3/2011	2015	2	1139	82.39
Healdton	530621	COUNTY LINE 21	1/1/2013	2017	2	437	48.76
Healdton	530622	COUNTY LINE 22	2/12/2010	2017	2	496	75.61
Healdton	530922	POOLEVILLE 22	6/26/2010	2017	2	321	67.36
Healdton	530927	POOLEVILLE 27	10/15/2010	2017	2	181	41.3
Healdton	531121	RATLIFF 21	11/13/2010	2018	2	233	23.23
Healdton	531125	RATLIFF 25	7/31/2010	2017	2	287	28.7
Healdton	531127	RATLIFF 27	11/20/2010	2018	2	160	23.53
Healdton	531921	FOX 21	3/6/2010	2017	2	413	57.96
Healdton	531922	FOX 22	2/20/2010	2017	2	269	27.05
Healdton	531923	FOX 23	8/29/2013	2017	2	204	21.87
Healdton	532121	WILDHORSE 21	12/17/2010	2019	2	188	17.93
Healdton	532122	WILDHORSE 22	10/1/2010	2017	2	46	13.99
Healdton	532221	DUNDEE 21		2015	2	6	1.56
Healdton	532222	DUNDEE 22	12/19/2010	2019	2	1348	90
Healdton	532224	DUNDEE 24	11/24/2010	2018	2	0	0.55
Madill	540823	CANEY CREEK 23	1/20/2011	2015	2	433	14.89
Madill	540831	CANEY CREEK 31	3/4/2011	2015	2	712	10.95
Madill	540921	LITTLE CITY 21	10/23/2014	2018	2	741	51.48
Madill	540922	LITTLE CITY 22	6/24/2010	2017	2	17	4.76
Madill	541022	GLASSES 22	11/15/2012	2016	1	928	22.41
Madill	541023	GLASSES 23	1/7/2011	2015	1	975	16.75
Madill	541024	GLASSES 24	12/31/2010	2019	2	703	26.41
Durant	550422	BUTTERFIELD 22	3/27/2014	2018	2	856	40.31
Durant	550424	BUTTERFIELD 24	12/1/2009	2016	2	848	8.6
Durant	550429	BUTTERFIELD 29	12/21/2010	2018	1	1387	18.85
Durant	550431	BUTTERFIELD 31	1/12/2015	2015	1	120	2.68
Durant	550502	DURANT 02		2015	2	3	0.14
Durant	550503	DURANT 03	5/29/2009	2016	2	99	0.99
Durant	550521	DURANT 21	1/22/2015	2015	1	275	2.12
Durant	550522	DURANT 22	9/1/2009	2015	2	827	42.82

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Durant	550523	DURANT 23	12/20/2010	2018	1	188	3.14
Durant	550621	BODLE 21	11/13/2009	2017	1	937	15.44
Durant	550622	BODLE 22	6/21/2010	2018	1	524	7.62
Durant	550623	BODLE 23	12/3/2010	2018	1	1840	41.99
Durant	550624	BODLE 24	6/26/2009	2016	2	1241	10.55
Durant	550626	BODLE 26	7/31/2010	2018	1	903	12.75
Durant	550628	BODLE 28	4/3/2009	2017	1	1037	6.8
Durant	550661	BODLE 61	6/26/2010	2017	2	455	32.96
Durant	550861	BROWN OG AND E 61	12/20/2010	2019	2	482	72.03
Durant	550863	BROWN OG AND E 63	10/7/2010	2017	2	757	46.03
Durant	551121	BOKCHITO 21	5/10/2012	2016	2	875	33.75
Durant	551221	COLBERT 21	1/26/2015	2015	1	1344	26.83
Durant	551222	COLBERT 22	12/31/2011	2015	1	1585	43.74
Pauls Valley	560502	PAULS VALLEY 02	11/2/2009	2016	2	325	2.44
Pauls Valley	560521	PAULS VALLEY 21	11/6/2009	2016	2	538	9.4
Pauls Valley	560522	PAULS VALLEY 22	5/9/2015	2017	2	1655	80.43
Pauls Valley	560523	PAULS VALLEY 23	2/2/2015	2015	2	0	0.76
Pauls Valley	560524	PAULS VALLEY 24	11/7/2009	2016	2	746	6.44
Pauls Valley	560621	WALNUT CREEK 21	9/20/2011	2015	2	1848	127.26
Pauls Valley	560721	ROSEDALE TAP 21	2/17/2014	2018	2	462	54.49
Pauls Valley	560722	ROSEDALE TAP 22	5/1/2012	2016	2	130	21.02
Pauls Valley	560821	SHELL ELMORE CITY TAP 21	11/7/2009	2016	2	141	34.86
Pauls Valley	561121	MAYSVILLE 21	12/17/2010	2015	1	610	13.05
Pauls Valley	561122	MAYSVILLE 22	11/22/2010	2018	2	511	47.72
Pauls Valley	561921	RUSH CREEK 21	11/22/2010	2015	1	909	16.51
Pauls Valley	561922	RUSH CREEK 22	12/25/2010	2018	2	1332	56.23
Pauls Valley	561924	RUSH CREEK 24	10/30/2009	2016	2	55	5.15
Pauls Valley	562021	PRAIRIE POINT 21	12/12/2009	2016	2	731	34.84
Sulphur	562022	PRAIRIE POINT 22	11/13/2012	2016	2	46	15.02
Sulphur	570521	SULPHUR 21	8/4/2012	2016	2	766	24.11
Sulphur	570523	SULPHUR 23		2019	1	1247	20.88
Sulphur	570529	SULPHUR 29		2019	1	1391	26.23
Sulphur	570531	SULPHUR 31		2019	2	653	9.73
Sulphur	570621	LAKE ARBUCKLE 21	11/22/2010	2018	2	133	8.53
Sulphur	570646	LAKE ARBUCKLE 46	11/19/2010	2018	2	299	42.45
Sulphur	570722	MILL CREEK 22	12/12/2009	2016	2	20	11.25
Sulphur	570723	MILL CREEK 23	7/31/2010	2017	2	246	17.95
Sulphur	570821	DAVIS 21	7/27/2012	2016	2	946	39.12
Sulphur	570822	DAVIS 22	10/31/2010	2018	1	1122	32.18
Sulphur	570921	PRICES FALLS 21	6/2/2014	2018	2	212	14.2
Sulphur	570923	PRICES FALLS 23	10/31/2010	2017	2	238	10.8
Sulphur	571262	JOLLYVILLE 62	8/4/2011	2015	2	122	22.96
Sulphur	571264	JOLLYVILLE 64	10/10/2011	2015	2	303	59.58
Sulphur	571269	JOLLYVILLE 69	11/13/2010	2018	2	13	1.42
Ada	580621	VALLEY VIEW 21	3/22/2011	2016	2	86	1.42
Ada	580622	VALLEY VIEW 22	12/17/2010	2016	1	760	15.56
Ada	580623	VALLEY VIEW 23	12/17/2010	2016	1	1216	11.82
Ada	580624	VALLEY VIEW 24	12/17/2010	2016	1	736	19.8
Ada	580721	AHLOSO 21	12/17/2010	2016	2	217	9.66
Ada	580722	AHLOSO 22	4/3/2009	2016	2	577	29.45

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Ada	580723	AHLOSO 23	1/27/2011	2016	2	1364	16.93
Ada	580724	AHLOSO 24	4/3/2009	2016	2	1642	18.11
Ada	580821	HARDEN CITY 21	3/17/2012	2016	2	155	21.03
Ada	580829	HARDEN CITY 29	1/5/2014	2018	2	0	0.07
Ada	580922	VANOSS 22	5/1/2014	2018	2	1170	52.54
Ada	581322	BYNG SPA 22	7/23/2010	2015	2	669	41.03
Ada	581621	PARK LANE 21	9/4/2010	2016	1	2161	23.89
Ada	581623	PARK LANE 23	9/23/2010	2016	1	1850	21.95
Ada	581923	BLUE RIVER 23	5/5/2015	2015	2	573	32.25
Madill	590621	TISHOMINGO 21	12/3/2010	2018	1	1040	24.46
Madill	590623	TISHOMINGO 23	9/7/2010	2018	1	59	1.54
Madill	590721	RUSSETT 21	6/12/2010	2017	2	668	46.17
Madill	590762	RUSSETT 62	6/27/2008	2015	2	15	18.94
Madill	590764	RUSSETT 64	4/1/2010	2017	2	2088	119.13
Chandler	710421	BELLCOW 21	7/19/2012	2016	2	1279	53.46
Chandler	710423	BELLCOW 23	8/21/2012	2016	2	1087	29.75
Chandler	710431	BELLCOW 31	10/4/2012	2016	2	282	16.34
Chandler	710442	BELLCOW 42	8/23/2012	2016	2	30	9.82
Chandler	710450	BELLCOW 50	1/10/2013	2017	2	521	64.81
Chandler	711742	JACKTOWN 42	12/31/2011	2015	2	976	51.17
Chandler	711743	JACKTOWN 43	5/7/2010	2017	2	203	19.94
Chandler	711846	KEY WEST 46	5/8/2010	2017	2	599	69
Chandler	711847	KEY WEST 47	7/17/2010	2017	2	917	60.29
Chandler	711941	WARWICK 41	2/27/2010	2017	2	1740	96.79
Chandler	711942	WARWICK 42	12/17/2010	2018	2	1220	81.58
Wewoka	720501	HOLDENVILLE 01	6/10/2010	2018	1	412	3.68
Wewoka	720502	HOLDENVILLE 02	12/9/2008	2015	2	497	5.89
Wewoka	720821	CYPRESS 21	7/25/2014	2018	2	1460	48.28
Wewoka	720822	CYPRESS 22	11/22/2010	2018	1	1829	26.98
Seminole	730622	FIXICO 22	5/5/2011	2015	2	1482	17.45
Seminole	730624	FIXICO 24	1/22/2009	2016	2	1507	24.11
Seminole	730629	FIXICO 29	1/31/2011	2015	2	633	32.9
Seminole	730631	FIXICO 31	3/21/2013	2017	2	757	59.38
Seminole	730646	FIXICO 46	3/3/2009	2016	2	361	34.5
Seminole	730647	FIXICO 47	2/19/2009	2016	2	86	19.58
Seminole	730721	LITTLE RIVER 21	3/9/2011	2015	2	187	32.39
Seminole	730722	LITTLE RIVER 22	12/31/2011	2015	2	566	50.66
Seminole	731121	BURNETT 21	12/17/2010	2018	2	50	13.75
Seminole	731225	JUMPER CREEK 25	11/4/2009	2016	2	438	70.55
Seminole	731227	JUMPER CREEK 27	5/1/2012	2016	2	1136	55.98
Seminole	731921	SEMINOLE PUMP 21	6/10/2010	2017	2	0	2.93
Seminole	732041	KOLACHE 41	7/6/2009	2017	2	434	29.72
Seminole	732042	KOLACHE 42	6/12/2012	2016	2	257	25.83
Seminole	732121	LETHA 21	10/29/2010	2017	2	555	32.25
Seminole	732122	LETHA 22	5/3/2012	2016	2	1034	56.45
Shawnee	740505	SHAWNEE 05	6/10/2010	2018	1	3	0.1
Shawnee	740548	SHAWNEE 48	4/16/2011	2015	2	1	4.19
Shawnee	740549	SHAWNEE 49	10/21/2011	2015	2	0	2.17
Shawnee	740604	INDEPENDENCE 04	12/17/2010	2018	2	48	0.63
Shawnee	740721	REMINGTON 21	8/16/2010	2017	2	2270	35.8

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Shawnee	740722	REMINGTON 22	12/31/2014	2018	2	1649	10.35
Shawnee	740921	MCLOUD 21	11/13/2010	2018	1	896	12.08
Shawnee	740922	MCLOUD 22	4/30/2010	2017	2	1352	68.83
Shawnee	741021	MAUD TAP 21	3/24/2011	2015	2	146	33.21
Shawnee	741022	MAUD TAP 22	5/27/2011	2015	2	310	58.66
Shawnee	741023	MAUD TAP 23	5/18/2011	2015	2	906	34.29
Shawnee	741129	DALE 29	9/11/2010	2017	2	1057	56.94
Shawnee	741221	PEARSON 21	1/3/2011	2015	2	937	74.39
Shawnee	741721	TRIBBEY 21	10/21/2011	2015	2	311	42.92
Shawnee	742301	ST LOUIS 2 01	5/28/2010	2017	2	14	3.96
Shawnee	743021	INGLEWOOD 21	11/2/2009	2016	2	1973	16.42
Shawnee	743022	INGLEWOOD 22	5/14/2014	2018	1	2365	22.79
Shawnee	743023	INGLEWOOD 23	10/27/2009	2016	2	1264	75.28
Shawnee	743024	INGLEWOOD 24	12/31/2011	2015	1	2062	17.9
Shawnee	743222	ST GREGORY 22	12/10/2014	2018	1	694	10.71
Shawnee	743224	ST GREGORY 24	12/31/2011	2015	1	1432	12.77
Shawnee	743229	ST GREGORY 29	8/29/2013	2017	2	922	27.85
Shawnee	743231	ST GREGORY 31	2/25/2014	2018	1	1365	11.71
Shawnee	743322	ROCK CREEK 22		2015	1	1031	12.53
Shawnee	743328	ROCK CREEK 28	9/9/2011	2015	2	735	54.6
Shawnee	743524	MISSION HILL 24	10/23/2014	2018	2	1155	44.19
Wewoka	750521	WEWOKA 21	8/21/2014	2018	2	1779	108.97
Wewoka	750524	WEWOKA 24	3/10/2010	2018	1	1502	45.89
Wewoka	750622	SASAKWA 22	7/21/2011	2015	2	84	19.66
Wewoka	750629	SASAKWA 29	6/19/2013	2017	2	366	35.15
Wewoka	750821	EMAHAKA 21	2/22/2012	2016	2	333	49.73
Wewoka	751001	CROMWELL TOWN 01	12/10/2008	2015	2	0	0
Wewoka	751247	CROMWELL 47	10/9/2010	2017	2	408	32.63
Drumright	760451	PAYNE 51	7/30/2014	2018	2	484	35.32
Drumright	760541	DRUMRIGHT 41	8/13/2010	2017	2	449	62.39
Drumright	760543	DRUMRIGHT 43	12/22/2010	2018	1	328	4.37
Drumright	760544	DRUMRIGHT 44	12/1/2014	2018	2	1300	79.05
Drumright	760641	CUSHING TAP 41	12/17/2010	2018	2	44	10.11
Drumright	760649	CUSHING TAP 49	12/10/2010	2018	2	97	22.59
Drumright	760821	TIGER CREEK 21	4/20/2011	2015	2	422	25.36
Drumright	760822	TIGER CREEK 22	8/13/2010	2017	2	106	14.88
Drumright	760824	TIGER CREEK 24	5/1/2010	2018	1	410	13.03
Drumright	761021	PRINCEVILLE 21	6/28/2010	2017	2	408	50.2
Drumright	761022	PRINCEVILLE 22	7/13/2010	2017	2	0	4.16
Drumright	761023	PRINCEVILLE 23	1/17/2011	2015	2	394	44.7
Drumright	761121	MORRISON TAP 21	6/12/2012	2016	2	509	30.31
Drumright	761122	MORRISON TAP 22	12/29/2010	2018	2	517	32.91
Drumright	761422	KNIPE 22	8/29/2014	2018	1	1023	14.3
Drumright	761423	KNIPE 23	12/31/2011	2015	1	949	21.02
Drumright	762049	ANTIOCH 49	9/10/2010	2017	2	233	56.59
Drumright	762841	PIPELINE 41	6/21/2012	2016	2	2	0.7
Drumright	762842	PIPELINE 42	2/22/2010	2017	2	31	3.66
Drumright	762843	PIPELINE 43	7/16/2010	2017	2	26	4.45
Drumright	762949	CUSHING OILFIELD 49		2015	2	109	22.12
Drumright	762951	CUSHING OILFIELD 51	3/8/2012	2016	2	22	3.63

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Drumright	763121	JENNINGS 21	12/31/2011	2015	2	230	14.77
Drumright	763221	OAK GROVE 21	5/9/2012	2016	2	1277	60.31
Drumright	763322	MCELROY 22		2015	2	1	5.73
Drumright	763643	GREAT PLAINS 43		2019	2	15	1.76
Bristow	770501	NINTH STREET 01	1/6/2012	2016	1	113	1.08
Bristow	770502	NINTH STREET 02	7/15/2010	2018	1	168	1.44
Bristow	770621	BRISTOW 21	9/30/2010	2017	2	1836	77.4
Bristow	770622	BRISTOW 22	11/2/2009	2016	2	2377	123.95
Bristow	770626	BRISTOW 26	10/1/2010	2017	2	221	7.94
Metro South	811521	SW 22ND ST 21	11/12/2011	2015	1	1405	14.37
Metro South	811522	SW 22ND ST 22	12/31/2011	2015	1	2181	15.48
Metro South	811523	SW 22ND ST 23	10/20/2011	2015	1	1044	14.26
Metro South	811524	SW 22ND ST 24	12/31/2011	2015	1	2278	12.77
Metro South	812921	SW 64TH ST 21	11/4/2010	2018	1	1535	10.85
Metro South	812922	SW 64TH ST 22	10/13/2011	2015	1	1215	11.24
Metro South	812923	SW 64TH ST 23	10/31/2011	2015	1	1703	9.62
Metro South	812924	SW 64TH ST 24	12/24/2011	2015	1	2198	12.3
Metro South	813221	KENTUCKY 21	12/7/2010	2018	1	2160	15.46
Metro South	813222	KENTUCKY 22	2/11/2011	2015	1	1545	12.46
Metro South	813223	KENTUCKY 23	4/12/2013	2017	1	2584	17.23
Metro South	813224	KENTUCKY 24	12/12/2011	2015	2	1726	11.77
Metro South	813321	WR AIRPORT 21		2016	2	1439	9.56
Metro South	813323	WR AIRPORT 23		2016	2	85	1.81
Metro South	814121	SAGE 21	2/11/2011	2015	1	1254	9.2
Metro South	814122	SAGE 22	12/31/2011	2015	2	907	7.22
Metro South	814123	SAGE 23	6/27/2013	2017	1	1583	17.68
Metro South	814124	SAGE 24	8/20/2011	2015	1	2158	14.65
Metro West	815061	HOBBY LOBBY 61	11/28/2014	2018	2	1352	15.23
Metro West	815062	HOBBY LOBBY 62	10/13/2011	2015	2	840	11.82
Metro South	815121	PENNSYLVANIA 21	5/13/2011	2015	1	2236	4.98
Metro South	815123	PENNSYLVANIA 23	4/22/2011	2015	1	1398	8.8
Metro South	815125	PENNSYLVANIA 25	5/20/2011	2015	1	1464	9.57
Metro South	815127	PENNSYLVANIA 27	12/31/2011	2015	1	1236	3.76
Metro South	815132	PENNSYLVANIA 32	7/2/2011	2015	1	1579	9.44
Metro South	815134	PENNSYLVANIA 34	5/27/2011	2015	1	2126	7.15
Metro South	815136	PENNSYLVANIA 36	8/27/2011	2015	1	1740	8.7
Metro South	815138	PENNSYLVANIA 38	4/1/2011	2015	1	1428	6.06
Metro West	815521	WILL ROGERS 21	5/16/12	2016	2	47	2.97
Metro West	815721	MACARTHUR 21	10/18/12	2016	2	178	4.35
Metro West	815722	MACARTHUR 22	2/11/2013	2017	2	422	12.21
Metro West	815723	MACARTHUR 23	6/27/2013	2017	2	72	5.76
Metro West	815724	MACARTHUR 24	5/14/2013	2017	2	1099	9.46
Metro West	815862	SARA 62	8/16/12	2016	2	2301	39.29
Metro West	815864	SARA 64	4/30/2013	2017	2	4780	48.24
Metro West	815869	SARA 69	1/17/2011	2015	2	3668	56.89
Metro West	815871	SARA 71	12/21/2012	2017	1	4487	26.26
Metro South	816322	SOUTHGATE 22	1/10/2011	2015	2	1779	5.17
Metro South	816324	SOUTHGATE 24	4/11/2014	2018	2	2137	14.77
Metro South	816326	SOUTHGATE 26	7/25/2014	2018	2	1002	23.27
Metro South	816328	SOUTHGATE 28	11/29/12	2016	2	1230	10.05

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Metro South	816329	SOUTHGATE 29	10/11/2014	2018	2	1701	2.95
Metro South	816331	SOUTHGATE 31	8/16/2014	2018	2	1426	5.02
Metro South	816333	SOUTHGATE 33	4/21/2014	2018	2	1244	5.31
Metro South	816335	SOUTHGATE 35	3/12/2013	2017	1	1025	8.1
Metro South	817021	SANTA FE AVE 21	6/6/2014	2018	1	1621	9.08
Metro South	817022	SANTA FE AVE 22	7/24/2014	2018	1	2115	12.99
Metro South	817023	SANTA FE AVE 23	1/14/2013	2017	1	954	10.23
Metro South	817024	SANTA FE AVE 24	12/31/2011	2015	1	2063	16.21
Metro South	817029	SANTA FE AVE 29	6/13/2013	2017	1	1832	15.51
Metro South	817031	SANTA FE AVE 31	4/30/2013	2017	2	1909	5.41
Metro South	819421	WESTMOORE 21	8/12/2013	2017	2	1171	2.71
Metro South	819422	WESTMOORE 22	2/25/2013	2017	2	1020	2.31
Metro South	819423	WESTMOORE 23	4/19/2013	2017	2	1407	3.1
Metro South	819424	WESTMOORE 24	8/6/12	2016	2	1815	8.24
Metro South	819429	WESTMOORE 29	9/10/2014	2018	2	1196	15.58
Metro South	819431	WESTMOORE 31	10/4/2014	2018	2	1219	3.46
Metro North	820668	ROBINSON AVE 68	5/11/2013	2017	2	114	0.2
Metro North	820671	ROBINSON AVE 71	5/4/2013	2017	2	60	2.51
Metro North	820673	ROBINSON AVE 73	3/14/2008	2016	1	1381	16.47
Metro North	820921	CLASSEN 21	10/17/2012	2016	1	530	4.52
Metro North	820922	CLASSEN 22	10/10/2012	2016	1	60	1.44
Metro North	820923	CLASSEN 23	12/4/2012	2016	1	1184	10.05
Metro North	820961	CLASSEN 61	11/1/2012	2016	1	702	6.26
Metro North	820965	CLASSEN 65	12/20/2008	2016	1	1095	9.04
Metro North	822021	MAY AVE 21	12/31/2011	2015	1	1183	8.53
Metro North	822022	MAY AVE 22	12/31/2011	2015	1	2347	15.73
Metro North	822023	MAY AVE 23	8/5/2011	2015	1	1058	7.32
Metro North	822024	MAY AVE 24	6/15/2012	2016	1	2009	13.3
Metro North	822121	MERIDIAN 21	5/5/2015	2015	1	232	4.1
Metro North	822122	MERIDIAN 22	12/27/2010	2018	1	2086	14.3
Metro North	822123	MERIDIAN 23	12/31/2011	2015	2	1602	10.64
Metro North	822124	MERIDIAN 24	2/27/2012	2016	2	503	7.77
Metro North	822126	MERIDIAN 26	5/5/2015	2015	2	866	6.62
Metro North	822128	MERIDIAN 28	7/29/2011	2015	2	2008	9.68
Metro North	822129	MERIDIAN 29	12/31/2011	2015	2	1597	11.39
Metro North	822131	MERIDIAN 31	2/10/2012	2016	2	312	4.46
Metro North	822133	MERIDIAN 33	1/31/2012	2016	1	262	4.8
Metro North	822135	MERIDIAN 35	1/27/2011	2015	2	459	6.88
Metro West	822221	CZECH HALL 21	2/13/2012	2016	1	1735	3.23
Metro West	822222	CZECH HALL 22	2/13/2012	2016	1	1108	3.13
Metro West	822223	CZECH HALL 23	8/7/2012	2016	1	1182	3.22
Metro West	822224	CZECH HALL 24	7/17/2012	2016	1	1345	8.69
Metro West	822229	CZECH HALL 29	6/10/2013	2017	1	645	6.85
Metro West	822231	CZECH HALL 31	6/10/2013	2017	1	1100	3.75
Metro West	824524	COUNCIL 24	3/5/2012	2016	2	320	9.43
Metro West	824526	COUNCIL 26	3/5/2012	2016	1	951	5.64
Metro West	824529	COUNCIL 29	3/5/2012	2016	2	263	6.75
Metro West	824533	COUNCIL 33	8/14/2012	2016	2	3090	15.84
Metro South	824821	SW 5TH ST 21	6/21/2011	2015	2	493	11.44
Metro South	824823	SW 5TH ST 23	12/10/2011	2015	1	2005	17.24

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Metro South	824862	SW 5TH ST 62	5/25/2011	2015	2	269	9.63
Metro South	824864	SW 5TH ST 64	10/13/2011	2015	1	873	13.95
Metro West	826601	MUSTANG STA 01	12/2/2014	2018	2	1	3.66
Metro West	826629	MUSTANG STA 29	11/27/12	2016	2	1	0.67
Metro West	829722	MORGAN ROAD 22	4/30/2013	2017	1	691	3.82
Metro West	829724	MORGAN ROAD 24		2019	1	2322	4.87
Metro West	829729	MORGAN ROAD 29		2019	2	64	4.09
Metro West	829731	MORGAN ROAD 31	9/29/12	2016	2	950	10.11
Metro West	829921	WESTOAKS 21	12/31/2011	2015	2	2046	10.1
Metro West	829922	WESTOAKS 22	5/20/2011	2015	2	782	7.42
Metro West	829923	WESTOAKS 23	12/22/2011	2015	2	1194	11.76
Metro West	829924	WESTOAKS 24	12/17/11	2015	2	1870	11.6
Metro West	829929	WESTOAKS 29	6/9/12	2016	1	889	6.69
Metro West	829931	WESTOAKS 31	12/31/2011	2015	2	2339	11.05
Metro North	830861	LONE OAK 61	12/9/2008	2015	2	3201	28.77
Metro North	830863	LONE OAK 63	11/20/2008	2016	1	1677	2.54
Metro North	830864	LONE OAK 64	12/10/2008	2015	2	2607	77.88
Metro North	830866	LONE OAK 66	11/20/2008	2016	1	4134	10.63
Metro North	830869	LONE OAK 69	7/17/2012	2016	1	1122	8.45
Metro North	830871	LONE OAK 71	2/23/2013	2017	1	4784	11.87
Metro North	831221	BELLE ISLE STA 21	11/20/2012	2016	2	1071	8.7
Metro North	831222	BELLE ISLE STA 22	5/1/2009	2017	1	953	9.16
Metro North	831223	BELLE ISLE STA 23	8/7/2010	2018	1	671	6.42
Metro North	831224	BELLE ISLE STA 24	9/6/2012	2016	2	520	2.37
Metro North	831225	BELLE ISLE STA 25	3/27/2009	2017	1	999	9.69
Metro North	831226	BELLE ISLE STA 26	7/1/2009	2017	1	1877	13.69
Metro North	831227	BELLE ISLE STA 27	4/1/2011	2015	2	68	0.83
Metro North	831228	BELLE ISLE STA 28	3/23/2011	2015	1	584	8.4
Metro North	831229	BELLE ISLE STA 29	5/11/2013	2017	2	808	6.3
Metro North	831231	BELLE ISLE STA 31	10/10/2012	2016	1	542	5.24
Metro North	831235	BELLE ISLE STA 35	12/31/2011	2015	2	77	4.28
Metro West	831371	HAYMAKER 71	6/17/2014	2018	2	1417	72.86
Metro West	831373	HAYMAKER 73	5/20/2013	2017	1	4285	43.15
Metro North	831722	SKYLINE 22	9/20/2008	2016	1	1198	8.25
Metro North	831724	SKYLINE 24	11/3/2008	2015	2	2701	1.25
Metro North	831729	SKYLINE 29	7/18/2008	2015	2	437	5.42
Metro North	831731	SKYLINE 31	3/7/2012	2016	1	1961	3.87
Metro West	832162	PIEDMONT 62	6/11/2013	2017	1	1281	53.61
Metro West	832164	PIEDMONT 64	4/2/2013	2017	2	2499	93.47
Metro West	832169	PIEDMONT 69	11/11/2014	2018	1	1635	48.59
o North ATE 5/	832221	THIRTY EIGHTH ST 21	5/27/2011	2015	1	1684	12.61
Metro North	832222	THIRTY EIGHTH ST 22	8/18/2007	2015	1	1624	10.58
Metro North	832223	THIRTY EIGHTH ST 23	5/20/2011	2015	1	1482	10.47
Metro North	832224	THIRTY EIGHTH ST 24	6/3/2011	2015	1	1622	12.27
Metro North	832225	THIRTY EIGHTH ST 25	5/27/2011	2015	1	2166	10.35
Metro North	832227	THIRTY EIGHTH ST 27	2/25/2012	2016	1	1085	7.29
Metro West	832321	RICHARDS 21	1/21/2015	2015	2	1230	6.32
Metro West	832322	RICHARDS 22	1/9/2013	2017	2	331	5.28
Metro West	832323	RICHARDS 23	12/12/2014	2018	2	1539	4.91
Metro West	832324	RICHARDS 24	6/1/2013	2017	2	1298	6

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Metro West	833526	BETHANY 26	1/24/2011	2015	1	2206	14.97
Metro West	833527	BETHANY 27	1/26/2011	2015	2	1753	14.6
Metro West	833528	BETHANY 28	6/24/2011	2015	2	2202	16.61
Metro West	833529	BETHANY 29	4/8/2013	2017	2	2114	10.8
Metro North	833626	TENNESSEE 26	12/12/2014	2018	1	1113	8.51
Metro North	833627	TENNESSEE 27	8/23/2008	2016	1	1507	3.64
Metro North	833628	TENNESSEE 28	9/6/2008	2016	1	1320	4.33
Metro North	833629	TENNESSEE 29	10/31/2009	2017	1	1388	9.74
Metro North	833631	TENNESSEE 31	12/6/2008	2016	1	1685	10.77
Metro North	833635	TENNESSEE 35	10/18/2008	2016	1	1650	8.97
Metro North	833721	EIGHTY FOURTH ST 21		2016	1	753	8.26
Metro North	833722	EIGHTY FOURTH ST 22	10/5/2012	2016	1	1188	11.41
Metro North	833723	EIGHTY FOURTH ST 23	4/2/2009	2017	1	362	3.17
Metro North	833724	EIGHTY FOURTH ST 24	2/9/2013	2017	1	293	4.28
Metro North	833729	EIGHTY FOURTH ST 29	4/14/2011	2015	2	1500	10.2
Metro North	833731	EIGHTY FOURTH ST 31	10/22/2011	2015	2	1932	14.13
Metro North	833921	TULSA AVE 21	12/20/2008	2016	1	618	2.97
Metro North	833922	TULSA AVE 22	11/5/2011	2015	1	1728	13.01
Metro North	833923	TULSA AVE 23	11/5/2011	2015	1	1264	6.74
Metro North	833924	TULSA AVE 24	12/13/2012	2016	1	808	7.02
Metro West	833925	TULSA AVE 25	12/30/2011	2015	2	2215	15.17
Metro North	833926	TULSA AVE 26	10/25/2008	2016	1	1373	9.69
Metro West	834022	SILVER LAKE 22	5/1/12	2016	2	1384	2.62
Metro West	834024	SILVER LAKE 24	1/16/2014	2018	2	2283	3.2
Metro West	834026	SILVER LAKE 26	4/16/12	2016	2	1360	6.24
Metro West	834028	SILVER LAKE 28	4/4/12	2016	2	1280	3.58
Metro West	834029	SILVER LAKE 29	2/13/12	2016	2	1144	2.94
Metro West	834031	SILVER LAKE 31	11/30/12	2016	2	1671	5.67
Metro West	834033	SILVER LAKE 33	3/30/12	2016	2	1117	1.92
Metro West	834035	SILVER LAKE 35	3/7/12	2016	2	1386	4.07
Metro West	834221	BRADEN PARK 21	1/31/2014	2018	2	738	2.32
Metro West	834223	BRADEN PARK 23	6/29/12	2016	2	1904	4.23
Metro North	834721	WILSHIRE 21	6/2/2008	2016	1	946	7.38
Metro North	834722	WILSHIRE 22	12/31/2011	2015	2	1579	11.22
Metro North	834723	WILSHIRE 23	8/13/2012	2016	1	1131	10.62
Metro North	834724	WILSHIRE 24	5/20/2008	2016	1	1036	8.31
Metro North	835221	QUAIL CREEK 21	3/5/2012	2016	1	1529	2.7
Metro North	835222	QUAIL CREEK 22	6/24/2008	2016	1	1500	3.83
Metro North	835223	QUAIL CREEK 23	7/20/2012	2016	1	636	2.02
Metro North	835224	QUAIL CREEK 24	6/14/2008	2016	1	879	2.95
Metro North	835229	QUAIL CREEK 29	11/8/2008	2016	1	999	0.92
Metro North	835231	QUAIL CREEK 31	7/18/2008	2016	1	297	3.69
Metro West	835921	YUKON 21	7/17/12	2016	1	1450	5.35
Metro West	835922	YUKON 22	5/3/2013	2017	1	1625	9.71
Metro West	835923	YUKON 23	1/30/12	2016	1	1221	16.98
Metro West	835924	YUKON 24	1/25/12	2016	1	1749	8.44
Metro West	836021	WOODLAWN 21	3/27/12	2016	1	1472	14.1
Metro West	836022	WOODLAWN 22	11/7/2013	2017	2	1300	12.21
Metro West	836023	WOODLAWN 23	1/24/2011	2015	1	1418	12.88
Metro West	836024	WOODLAWN 24	3/1/12	2016	2	1363	23.39

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Metro North	836121	WESTERN AVE 21	1/10/2009	2017	1	1481	10.04
Metro North	836122	WESTERN AVE 22	3/31/2012	2016	1	982	5.08
Metro North	836123	WESTERN AVE 23	5/10/2008	2016	1	1219	9.21
Metro North	836124	WESTERN AVE 24	7/31/2009	2017	1	1998	9.3
Metro North	836125	WESTERN AVE 25	8/13/2012	2016	1	2473	10.24
Metro North	836126	WESTERN AVE 26	4/6/2012	2016	1	470	4.68
Metro North	836127	WESTERN AVE 27	12/31/2011	2015	2	2184	10.96
Metro North	836128	WESTERN AVE 28	8/23/2008	2016	1	992	8.06
Metro West	836521	LAKESIDE 21	11/12/12	2016	2	1696	10.17
Metro West	836522	LAKESIDE 22	10/1/12	2016	2	2006	7.78
Metro West	836523	LAKESIDE 23	10/2/12	2016	2	1758	6.49
Metro West	836524	LAKESIDE 24	1/15/2014	2018	2	1681	8.41
Metro West	838121	DIVISION AVE 21	4/15/12	2016	2	1733	9.51
Metro West	838122	DIVISION AVE 22	4/28/12	2016	2	999	3.16
Metro West	838123	DIVISION AVE 23	4/9/12	2016	2	1252	3.69
Metro West	838124	DIVISION AVE 24	2/11/2014	2018	2	1605	3.48
Metro West	838129	DIVISION AVE 29	4/2/2014	2018	2	1033	2.22
Metro West	838131	DIVISION AVE 31	3/26/2014	2018	1	2094	9.49
Metro North	839869	CHISHOLM CREEK 69	5/11/2013	2017	1	3877	13.47
Metro North	839871	CHISHOLM CREEK 71	6/29/2013	2017	1	2671	12.24
Metro East	841170	ACORN 70		2015	2	1106	38.15
Metro East	841172	ACORN 72		2015	2	1228	17.24
Metro East	841621	DUNJEE 21	12/31/2012	2017	1	1671	27.51
Metro East	841623	DUNJEE 23	12/31/2012	2017	1	2340	59.06
Metro East	841723	ROUND BARN 23	11/12/2014	2018	2	1030	67.28
Metro North	843022	REMINGTON PARK 22	8/9/2008	2016	1	716	16.68
Metro North	843024	REMINGTON PARK 24	8/14/2008	2016	1	195	5.92
Metro North	843421	DEEP FORK 21	4/25/2009	2017	1	509	5.98
Metro East	843422	DEEP FORK 22	12/31/2012	2016	2	799	36.23
Metro East	845821	GREEN PASTURES 21	11/2/2012	2016	2	1346	41.45
Metro East	845822	GREEN PASTURES 22	12/31/2013	2016	1	1066	41.62
Metro East	845824	GREEN PASTURES 24	3/28/2009	2016	2	928	64.18
Metro East	846421	BRYANT 21	4/30/2009	2016	2	1262	28.7
Metro East	846422	BRYANT 22	7/20/2008	2015	2	685	34.33
Metro North	846921	MEMORIAL 21	3/31/2009	2016	2	1135	9.48
Metro North	846922	MEMORIAL 22	10/25/2008	2016	1	1560	16.25
Metro North	846923	MEMORIAL 23	11/12/2011	2015	1	1488	12.35
Metro North	846924	MEMORIAL 24	10/25/2008	2016	1	1155	4.81
Metro North	846961	MEMORIAL 61	7/25/2009	2017	1	1331	8.35
Metro East	846963	MEMORIAL 63	1/17/2009	2016	2	470	7.93
Metro North	846965	MEMORIAL 65	6/22/2013	2017	2	41	2.57
Metro East	847121	NE 30TH ST 21	12/13/2008	2015	2	449	8.86
Metro East	847122	NE 30TH ST 22	2/28/2014	2018	2	803	29.74
Metro East	847123	NE 30TH ST 23	7/13/2013	2017	1	1439	17.13
Metro North	847421	STONEWALL 21	3/31/2009	2017	1	488	8.11
Metro North	847422	STONEWALL 22	9/6/2008	2016	1	1715	13.46
Metro North	847423	STONEWALL 23	12/1/2014	2018	1	1139	11.75
Metro North	847424	STONEWALL 24	1/24/2009	2017	1	2192	18.38
Metro North	847429	STONEWALL 29	5/28/2010	2018	1	812	11.24
Metro North	847431	STONEWALL 31	10/18/2008	2016	1	414	6.8

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Metro North	849329	KELLEY AVE 29		2019	1	435	8.15
Metro North	849331	KELLEY AVE 31		2019	1	1027	14.31
Metro North	850623	PARK PLACE 23	10/24/2012	2016	1	299	3.15
Metro North	850623	PARK PLACE 23	7/6/2012	2016	1	300	3.15
Metro North	850627	PARK PLACE 27	1/19/2013	2017	1	596	5.35
Metro North	850627	PARK PLACE 27	7/17/2009	2017	1	587	5.35
Metro North	851101	TWENTY FIRST ST 01	4/25/2012	2016	2	311	3.88
Metro North	851102	TWENTY FIRST ST 02	11/5/2011	2015	1	311	3.35
Metro North	851103	TWENTY FIRST ST 03	5/29/2009	2017	1	457	3.83
Metro East	851922	NE 10TH ST 22	3/20/2014	2018	1	1830	10.01
Metro East	851924	NE 10TH ST 24	2/11/2011	2015	2	1761	17.25
Metro East	851926	NE 10TH ST 26	12/19/2010	2018	1	2141	23.68
Metro East	851928	NE 10TH ST 28	12/19/2010	2018	1	2053	10.56
Metro East	851929	NE 10TH ST 29	3/23/2011	2015	1	1010	8.02
Metro East	851931	NE 10TH ST 31	11/5/2012	2016	1	979	17.24
Metro East	851933	NE 10TH ST 33	4/6/2012	2016	1	1098	9.21
Metro East	851935	NE 10TH ST 35	5/13/2009	2017	1	2419	16.08
Metro East	852222	MIDWAY 22	8/1/2009	2017	1	2085	43.55
Metro East	852224	MIDWAY 24	7/6/2009	2017	1	1532	29.01
Metro East	852229	MIDWAY 29	8/3/2013	2017	1	1500	46.92
Metro East	852231	MIDWAY 31	11/30/2010	2018	1	1275	40.57
Metro East	852261	MIDWAY 61	9/26/2009	2018	2	3680	137.09
Metro East	852263	MIDWAY 63	9/19/2009	2015	2	1537	78.41
Metro North	853001	CALIFORNIA 01		2015	2	4	0.31
Metro North	853002	CALIFORNIA 02		2015	2	3	0.4
Metro North	853621	WASHINGTON PARK 21	8/30/2008	2016	1	2516	23.97
Metro North	853622	WASHINGTON PARK 22	7/10/2009	2017	1	1050	15.94
Metro North	853623	WASHINGTON PARK 23	10/22/2011	2015	1	89	1.44
Metro North	853624	WASHINGTON PARK 24	9/6/2008	2016	1	773	7.75
Metro North	853661	WASHINGTON PARK 61		2019	2	1	0.19
Metro North	853663	WASHINGTON PARK 63		2019	2	3	0.48
Metro North	853670	WASHINGTON PARK 70		2019	1	1177	3.71
Metro North	853672	WASHINGTON PARK 72		2019	2	1	0.51
Metro North	854222	RENO 22	5/25/2013	2017	1	1869	16.88
Metro East	854224	RENO 24	4/18/2014	2018	2	1258	18.69
Metro East	854229	RENO 29	3/30/2013	2017	1	1416	13.1
Metro East	854231	RENO 31	6/25/2013	2017	1	1037	10.01
Metro East	861721	SUNNYLANE 21	2/11/2011	2015	1	1555	4.99
Metro East	861722	SUNNYLANE 22	2/12/2015	2015	1	1870	9.48
Metro East	861723	SUNNYLANE 23	12/31/2013	2016	1	1243	6.58
Metro East	861724	SUNNYLANE 24	11/8/2008	2016	1	2317	6
Metro East	861821	BARNES 21	12/20/2014	2018	2	650	17
Metro East	861822	BARNES 22	12/20/2014	2018	2	518	12.93
Metro South	862022	LIGHTNING CREEK 22	10/5/12	2016	1	1679	14
Metro South	862024	LIGHTNING CREEK 24	5/25/2013	2017	1	974	7.63
Metro South	862029	LIGHTNING CREEK 29	6/11/2013	2017	2	1145	10.44
Metro South	862031	LIGHTNING CREEK 31	2/11/2013	2017	1	1612	18.48
Metro East	862134	DRAPER LAKE 34	4/10/2010	2017	2	911	48.89
Metro East	862171	DRAPER LAKE 71	12/12/2009	2016	2	2905	170.05
Metro East	862173	DRAPER LAKE 73	10/23/2010	2017	2	151	17.57

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Metro South	862621	TROSPER 21	7/23/2011	2015	1	2341	17.98
Metro South	862622	TROSPER 22	12/17/2011	2015	1	453	11.85
Metro South	862623	TROSPER 23	2/28/2014	2018	2	520	12.35
Metro South	862624	TROSPER 24	2/11/13	2017	1	1190	10.94
Metro South	862625	TROSPER 25	12/17/2011	2015	1	1461	17.54
Metro South	862627	TROSPER 27	8/16/2013	2017	1	2145	10.6
Metro East	865021	GLENDALE 21	11/19/2011	2015	1	1203	9.97
Metro East	865022	GLENDALE 22	11/19/2011	2015	1	1377	10.59
Metro East	865023	GLENDALE 23	11/17/2008	2016	1	1270	10.38
Metro East	865024	GLENDALE 24	4/26/2014	2018	1	1164	8.69
Metro East	865029	GLENDALE 29	6/27/2008	2016	1	1817	10.87
Metro East	865031	GLENDALE 31	5/10/2014	2018	1	1565	10.31
Metro South	865421	MOORE 21	12/31/2011	2015	2	1891	6.51
Metro South	865422	MOORE 22	6/6/12	2016	2	1218	9.66
Metro South	865423	MOORE 23	1/27/2011	2015	2	1553	4.57
Metro South	865424	MOORE 24	2/28/2014	2018	2	1332	2.81
Metro South	865429	MOORE 29	12/31/2011	2015	2	1537	11.36
Metro South	865431	MOORE 31	12/24/2011	2015	1	1371	10.91
Metro South	865621	FOSTER 21	6/25/2013	2017	1	612	7.86
Metro South	865622	FOSTER 22	6/25/2013	2017	2	280	5.9
Metro South	865623	FOSTER 23	3/8/2013	2017	2	793	3.84
Metro South	865624	FOSTER 24	6/21/2010	2018	1	242	5.14
Metro South	865629	FOSTER 29	5/3/2011	2015	1	887	14.31
Metro South	865631	FOSTER 31	4/22/2011	2015	2	112	3.72
Metro East	866221	SE 15TH ST 21	12/31/2012	2016	1	1312	8.15
Metro East	866222	SE 15TH ST 22	4/1/2014	2018	1	2423	35.48
Metro East	866223	SE 15TH ST 23	3/1/2014	2018	1	1519	24.18
Metro East	866224	SE 15TH ST 24	12/31/2012	2016	1	1692	23.12
Metro East	869021	WILD MARY 21	5/29/2010	2018	1	1762	17.99
Metro East	869023	WILD MARY 23	7/30/2010	2018	1	1743	14.6
Metro East	869221	AIR DEPOT 21		2015	2	745	6.32
Metro East	869223	AIR DEPOT 23		2015	2	1279	5.26
East	869723	TINKER FIELD NO 3 23	9/1/2014	2018	2	0	1.75
East	869739	TINKER FIELD NO 3 39	9/1/2014	2018	2	0	1.2
Norman	870522	NORMAN 22	5/16/2013	2017	1	791	5.05
Norman	870523	NORMAN 23	12/31/2011	2015	2	96	0.51
Norman	870621	BOYD 21	8/28/2010	2015	2	944	7.35
Norman	870622	BOYD 22	5/18/2010	2017	2	1301	7.91
Norman	870623	BOYD 23	11/22/2010	2018	2	2037	12.45
Norman	870624	BOYD 24	10/23/2010	2017	2	656	5.51
Norman	870629	BOYD 29	2/9/2015	2015	2	1302	9.6
Norman	870631	BOYD 31	11/5/2014	2018	2	1280	7.48
Norman	870721	WILKINSON 21	3/11/2013	2017	2	1676	5.3
Norman	870722	WILKINSON 22	10/7/2014	2018	2	2320	18.17
Norman	870723	WILKINSON 23	6/23/2014	2018	2	1641	3.74
Norman	870724	WILKINSON 24	1/27/2011	2015	2	2063	7.11
Norman	870769	WILKINSON 69	2/21/2011	2015	2	2337	12.52
Norman	870771	WILKINSON 71	7/2/2012	2016	2	2441	65.77
Norman	870821	CEDAR LANE 21	1/14/2015	2015	2	1117	7.36
Norman	870822	CEDAR LANE 22	8/18/2014	2018	1	1856	6.44

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Norman	870823	CEDAR LANE 23	9/2/2014	2018	2	2335	11.33
Norman	870824	CEDAR LANE 24	1/19/2015	2015	2	1536	10.54
Norman	870921	LITTLE RIVER LAKE 21	11/15/2010	2018	2	742	60.54
Norman	871421	LITTLE AXE 21	6/9/2010	2017	2	808	73.36
Norman	871521	ETOWAH 21	12/31/2011	2015	2	59	23.37
Metro South	871721	TURNER 21	4/9/12	2016	2	1764	4.72
Norman	871723	TURNER 23	6/2/2014	2018	1	916	11.69
Norman	871922	PLEASANT VALLEY 22	10/9/2010	2018	1	1013	4.13
Norman	871924	PLEASANT VALLEY 24	6/10/2014	2018	2	742	10.29
Norman	872122	SPRING HILL 22	12/31/2011	2015	2	16	7.08
Norman	872123	SPRING HILL 23	2/27/12	2016	2	5	7.37
Norman	872229	MILLENNIUM 29	1/17/2011	2015	1	1910	11.48
Norman	872231	MILLENNIUM 31	2/22/2011	2015	1	1465	25.39
Norman	872321	INDIAN HILL 21	4/4/2013	2017	1	1244	16.03
Norman	872323	INDIAN HILL 23	10/30/12	2016	2	1929	10.38
Norman	872621	NOBLE 21	2/11/2011	2015	1	1089	10.96
Norman	872623	NOBLE 23	1/3/2011	2015	2	1314	9.01
Norman	872721	STUBBEMAN 21	5/14/2013	2017	1	886	5.79
Norman	872722	STUBBEMAN 22	10/14/2014	2018	2	990	4.9
Norman	872723	STUBBEMAN 23	8/11/2010	2017	2	133	6.06
Norman	872724	STUBBEMAN 24	9/14/12	2016	1	1327	12.2
Norman	872729	STUBBEMAN 29	9/20/12	2016	2	676	8.1
Norman	872731	STUBBEMAN 31	7/19/12	2016	2	1445	10.52
Norman	872821	CHERRY CREEK 21	6/13/2013	2017	2	1062	1.5
Norman	872822	CHERRY CREEK 22	10/2/2010	2017	2	723	1.14
Norman	872823	CHERRY CREEK 23	6/11/2013	2017	2	277	1.03
Norman	872824	CHERRY CREEK 24	1/13/2015	2015	2	1197	2.1
Norman	872829	CHERRY CREEK 29	10/28/2010	2017	2	1772	1.59
Norman	872831	CHERRY CREEK 31	10/26/2010	2017	2	1850	7.06
Guthrie	880621	COTTONWOOD CREEK 21	12/15/2014	2018	2	1950	70.39
Guthrie	880622	COTTONWOOD CREEK 22	10/31/2014	2018	2	1252	29.42
Guthrie	880623	COTTONWOOD CREEK 23	6/26/2010	2018	1	1469	37.16
Guthrie	880624	COTTONWOOD CREEK 24	10/17/2009	2016	2	744	37.93
Guthrie	880721	CRESCENT 21	3/30/2013	2017	1	1019	29.77
Guthrie	881003	ORLANDO 03	4/15/2010	2017	2	3	0.98
Guthrie	881341	FITZGERALD CREEK 41	12/13/2008	2015	2	298	23.23
Guthrie	881342	FITZGERALD CREEK 42	4/16/2015	2017	1	929	29.46
Guthrie	881424	PINE STREET 24	5/5/2015	2015	2	1336	17.91
Guthrie	881429	PINE STREET 29	10/2/2010	2018	2	1758	63.72
Guthrie	881444	PINE STREET 44	10/9/2010	2018	2	176	32.61
Guthrie	881921	LIBERTY LAKE 21	4/9/2009	2016	2	1435	52.79
Guthrie	881923	LIBERTY LAKE 23	3/7/2009	2017	2	1681	33.9
Guthrie	882221	WATERLOO 21	4/17/2009	2017	1	1099	13.9
Metro North	882222	WATERLOO 22	10/1/2014	2018	2	1125	32.53
Metro North	882223	WATERLOO 23	9/12/2009	2015	2	1262	66.56
Guthrie	882224	WATERLOO 24	10/9/2010	2018	2	1879	43.35
Metro North	888850	EDMOND DIST	2/10/2009	2016	2	0	0.16
Metro North	888851	EDMOND DIST	2/2/2009	2016	2	0	0.07
Metro North	888853	EDMOND DIST	2/10/2009	2016	2	0	0.1
Metro North	888854	EDMOND DIST	2/17/2009	2016	2	0	0.18

District	Circuit #	Circuit Name	History	Next Date to Work	Category	# Customers	Miles
Metro North	888855	EDMOND DIST	2/10/2009	2016	2	0	0.13
Metro North	888856	EDMOND DIST	3/10/2009	2016	2	0	0.22
Metro North	888857	EDMOND DIST	3/10/2009	2016	2	0	0.18
Metro North	888858	EDMOND DIST	3/10/2009	2016	2	0	0.09
Metro North	888859	EDMOND DIST	3/23/2009	2016	2	0	0.07
Metro North	888861	EDMOND DIST	3/23/2009	2016	2	0	0.14
Metro North	888862	EDMOND DIST	3/23/2009	2016	2	0	0.32
Metro North	888863	EDMOND DIST	1/1/2008	2015	2	0	0.13
Metro North	888864	EDMOND DIST	3/23/2009	2016	2	0	0.33
Metro North	888881	EDMOND DIST	1/19/2009	2016	2	1	0.41
Metro North	888882	EDMOND DIST	3/14/2009	2016	2	2	1.57
Metro North	888883	EDMOND DIST	2/24/2009	2016	2	14	0.67
Metro North	888884	EDMOND DIST	3/7/2009	2016	2	5	0.49
Metro North	888885	EDMOND DIST	1/1/2008	2015	2	3	0.18
Metro North	888886	EDMOND DIST	3/23/2009	2016	2	4	0.16
Metro North	888887	EDMOND DIST	3/23/2009	2016	2	3	0.47
Metro North	888888	EDMOND DIST	3/23/2009	2016	2	22	1.82
El Reno	890239	TATONGA 39		2015	2	0	0.36
El Reno	890521	EL RENO 21	2/18/2012	2016	1	2163	24.87
El Reno	890522	EL RENO 22	4/2/2014	2018	2	2076	82.67
El Reno	890523	EL RENO 23	3/26/2014	2018	1	1337	30.32
El Reno	890524	EL RENO 24	8/24/2011	2015	2	1695	12.22
El Reno	890646	SOUTHARD 46	7/29/2009	2018	2	18	31.87
El Reno	890647	SOUTHARD 47	11/28/2009	2016	2	782	82.41
El Reno	890649	SOUTHARD 49	12/12/2009	2016	2	344	79.28
El Reno	890701	CANTON 01	10/24/2009	2016	2	201	4.07
El Reno	890702	CANTON 02	10/24/2009	2016	2	397	8.8
El Reno	890846	ROMAN NOSE 46	5/8/2013	2017	2	63	11.52
El Reno	890847	ROMAN NOSE 47	10/24/2009	2016	2	444	157.61
El Reno	891021	OKARCHE 21	2/12/2014	2018	2	733	37.99
El Reno	892122	JENSEN RD 22	12/11/2009	2017	1	906	10.29
El Reno	892161	JENSEN RD 61	2/11/2011	2015	2	811	68.36
El Reno	892163	JENSEN RD 63	8/24/2011	2015	2	760	44.41
El Reno	892169	JENSEN RD 69	2/11/2011	2015	2	484	52.37

Circuit Numb	Circuit Name	Voltage	Number of Cu	Length (miles)	
310504	CHEROKEE ST 04	De-Energized	0	0.0009	Retrieved 11/13 from Joanna in GIS
310921	HONOR HEIGHTS 21	12.5/7.2 kV	1365	52.786	
310922	HONOR HEIGHTS 22	12.5/7.2 kV	26	0.9976	
311021	RIVERSIDE 21	12.5/7.2 kV	1316	10.26	
311022	RIVERSIDE 22	12.5/7.2 kV	1116	10.563	
311023	RIVERSIDE 23	12.5/7.2 kV	150	5.5366	
311024	RIVERSIDE 24	12.5/7.2 kV	1687	16.412	
311025	RIVERSIDE 25	12.5/7.2 kV	1	1.4017	
311121	FIVE TRIBES 21	De-Energized	0	0.0014	
311122	FIVE TRIBES 22	De-Energized	0	0.0014	
311129	FIVE TRIBES 29	12.5/7.2 kV	886	28.419	
311131	FIVE TRIBES 31	12.5/7.2 kV	1019	31.126	
311421	TENNYSON 21	12.5/7.2 kV	1234	14	
311422	TENNYSON 22	12.5/7.2 kV	1421	24.8	
311423	TENNYSON 23	12.5/7.2 kV	2021	23.717	
311424	TENNYSON 24	12.5/7.2 kV	935	13.57	
311621	CALLERY 21	12.5/7.2 kV	8	0.4221	
311623	CALLERY 23	12.5/7.2 kV	225	19.853	
311624	CALLERY 24	12.5/7.2 kV	1247	18.307	
311648	CALLERY 48	13.8 kV	0	1.375	
312621	MUSKOGEE AB 21	De-Energized	0	0.0018	
312821	HANCOCK 21	12.5/7.2 kV	1631	12.675	
312822	HANCOCK 22	12.5/7.2 kV	1200	13.858	
312823	HANCOCK 23	12.5/7.2 kV	1674	17.603	
312824	HANCOCK 24	12.5/7.2 kV	1991	21.962	
312869	HANCOCK 69	34.5/19.9 kV	20	5.7907	
312901	FANSTEEL 01	4.16/2.4 kV	0	0.007	
313101	MUSKOGEE WW 01	2.4 kV	0	0.0421	
313224	MUSKOGEE PORT 24	12.5/7.2 kV	254	7.7505	
313624	EUCLID 24	12.5/7.2 kV	21	3.4565	
313629	EUCLID 29	12.5/7.2 kV	828	11.563	
313631	EUCLID 31	12.5/7.2 kV	395	11.771	
313769	AGENCY 69	34.5/19.9 kV	171	6.7213	
320521	SAPULPA 21	12.5/7.2 kV	1464	20.095	
320522	SAPULPA 22	12.5/7.2 kV	0	1.3327	
320523	SAPULPA 23	12.5/7.2 kV	1085	10.323	
320524	SAPULPA 24	12.5/7.2 kV	0	0.9055	
320529	SAPULPA 29	12.5/7.2 kV	554	6.1304	
320531	SAPULPA 31	12.5/7.2 kV	2	0.9691	
320721	HILL TOP 21	12.5/7.2 kV	500	2.0236	
320723	HILL TOP 23	12.5/7.2 kV	414	1.5368	
320821	TIBBENS ROAD 21	12.5/7.2 kV	910	18.444	
320822	TIBBENS ROAD 22	12.5/7.2 kV	1343	43.095	
320823	TIBBENS ROAD 23	12.5/7.2 kV	159	11.112	
320824	TIBBENS ROAD 24	12.5/7.2 kV	1090	25.823	
320922	BIXBY 22	12.5/7.2 kV	1307	23.404	
320929	BIXBY 29	12.5/7.2 kV	1321	57.09	
321021	HICKORY HILL 21	12.5/7.2 kV	2262	29.266	
321024	HICKORY HILL 24	12.5/7.2 kV	492	11.467	
321121	KRMG TAP 21	De-Energized	0	0.0019	
321321	BOWDEN 21	12.5/7.2 kV	980	25.319	
321323	BOWDEN 23	12.5/7.2 kV	1101	15.407	
321329	BOWDEN 29	12.5/7.2 kV	1717	65.434	
321331	BOWDEN 31	12.5/7.2 kV	114	6.6682	
321421	LONE STAR 21	12.5/7.2 kV	1531	20.805	
321422	LONE STAR 22	12.5/7.2 kV	1695	40.305	
321501	EXPLORER GLENPOOL 01	4.16/2.4 kV	0	0.0074	
321626	BEELINE 26	12.5/7.2 kV	1264	26.997	
321628	BEELINE 28	12.5/7.2 kV	1367	14.37	
321629	BEELINE 29	12.5/7.2 kV	1311	35.023	
321633	BEELINE 33	12.5/7.2 kV	1487	12.797	
321824	BEGGS 24	12.5/7.2 kV	1196	60.141	
321829	BEGGS 29	12.5/7.2 kV	1077	50.563	

Circuit Numt	Circuit Name	Voltage	Number of Cu:	Length (miles)
322024	KELLYVILLE 24	12.5/7.2 kV	1823	117.67
322025	KELLYVILLE 25	12.5/7.2 kV	0	0.0112
322027	KELLYVILLE 27	12.5/7.2 kV	0	0.0114
322029	KELLYVILLE 29	12.5/7.2 kV	1143	54.92
331221	CHECOTAH 21	12.5/7.2 kV	1561	33.092
331222	CHECOTAH 22	12.5/7.2 kV	1858	78.649
331321	ILLINOIS RIVER 21	12.5/7.2 kV	1102	29.782
331421	PORUM 21	12.5/7.2 kV	770	65.201
331521	WARNER TAP 21	12.5/7.2 kV	1068	39.494
331901	EUFAULA 01	De-Energized	0	0.0014
332124	ROSS LAKE 24	12.5/7.2 kV	1363	22.744
332129	ROSS LAKE 29	12.5/7.2 kV	981	26.263
332131	ROSS LAKE 31	12.5/7.2 kV	1607	93.536
332401	WEBBERS FALLS 01	De-Energized	0	0.0011
332542	WELLS 42	24.9/14.4 kV	1555	32.074
332543	WELLS 43	24.9/14.4 kV	3	0.1782
332549	WELLS 49	24.9/14.4 kV	1253	82.579
332621	JAMESVILLE 21	12.5/7.2 kV	346	66.728
332623	JAMESVILLE 23	12.5/7.2 kV	522	24.349
332641	JAMESVILLE 41	24.9/14.4 kV	282	29.012
332642	JAMESVILLE 42	24.9/14.4 kV	904	24.058
332722	VIAN 22	12.5/7.2 kV	984	20.375
333221	EUFAULA SPA 21	12.5/7.2 kV	135	3.5694
333223	EUFAULA SPA 23	12.5/7.2 kV	129	8.3507
333521	KERR MCGEE SEQUOYAH 21	12.5/7.2 kV	0	0.0137
350521	POTEAU 21	12.5/7.2 kV	625	6.0891
350522	POTEAU 22	12.5/7.2 kV	1348	51.718
350523	POTEAU 23	12.5/7.2 kV	161	4.6115
350621	CAVANAL MTN 21	12.5/7.2 kV	1124	14.856
350622	CAVANAL MTN 22	12.5/7.2 kV	1470	36.014
350623	CAVANAL MTN 23	12.5/7.2 kV	308	3.2073
350721	HOWE 21	12.5/7.2 kV	92	9.5211
350722	HOWE 22	12.5/7.2 kV	560	24.406
350821	SPIRO COAL 21	12.5/7.2 kV	492	23.141
350822	SPIRO COAL 22	12.5/7.2 kV	1	3.4747
350921	PANAMA 21	12.5/7.2 kV	1036	33.014
350922	PANAMA 22	12.5/7.2 kV	119	15.041
350923	PANAMA 23	12.5/7.2 kV	127	19.978
350941	PANAMA 41	De-Energized	0	0.0019
350942	PANAMA 42	24.9/14.4 kV	478	43.119
351421	HEAVENER 21	12.5/7.2 kV	588	14.762
351422	HEAVENER 22	12.5/7.2 kV	1626	64.523
351625	TARBY 25	12.5/7.2 kV	1909	93.002
360721	ROLAND ROAD 21	12.5/7.2 kV	1318	27.864
360821	MULDROW 21	12.5/7.2 kV	1451	31.678
360822	MULDROW 22	12.5/7.2 kV	21	0.6579
360823	MULDROW 23	12.5/7.2 kV	558	25.065
360824	MULDROW 24	12.5/7.2 kV	548	18.504
361099	MULDROW KAMO 99	12.5/7.2 kV	0	0.0066
390701	YAFFE 01	4.16/2.4 kV	0	0.0092
410508	ENID 08	De-Energized	0	0.0052
410521	ENID 21	12.5/7.2 kV	707	7.7571
410522	ENID 22	12.5/7.2 kV	365	2.4685
410523	ENID 23	12.5/7.2 kV	400	4.8639
410621	HEMLOCK 21	12.5/7.2 kV	1285	11.182
410622	HEMLOCK 22	12.5/7.2 kV	1800	15.436
410623	HEMLOCK 23	12.5/7.2 kV	1627	18.511
410624	HEMLOCK 24	12.5/7.2 kV	1851	22.029
410701	CLEVELAND AVE 01	De-Energized	0	0.0009
410702	CLEVELAND AVE 02	De-Energized	0	0.0009
410721	CLEVELAND AVE 21	12.5/7.2 kV	883	8.1364
410722	CLEVELAND AVE 22	12.5/7.2 kV	1460	11.172
410723	CLEVELAND AVE 23	12.5/7.2 kV	1441	11.464

Circuit Numb	Circuit Name	Voltage	Number of Cu	Length (miles)
410724	CLEVELAND AVE 24	12.5/7.2 kV	905	6.4124
410921	WAUKOMIS 21	12.5/7.2 kV	224	33.051
410922	WAUKOMIS 22	12.5/7.2 kV	270	3.2312
410923	WAUKOMIS 23	12.5/7.2 kV	706	123.32
410924	WAUKOMIS 24	12.5/7.2 kV	590	89.29
411221	CHESTNUT 21	12.5/7.2 kV	1156	16.271
411222	CHESTNUT 22	12.5/7.2 kV	1929	16.807
411922	GLENWOOD 22	12.5/7.2 kV	1579	6.182
411924	GLENWOOD 24	12.5/7.2 kV	1291	66.987
411929	GLENWOOD 29	12.5/7.2 kV	1429	6.6242
411931	GLENWOOD 31	12.5/7.2 kV	982	5.8723
412321	KREMLIN TAP 21	12.5/7.2 kV	465	100.17
412322	KREMLIN TAP 22	12.5/7.2 kV	16	6.3134
413522	SO 4TH ST 22	12.5/7.2 kV	1606	29.972
413524	SO 4TH ST 24	12.5/7.2 kV	1864	22.649
415122	VANCE AFB 22	12.5/7.2 kV	369	13.462
415322	IMO 22	12.5/7.2 kV	502	20.159
415324	IMO 24	12.5/7.2 kV	706	83.031
415521	ENID INDUSTRIAL 21	12.5/7.2 kV	0	0.003
415523	ENID INDUSTRIAL 23	12.5/7.2 kV	0	0.003
415721	NE ENID 21	12.5/7.2 kV	259	56.288
415723	NE ENID 23	12.5/7.2 kV	1326	81.65
415824	FAIRMONT 24	12.5/7.2 kV	9	0.6509
415829	FAIRMONT 29	12.5/7.2 kV	1660	143.55
421021	MEDFORD 21	12.5/7.2 kV	71	11.866
421022	MEDFORD 22	12.5/7.2 kV	845	32.013
421501	CONTINENTAL EMPIRE 01	13.8 kV	0	0.0205
421941	BUNCH CREEK 41	24.9/14.4 kV	1101	113.7
422021	CLYDE 21	12.5/7.2 kV	49	18.113
422023	CLYDE 23	12.5/7.2 kV	494	67.932
422521	FOUR CORNERS 21	12.5/7.2 kV	58	23.441
423021	THREE SANDS 21	12.5/7.2 kV	46	17.742
423101	CHILOCCO INDIAN SCHOOL 01	24.9/14.4 kV	0	0.0111
423521	OWEN 21	12.5/7.2 kV	0	0.0075
423921	OTOE 21	12.5/7.2 kV	0	0.0865
423922	OTOE 22	12.5/7.2 kV	181	26.859
424046	DEER CREEK 46	24.9/14.4 kV	210	19.415
424048	DEER CREEK 48	24.9/14.4 kV	632	76.55
424221	CONTINENTAL BLACKS 21	12.5/7.2 kV	0	0.0261
424601	CHEROKEE PL PONCA CL 01	2.4 kV	0	0.0067
425001	CONTINENTAL EAST 01	De-Energized	0	0.0059
425521	KOCH 21	12.5/7.2 kV	0	0.0078
425522	KOCH 22	12.5/7.2 kV	0	0.0073
425621	SINCLAIR BLACKWELL 21	12.5/7.2 kV	0	1.0531
426001	CHIKASKIA 01	12.5/7.2 kV	0	0.0068
426121	WHITE EAGLE 21	12.5/7.2 kV	289	36.415
430822	GARBER TAP 22	12.5/7.2 kV	0	0.0004
432101	COVINGTON 01	De-Energized	0	0.0009
432102	COVINGTON 02	De-Energized	0	0.0009
433901	CONOCO PERRY 01	4.16/2.4 kV	0	0.0067
434121	PERRY 21	12.5/7.2 kV	0	0.0076
435341	OTTER 41	24.9/14.4 kV	976	139.78
435342	OTTER 42	24.9/14.4 kV	0	50.202
435401	BRONCO ROAD 01	4.16/2.4 kV	0	0.0014
441421	HENNESSEY 21	12.5/7.2 kV	697	6.9365
441422	HENNESSEY 22	12.5/7.2 kV	450	80.795
441423	HENNESSEY 23	12.5/7.2 kV	281	72.247
441424	HENNESSEY 24	12.5/7.2 kV	553	55.506
446121	TURKEY CREEK 21	12.5/7.2 kV	429	44.361
446123	TURKEY CREEK 23	12.5/7.2 kV	139	7.7263
451821	MENO TAP 21	12.5/7.2 kV	532	100.36
451822	MENO TAP 22	12.5/7.2 kV	959	67.508
451922	CLEO 22	12.5/7.2 kV	338	23.31

Circuit Numt	Circuit Name	Voltage	Number of Cu:	Length (miles)
452221	ALINE 21	12.5/7.2 kV	197	6.7194
452821	SALINE 21	12.5/7.2 kV	452	27.978
452823	SALINE 23	12.5/7.2 kV	384	19.219
453821	GOLTRY TAP 21	7.2 kV	22	13.49
453822	GOLTRY TAP 22	12.5/7.2 kV	241	64.357
460501	WOODWARD 01	4.16/2.4 kV	0	0.0019
460502	WOODWARD 02	4.16/2.4 kV	0	0.0034
460621	CEDAR AVE 21	12.5/7.2 kV	934	12.104
460622	CEDAR AVE 22	12.5/7.2 kV	931	33.299
460623	CEDAR AVE 23	12.5/7.2 kV	1624	17.864
460624	CEDAR AVE 24	12.5/7.2 kV	522	12.189
460629	CEDAR AVE 29	12.5/7.2 kV	1047	9.2096
460631	CEDAR AVE 31	12.5/7.2 kV	1220	19.452
460701	GAGE 01	4.16/2.4 kV	0	0.0119
460846	WOODWARD DISTRICT 46	24.9/14.4 kV	801	59.012
460847	WOODWARD DISTRICT 47	24.9/14.4 kV	690	13.004
460946	GLASS MTNS 46	24.9/14.4 kV	127	19.115
460947	GLASS MTNS 47	24.9/14.4 kV	2	2.1327
461001	VICI 01	4.16/2.4 kV	0	0.0055
461003	VICI 03	4.16/2.4 kV	0	0.0054
461141	DEWEY 41	24.9/14.4 kV	733	94.24
461143	DEWEY 43	24.9/14.4 kV	811	33.37
461201	SEILING 01	De-Energized	0	0.0014
461621	NEWMAN AVE 21	12.5/7.2 kV	198	7.6983
461622	NEWMAN AVE 22	12.5/7.2 kV	214	3.9163
461641	NEWMAN AVE 41	24.9/14.4 kV	2020	111.01
462329	TANGIER 29	12.5/7.2 kV	1	0.2387
462331	TANGIER 31	12.5/7.2 kV	92	24.637
462421	IODINE 21	12.5/7.2 kV	0	0.0291
462422	IODINE 22	12.5/7.2 kV	0	0.0291
470521	ALVA 21	12.5/7.2 kV	825	22.182
470522	ALVA 22	12.5/7.2 kV	1921	39.456
470523	ALVA 23	12.5/7.2 kV	648	93.498
470721	KNOBHILL 21	12.5/7.2 kV	720	41.619
470722	KNOBHILL 22	12.5/7.2 kV	575	121.7
491201	WFEC-PERRY 01	24.9/14.4 kV	0	0.0082
491301	NEWKIRK TOWN 01	12.5/7.2 kV	0	0.0082
491601	WFEC-MARSHALL 01	24.9/14.4 kV	0	0.0075
491801	WFEC-NUMA 01	24.9/14.4 kV	0	0.0075
492901	CONOCO NORTH (OLD) 01	13.8 kV	0	0.0077
510422	FOUNDATION 22	12.5/7.2 kV	1873	135.58
510433	FOUNDATION 33	12.5/7.2 kV	2250	91.83
510501	ARDMORE 01	De-Energized	0	0.0009
510502	ARDMORE 02	De-Energized	0	0.0009
510503	ARDMORE 03	De-Energized	0	0.0009
510504	ARDMORE 04	De-Energized	0	0.0009
510524	ARDMORE 24	12.5/7.2 kV	1904	62.131
510526	ARDMORE 26	12.5/7.2 kV	1893	21.354
510528	ARDMORE 28	12.5/7.2 kV	1234	23.638
510530	ARDMORE 30	12.5/7.2 kV	722	7.466
510621	HARRIS ST 21	12.5/7.2 kV	61	1.2372
510622	HARRIS ST 22	12.5/7.2 kV	1167	53.434
510623	HARRIS ST 23	12.5/7.2 kV	872	8.9688
510721	TOWER HEIGHTS 21	12.5/7.2 kV	718	7.3012
510722	TOWER HEIGHTS 22	12.5/7.2 kV	1316	11.063
510723	TOWER HEIGHTS 23	12.5/7.2 kV	2118	19.144
510724	TOWER HEIGHTS 24	12.5/7.2 kV	1396	14.112
510821	WOLF CREEK 21	12.5/7.2 kV	230	36.259
510822	WOLF CREEK 22	12.5/7.2 kV	250	30.645
510929	ARDMORE WEST 29	12.5/7.2 kV	577	11.47
510931	ARDMORE WEST 31	12.5/7.2 kV	701	41.362
511721	MARIETTA 21	12.5/7.2 kV	730	42.498
511722	MARIETTA 22	12.5/7.2 kV	1073	28.974

Circuit Numb	Circuit Name	Voltage	Number of Cus	Length (miles)
511723	MARIETTA 23	12.5/7.2 kV	0	0.6076
512222	DILLARD 22	12.5/7.2 kV	976	25.118
512223	DILLARD 23	12.5/7.2 kV	606	68.8
512241	DILLARD 41	24.9/14.4 kV	0	1.914
512264	DILLARD 64	34.5/19.9 kV	0	5.0263
512301	UNIROYAL 01	4.16/2.4 kV	0	0.0075
512302	UNIROYAL 02	4.16/2.4 kV	0	0.0074
512422	BERWYN 22	12.5/7.2 kV	329	34.521
512423	BERWYN 23	12.5/7.2 kV	868	104.46
512521	LONE GROVE 21	12.5/7.2 kV	865	38.215
512522	LONE GROVE 22	12.5/7.2 kV	520	50.358
512523	LONE GROVE 23	12.5/7.2 kV	0	46.391
512524	LONE GROVE 24	12.5/7.2 kV	1108	44.698
512701	SUNNYSIDE 01	34.5/19.9 kV	0	0.0173
512902	TOTAL PETROLEUM 02	12.5/7.2 kV	0	0.0076
512903	TOTAL PETROLEUM 03	12.5/7.2 kV	0	0.0074
530521	HEALDTON 21	12.5/7.2 kV	1574	102.56
530523	HEALDTON 23	12.5/7.2 kV	1140	82.45
530621	COUNTY LINE 21	12.5/7.2 kV	441	48.886
530622	COUNTY LINE 22	12.5/7.2 kV	504	75.34
530922	POOLEVILLE 22	12.5/7.2 kV	324	67.36
530927	POOLEVILLE 27	12.5/7.2 kV	180	41.296
531121	RATLIFF 21	12.5/7.2 kV	232	23.233
531123	RATLIFF 23	12.5/7.2 kV	0	0.0089
531125	RATLIFF 25	12.5/7.2 kV	291	28.704
531127	RATLIFF 27	12.5/7.2 kV	160	23.529
531201	SINCLAIR PL RINGLING 01	2.4 kV	0	0.0077
531921	FOX 21	12.5/7.2 kV	417	58.602
531922	FOX 22	12.5/7.2 kV	269	27.068
531923	FOX 23	12.5/7.2 kV	205	21.866
532121	WILDHORSE 21	12.5/7.2 kV	189	17.948
532122	WILDHORSE 22	12.5/7.2 kV	46	13.987
532221	DUNDEE 21	12.5/7.2 kV	6	1.5556
532222	DUNDEE 22	12.5/7.2 kV	1351	90.003
532224	DUNDEE 24	12.5/7.2 kV	0	0.5495
540741	MADILL INDUSTRIAL 41	13.8 kV	0	0.0186
540801	CANEY CREEK 01	12.5/7.2 kV	0	0.0071
540821	CANEY CREEK 21	12.5/7.2 kV	0	0.0015
540823	CANEY CREEK 23	12.5/7.2 kV	433	14.917
540831	CANEY CREEK 31	12.5/7.2 kV	712	10.953
540921	LITTLE CITY 21	12.5/7.2 kV	742	51.689
540922	LITTLE CITY 22	12.5/7.2 kV	17	4.76
541021	GLASSES 21	12.5/7.2 kV	0	0.0569
541022	GLASSES 22	12.5/7.2 kV	927	22.375
541023	GLASSES 23	12.5/7.2 kV	976	16.621
541024	GLASSES 24	12.5/7.2 kV	705	26.533
550422	BUTTERFIELD 22	12.5/7.2 kV	878	40.291
550424	BUTTERFIELD 24	12.5/7.2 kV	866	8.5932
550429	BUTTERFIELD 29	12.5/7.2 kV	1394	18.867
550431	BUTTERFIELD 31	12.5/7.2 kV	106	2.6822
550501	DURANT 01	De-Energized	0	0.0011
550502	DURANT 02	De-Energized	0	0.0011
550503	DURANT 03	De-Energized	0	0.0011
550521	DURANT 21	12.5/7.2 kV	415	2.7267
550522	DURANT 22	12.5/7.2 kV	826	42.916
550523	DURANT 23	12.5/7.2 kV	210	3.296
550621	BODLE 21	12.5/7.2 kV	942	15.437
550622	BODLE 22	12.5/7.2 kV	530	7.6226
550623	BODLE 23	12.5/7.2 kV	1845	42.111
550624	BODLE 24	12.5/7.2 kV	1234	10.547
550626	BODLE 26	12.5/7.2 kV	1051	12.747
550628	BODLE 28	12.5/7.2 kV	1034	6.7951
550661	BODLE 61	34.5/19.9 kV	460	32.973

Circuit Numt	Circuit Name	Voltage	Number of Cu:	Length (miles)
550861	BROWN OG AND E 61	34.5/19.9 kV	486	72.093
550863	BROWN OG AND E 63	34.5/19.9 kV	759	46.244
551001	EXPLORER PL DURANT 01	4.16/2.4 kV	0	0.0082
551121	BOKCHITO 21	12.5/7.2 kV	870	33.754
551221	COLBERT 21	12.5/7.2 kV	1350	26.802
551222	COLBERT 22	12.5/7.2 kV	1590	43.83
551502	BLUE BIRD 02	4.16/2.4 kV	0	0.0083
551509	BLUE BIRD 09	4.16/2.4 kV	0	0.0178
560501	PAULS VALLEY 01	4.16/2.4 kV	0	0.0018
560502	PAULS VALLEY 02	4.16/2.4 kV	0	0.0012
560521	PAULS VALLEY 21	12.5/7.2 kV	538	9.3989
560522	PAULS VALLEY 22	12.5/7.2 kV	1652	80.315
560523	PAULS VALLEY 23	12.5/7.2 kV	0	0.756
560524	PAULS VALLEY 24	12.5/7.2 kV	746	6.4351
560621	WALNUT CREEK 21	12.5/7.2 kV	1856	127.61
560721	ROSEDALE TAP 21	De-Energized	0	0.0014
560722	ROSEDALE TAP 22	12.5/7.2 kV	594	75.637
560821	SHELL ELMORE CITY TAP 21	12.5/7.2 kV	142	34.863
561121	MAYSVILLE 21	12.5/7.2 kV	610	13.053
561122	MAYSVILLE 22	12.5/7.2 kV	512	47.737
561401	WYNNEWOOD REF 1 01	4.16/2.4 kV	0	0.0069
561921	RUSH CREEK 21	12.5/7.2 kV	912	16.396
561922	RUSH CREEK 22	12.5/7.2 kV	1340	56.327
561924	RUSH CREEK 24	12.5/7.2 kV	56	5.1466
562021	PRAIRIE POINT 21	12.5/7.2 kV	735	34.843
562022	PRAIRIE POINT 22	12.5/7.2 kV	47	15.017
562201	AMOCO-PAULS VALLEY 01	2.4 kV	0	0.0105
562301	SUN OIL 01	2.4 kV	0	0.0036
562801	WYNNEWOOD REF 2 01	4.16/2.4 kV	0	0.0074
569601	OMPA-WYNNEWOOD 01	4.16/2.4 kV	0	0.0081
570521	SULPHUR 21	12.5/7.2 kV	767	24.115
570523	SULPHUR 23	12.5/7.2 kV	1250	20.834
570529	SULPHUR 29	12.5/7.2 kV	1392	26.278
570531	SULPHUR 31	12.5/7.2 kV	653	9.7308
570621	LAKE ARBUCKLE 21	12.5/7.2 kV	134	8.6822
570646	LAKE ARBUCKLE 46	24.9/14.4 kV	293	41.176
570722	MILL CREEK 22	12.5/7.2 kV	20	11.25
570723	MILL CREEK 23	12.5/7.2 kV	246	17.951
570821	DAVIS 21	12.5/7.2 kV	949	39.124
570822	DAVIS 22	12.5/7.2 kV	1123	32.225
570921	PRICES FALLS 21	12.5/7.2 kV	215	14.203
570923	PRICES FALLS 23	12.5/7.2 kV	230	10.528
571262	JOLLYVILLE 62	34.5/19.9 kV	123	22.917
571264	JOLLYVILLE 64	34.5/19.9 kV	302	59.599
571269	JOLLYVILLE 69	34.5/19.9 kV	13	1.4158
579701	WFEC-OAKLAWN 01	24.9/14.4 kV	0	0.0074
580621	VALLEY VIEW 21	12.5/7.2 kV	86	1.4227
580622	VALLEY VIEW 22	12.5/7.2 kV	759	15.565
580623	VALLEY VIEW 23	12.5/7.2 kV	1215	11.824
580624	VALLEY VIEW 24	12.5/7.2 kV	737	19.799
580721	AHLOSO 21	12.5/7.2 kV	218	9.4801
580722	AHLOSO 22	12.5/7.2 kV	578	29.38
580723	AHLOSO 23	12.5/7.2 kV	1365	17.058
580724	AHLOSO 24	12.5/7.2 kV	1643	18.103
580821	HARDEN CITY 21	12.5/7.2 kV	157	21.027
580822	HARDEN CITY 22	12.5/7.2 kV	0	0.0958
580829	HARDEN CITY 29	12.5/7.2 kV	0	0.0705
580922	VANOSS 22	12.5/7.2 kV	1174	52.521
581321	BYNG SPA 21	12.5/7.2 kV	0	0.0367
581322	BYNG SPA 22	12.5/7.2 kV	670	41.14
581401	ADA O C PUMP 01	2.4 kV	0	0.0076
581501	STONEWALL OC PUMP 01	2.4 kV	0	0.0076
581621	PARK LANE 21	12.5/7.2 kV	2163	23.891

Circuit Numb	Circuit Name	Voltage	Number of Cu	Length (miles)
581623	PARK LANE 23	12.5/7.2 kV	1851	22.324
581701	IDEAL CEMENT 01	4.16/2.4 kV	0	0.0077
581921	BLUE RIVER 21	12.5/7.2 kV	0	0.1219
581923	BLUE RIVER 23	12.5/7.2 kV	574	32.227
582001	FRISCO 01	12.5/7.2 kV	0	0.0083
590621	TISHOMINGO 21	12.5/7.2 kV	1042	24.456
590623	TISHOMINGO 23	12.5/7.2 kV	56	1.5059
590721	RUSSETT 21	12.5/7.2 kV	669	46.235
590762	RUSSETT 62	34.5/19.9 kV	16	18.939
590764	RUSSETT 64	34.5/19.9 kV	2089	119.18
590821	RAVIA 21	12.5/7.2 kV	0	0.0036
710421	BELLCOW 21	12.5/7.2 kV	1282	53.609
710423	BELLCOW 23	12.5/7.2 kV	1090	29.89
710431	BELLCOW 31	12.5/7.2 kV	282	16.337
710442	BELLCOW 42	24.9/14.4 kV	32	9.8217
710450	BELLCOW 50	24.9/14.4 kV	524	65.062
710521	CHANDLER 21	De-Energized	0	0.0009
710523	CHANDLER 23	De-Energized	0	0.0009
710546	CHANDLER 46	De-Energized	0	0.0009
710547	CHANDLER 47	De-Energized	0	0.0009
710548	CHANDLER 48	De-Energized	0	0.0009
711001	MEEKER 01	De-Energized	0	0.0015
711742	JACKTOWN 42	24.9/14.4 kV	977	51.179
711743	JACKTOWN 43	24.9/14.4 kV	204	19.767
711846	KEY WEST 46	24.9/14.4 kV	604	69.003
711847	KEY WEST 47	24.9/14.4 kV	918	60.374
711941	WARWICK 41	24.9/14.4 kV	1751	96.458
711942	WARWICK 42	24.9/14.4 kV	1225	81.579
720501	HOLDENVILLE 01	De-Energized	0	0.0014
720502	HOLDENVILLE 02	De-Energized	0	0.0014
720821	CYPRESS 21	12.5/7.2 kV	1461	48.275
720822	CYPRESS 22	12.5/7.2 kV	1834	26.977
730622	FIXICO 22	12.5/7.2 kV	1483	17.45
730624	FIXICO 24	12.5/7.2 kV	1505	24.128
730629	FIXICO 29	12.5/7.2 kV	638	32.87
730631	FIXICO 31	12.5/7.2 kV	764	59.365
730646	FIXICO 46	24.9/14.4 kV	360	34.749
730647	FIXICO 47	24.9/14.4 kV	89	19.621
730721	LITTLE RIVER 21	12.5/7.2 kV	190	32.391
730722	LITTLE RIVER 22	12.5/7.2 kV	570	50.649
731121	BURNETT 21	12.5/7.2 kV	49	13.881
731225	JUMPER CREEK 25	12.5/7.2 kV	439	70.553
731227	JUMPER CREEK 27	12.5/7.2 kV	1137	55.978
731621	YOUNG CREEK 21	12.5/7.2 kV	0	0.0696
731701	KONAWA OC PUMP 01	4.16/2.4 kV	0	0.0057
731901	SEMINOLE PUMP 01	4.16/2.4 kV	0	0.1048
731921	SEMINOLE PUMP 21	12.5/7.2 kV	0	2.9304
732041	KOLACHE 41	24.9/14.4 kV	436	29.686
732042	KOLACHE 42	24.9/14.4 kV	265	25.833
732121	LETHA 21	12.5/7.2 kV	556	32.27
732122	LETHA 22	12.5/7.2 kV	1036	56.509
740504	SHAWNEE 04	4.16/2.4 kV	3	0.1686
740548	SHAWNEE 48	24.9/14.4 kV	1	4.1647
740549	SHAWNEE 49	24.9/14.4 kV	0	2.1236
740602	INDEPENDENCE 02	4.16/2.4 kV	0	0.0036
740603	INDEPENDENCE 03	4.16/2.4 kV	0	0.004
740604	INDEPENDENCE 04	4.16/2.4 kV	0	0.0036
740721	REMINGTON 21	12.5/7.2 kV	2273	35.798
740722	REMINGTON 22	12.5/7.2 kV	1650	10.347
740921	MCLOUD 21	12.5/7.2 kV	898	12.084
740922	MCLOUD 22	12.5/7.2 kV	1353	69.078
741021	MAUD TAP 21	#N/A	146	33.212
741022	MAUD TAP 22	#N/A	310	58.748

Circuit Numb	Circuit Name	Voltage	Number of Cus	Length (miles)
741023	MAUD TAP 23	12.5/7.2 kV	909	34.494
741129	DALE 29	12.5/7.2 kV	1061	57.008
741221	PEARSON 21	12.5/7.2 kV	938	74.63
741721	TRIBBEY 21	12.5/7.2 kV	313	43.486
741901	EARLSBORO 01	4.16/2.4 kV	0	0.0103
742301	ST LOUIS 2 01	4.16/2.4 kV	0	0.0024
742701	SERVICE PL TRIBBEY 01	2.4 kV	0	0.0035
742901	MACOMB OC PUMP 01	2.4 kV	0	0.0076
743021	INGLEWOOD 21	12.5/7.2 kV	1974	16.416
743022	INGLEWOOD 22	12.5/7.2 kV	2366	22.794
743023	INGLEWOOD 23	12.5/7.2 kV	1268	75.361
743024	INGLEWOOD 24	12.5/7.2 kV	2062	17.859
743222	ST GREGORY 22	12.5/7.2 kV	707	10.709
743224	ST GREGORY 24	12.5/7.2 kV	1433	12.702
743229	ST GREGORY 29	12.5/7.2 kV	924	27.864
743231	ST GREGORY 31	12.5/7.2 kV	1373	11.706
743321	ROCK CREEK 21	12.5/7.2 kV	0	0.0019
743322	ROCK CREEK 22	12.5/7.2 kV	1035	12.565
743323	ROCK CREEK 23	12.5/7.2 kV	0	0.0019
743328	ROCK CREEK 28	12.5/7.2 kV	737	54.825
743401	TECUMSEH TOWN 01	4.16/2.4 kV	0	0.0072
743524	MISSION HILL 24	12.5/7.2 kV	1152	43.806
750521	WEWOKA 21	12.5/7.2 kV	1784	109.04
750524	WEWOKA 24	12.5/7.2 kV	1504	45.891
750622	SASAKWA 22	12.5/7.2 kV	85	19.675
750629	SASAKWA 29	12.5/7.2 kV	366	35.157
750821	EMAHAKA 21	12.5/7.2 kV	338	49.902
751001	CROMWELL TOWN 01	De-Energized	0	0.006
751247	CROMWELL 47	24.9/14.4 kV	408	32.626
760451	PAYNE 51	24.9/14.4 kV	485	35.319
760541	DRUMRIGHT 41	24.9/14.4 kV	451	62.397
760543	DRUMRIGHT 43	24.9/14.4 kV	329	4.3748
760544	DRUMRIGHT 44	24.9/14.4 kV	1293	78.463
760641	CUSHING TAP 41	24.9/14.4 kV	45	10.135
760649	CUSHING TAP 49	24.9/14.4 kV	98	22.717
760821	TIGER CREEK 21	12.5/7.2 kV	421	25.245
760822	TIGER CREEK 22	12.5/7.2 kV	106	14.883
760824	TIGER CREEK 24	12.5/7.2 kV	406	13.031
760902	SHELL PL CUSHING 02	4.16/2.4 kV	0	0.0073
761021	PRINCEVILLE 21	12.5/7.2 kV	405	50.235
761022	PRINCEVILLE 22	12.5/7.2 kV	0	4.1557
761023	PRINCEVILLE 23	De-Energized	0	0.0028
761121	MORRISON TAP 21	12.5/7.2 kV	510	30.313
761122	MORRISON TAP 22	12.5/7.2 kV	517	32.93
761241	MEHAN TAP 41	24.9/14.4 kV	0	0.0212
761301	OILTON 01	4.16/2.4 kV	0	0.0015
761422	KNIPE 22	12.5/7.2 kV	1031	14.298
761423	KNIPE 23	12.5/7.2 kV	950	21.121
761501	PERKINS 01	De-Energized	0	0.0014
762049	ANTIOCH 49	24.9/14.4 kV	230	56.229
762301	STILLWATER 01	12.5/7.2 kV	0	0.0082
762401	SERVICE PL DRUMRIGHT 01	4.16/2.4 kV	0	0.007
762603	SKELLY PL CUSHING 03	4.16/2.4 kV	0	0.0187
762841	PIPELINE 41	24.9/14.4 kV	2	0.7047
762842	PIPELINE 42	24.9/14.4 kV	32	5.5017
762843	PIPELINE 43	24.9/14.4 kV	27	4.4543
762949	CUSHING OILFIELD 49	24.9/14.4 kV	102	22.071
762951	CUSHING OILFIELD 51	24.9/14.4 kV	22	3.6285
763121	JENNINGS 21	12.5/7.2 kV	231	14.828
763221	OAK GROVE 21	12.5/7.2 kV	1276	60.441
763322	MCELROY 22	12.5/7.2 kV	1	5.7301
763401	KINZIE 01	#N/A	0	0.0075
763642	GREAT PLAINS 42	24.9/14.4 kV	0	0.6912

Circuit Numb	Circuit Name	Voltage	Number of Cus	Length (miles)
763643	GREAT PLAINS 43	24.9/14.4 kV	15	1.7614
769301	ARCO PL CUSHING 01	4.16/2.4 kV	0	0.0064
769399	ARCO PL CUSHING 99	2.4 kV	0	0.0253
770501	NINTH STREET 01	4.16/2.4 kV	0	0.007
770502	NINTH STREET 02	4.16/2.4 kV	0	0.0047
770621	BRISTOW 21	12.5/7.2 kV	1838	77.067
770622	BRISTOW 22	12.5/7.2 kV	2387	124.57
770626	BRISTOW 26	12.5/7.2 kV	223	7.9368
811221	DAYTON 21	13.8 kV	0	0.0069
811222	DAYTON 22	13.8 kV	0	0.007
811301	CHEMETRON 01	4.16/2.4 kV	0	0.0077
811521	SW 22ND ST 21	12.5/7.2 kV	1407	14.348
811522	SW 22ND ST 22	12.5/7.2 kV	2184	15.479
811523	SW 22ND ST 23	12.5/7.2 kV	1045	14.264
811524	SW 22ND ST 24	12.5/7.2 kV	2281	12.77
812921	SW 64TH ST 21	12.5/7.2 kV	1536	10.851
812922	SW 64TH ST 22	12.5/7.2 kV	1216	11.24
812923	SW 64TH ST 23	12.5/7.2 kV	1705	9.6161
812924	SW 64TH ST 24	12.5/7.2 kV	2199	12.299
813221	KENTUCKY 21	12.5/7.2 kV	2162	15.462
813222	KENTUCKY 22	12.5/7.2 kV	1547	12.458
813223	KENTUCKY 23	12.5/7.2 kV	2590	17.223
813224	KENTUCKY 24	12.5/7.2 kV	1724	11.763
813321	WR AIRPORT 21	12.5/7.2 kV	1439	9.5601
813323	WR AIRPORT 23	12.5/7.2 kV	84	1.8101
814121	SAGE 21	12.5/7.2 kV	1255	9.2027
814122	SAGE 22	12.5/7.2 kV	908	7.2177
814123	SAGE 23	12.5/7.2 kV	1589	17.676
814124	SAGE 24	12.5/7.2 kV	2158	14.648
815061	HOBBY LOBBY 61	34.5/19.9 kV	1395	15.125
815062	HOBBY LOBBY 62	34.5/19.9 kV	847	11.735
815121	PENNSYLVANIA 21	12.5/7.2 kV	2237	5.0192
815123	PENNSYLVANIA 23	12.5/7.2 kV	1398	8.8041
815125	PENNSYLVANIA 25	12.5/7.2 kV	1462	9.5744
815127	PENNSYLVANIA 27	12.5/7.2 kV	1242	3.7551
815132	PENNSYLVANIA 32	12.5/7.2 kV	1579	9.443
815134	PENNSYLVANIA 34	12.5/7.2 kV	2134	7.1549
815136	PENNSYLVANIA 36	12.5/7.2 kV	1752	8.8247
815138	PENNSYLVANIA 38	12.5/7.2 kV	1428	6.0553
815521	WILL ROGERS 21	12.5/7.2 kV	46	2.9707
815522	WILL ROGERS 22	12.5/7.2 kV	0	0.0074
815523	WILL ROGERS 23	12.5/7.2 kV	0	0.0076
815721	MACARTHUR 21	12.5/7.2 kV	207	4.8027
815722	MACARTHUR 22	12.5/7.2 kV	393	11.786
815723	MACARTHUR 23	12.5/7.2 kV	74	5.7647
815724	MACARTHUR 24	12.5/7.2 kV	1239	9.4598
815862	SARA 62	34.5/19.9 kV	2551	41.842
815864	SARA 64	34.5/19.9 kV	4838	48.557
815869	SARA 69	34.5/19.9 kV	3667	56.891
815871	SARA 71	34.5/19.9 kV	4378	23.667
816322	SOUTHGATE 22	12.5/7.2 kV	1781	5.1738
816324	SOUTHGATE 24	12.5/7.2 kV	2137	14.766
816326	SOUTHGATE 26	12.5/7.2 kV	1331	24.847
816328	SOUTHGATE 28	12.5/7.2 kV	1227	10.009
816329	SOUTHGATE 29	12.5/7.2 kV	1708	3.8928
816331	SOUTHGATE 31	12.5/7.2 kV	1433	4.9762
816333	SOUTHGATE 33	12.5/7.2 kV	1244	5.3086
816335	SOUTHGATE 35	12.5/7.2 kV	1016	8.1427
817021	SANTA FE AVE 21	12.5/7.2 kV	1623	9.0792
817022	SANTA FE AVE 22	12.5/7.2 kV	2124	12.983
817023	SANTA FE AVE 23	12.5/7.2 kV	958	10.23
817024	SANTA FE AVE 24	12.5/7.2 kV	2071	16.208
817029	SANTA FE AVE 29	12.5/7.2 kV	1835	15.512

Circuit Numb	Circuit Name	Voltage	Number of Cus	Length (miles)
817031	SANTA FE AVE 31	12.5/7.2 kV	1907	5.4119
819421	WESTMOORE 21	12.5/7.2 kV	1172	2.7056
819422	WESTMOORE 22	12.5/7.2 kV	1021	2.3064
819423	WESTMOORE 23	12.5/7.2 kV	1410	3.1032
819424	WESTMOORE 24	12.5/7.2 kV	1822	8.1912
819429	WESTMOORE 29	12.5/7.2 kV	906	13.176
819431	WESTMOORE 31	12.5/7.2 kV	1415	3.4596
820668	ROBINSON AVE 68	34.5/19.9 kV	113	0.1981
820671	ROBINSON AVE 71	34.5/19.9 kV	62	2.5106
820673	ROBINSON AVE 73	34.5/19.9 kV	1381	16.468
820921	CLASSEN 21	12.5/7.2 kV	535	4.4861
820922	CLASSEN 22	12.5/7.2 kV	54	1.3055
820923	CLASSEN 23	12.5/7.2 kV	1172	9.9261
820961	CLASSEN 61	34.5/19.9 kV	703	6.2635
820965	CLASSEN 65	34.5/19.9 kV	1110	9.0234
821601	GRAND AVE 01	4.16/2.4 kV	0	0.0055
821602	GRAND AVE 02	4.16/2.4 kV	0	0.0135
821603	GRAND AVE 03	4.16/2.4 kV	0	0.0014
821604	GRAND AVE 04	4.16/2.4 kV	0	0.0033
822021	MAY AVE 21	12.5/7.2 kV	1182	8.5332
822022	MAY AVE 22	12.5/7.2 kV	2346	15.722
822023	MAY AVE 23	12.5/7.2 kV	1059	7.298
822024	MAY AVE 24	12.5/7.2 kV	2008	13.304
822121	MERIDIAN 21	12.5/7.2 kV	205	3.9598
822122	MERIDIAN 22	12.5/7.2 kV	2078	14.303
822123	MERIDIAN 23	12.5/7.2 kV	1602	10.643
822124	MERIDIAN 24	12.5/7.2 kV	503	7.7699
822126	MERIDIAN 26	12.5/7.2 kV	807	6.4111
822128	MERIDIAN 28	12.5/7.2 kV	2009	9.6799
822129	MERIDIAN 29	12.5/7.2 kV	1597	11.393
822131	MERIDIAN 31	12.5/7.2 kV	309	4.4601
822133	MERIDIAN 33	12.5/7.2 kV	262	4.7976
822135	MERIDIAN 35	12.5/7.2 kV	459	6.6676
822221	CZECH HALL 21	12.5/7.2 kV	1418	3.1166
822222	CZECH HALL 22	12.5/7.2 kV	1108	3.1192
822223	CZECH HALL 23	12.5/7.2 kV	1183	3.2192
822224	CZECH HALL 24	12.5/7.2 kV	1345	8.6871
822229	CZECH HALL 29	12.5/7.2 kV	997	6.917
822231	CZECH HALL 31	12.5/7.2 kV	1103	3.7621
822421	XEROX 21	12.5/7.2 kV	0	0.0046
822422	XEROX 22	12.5/7.2 kV	0	0.0048
824522	COUNCIL 22	12.5/7.2 kV	0	0.0148
824524	COUNCIL 24	12.5/7.2 kV	321	9.5789
824526	COUNCIL 26	12.5/7.2 kV	958	5.6431
824529	COUNCIL 29	12.5/7.2 kV	265	6.7525
824531	COUNCIL 31	12.5/7.2 kV	0	0.0192
824533	COUNCIL 33	12.5/7.2 kV	3093	15.867
824821	SW 5TH ST 21	12.5/7.2 kV	493	11.445
824823	SW 5TH ST 23	12.5/7.2 kV	2008	17.236
824862	SW 5TH ST 62	34.5/19.9 kV	267	9.6287
824864	SW 5TH ST 64	34.5/19.9 kV	876	13.952
826601	MUSTANG STA 01	2.4 kV	0	3.6592
826629	MUSTANG STA 29	12.5/7.2 kV	1	0.6729
829722	MORGAN ROAD 22	12.5/7.2 kV	691	3.8209
829724	MORGAN ROAD 24	12.5/7.2 kV	2332	4.8681
829729	MORGAN ROAD 29	12.5/7.2 kV	66	4.0933
829731	MORGAN ROAD 31	12.5/7.2 kV	953	10.187
829921	WESTOAKS 21	12.5/7.2 kV	2052	10.102
829922	WESTOAKS 22	12.5/7.2 kV	783	7.4195
829923	WESTOAKS 23	12.5/7.2 kV	1203	11.76
829924	WESTOAKS 24	12.5/7.2 kV	1863	11.603
829929	WESTOAKS 29	12.5/7.2 kV	888	6.6903
829931	WESTOAKS 31	12.5/7.2 kV	2343	11.049

Circuit Numt	Circuit Name	Voltage	Number of Cus	Length (miles)
830861	LONE OAK 61	34.5/19.9 kV	3267	28.768
830863	LONE OAK 63	34.5/19.9 kV	1681	2.5433
830864	LONE OAK 64	34.5/19.9 kV	2696	78.287
830866	LONE OAK 66	34.5/19.9 kV	4154	10.62
830869	LONE OAK 69	34.5/19.9 kV	1140	8.4169
830871	LONE OAK 71	34.5/19.9 kV	4957	11.872
831221	BELLE ISLE STA 21	12.5/7.2 kV	1007	8.2147
831222	BELLE ISLE STA 22	12.5/7.2 kV	954	9.1248
831223	BELLE ISLE STA 23	12.5/7.2 kV	670	6.3416
831224	BELLE ISLE STA 24	12.5/7.2 kV	520	2.3705
831225	BELLE ISLE STA 25	12.5/7.2 kV	1001	9.6925
831226	BELLE ISLE STA 26	12.5/7.2 kV	1878	13.688
831227	BELLE ISLE STA 27	12.5/7.2 kV	68	0.8339
831228	BELLE ISLE STA 28	12.5/7.2 kV	583	8.395
831229	BELLE ISLE STA 29	12.5/7.2 kV	807	6.2943
831231	BELLE ISLE STA 31	12.5/7.2 kV	542	5.2292
831235	BELLE ISLE STA 35	12.5/7.2 kV	77	3.9984
831371	HAYMAKER 71	34.5/19.9 kV	1424	72.866
831373	HAYMAKER 73	34.5/19.9 kV	4364	44.722
831722	SKYLINE 22	12.5/7.2 kV	1200	8.2508
831724	SKYLINE 24	12.5/7.2 kV	2726	2.2316
831729	SKYLINE 29	12.5/7.2 kV	441	5.4234
831731	SKYLINE 31	12.5/7.2 kV	1958	3.5339
832162	PIEDMONT 62	34.5/19.9 kV	1293	53.611
832164	PIEDMONT 64	34.5/19.9 kV	2542	95.293
832169	PIEDMONT 69	34.5/19.9 kV	1624	48.667
832221	THIRTY EIGHTH ST 21	12.5/7.2 kV	1679	12.618
832222	THIRTY EIGHTH ST 22	12.5/7.2 kV	1624	10.582
832223	THIRTY EIGHTH ST 23	12.5/7.2 kV	1482	10.474
832224	THIRTY EIGHTH ST 24	12.5/7.2 kV	1625	12.27
832225	THIRTY EIGHTH ST 25	12.5/7.2 kV	2168	10.349
832227	THIRTY EIGHTH ST 27	12.5/7.2 kV	1085	7.2931
832321	RICHARDS 21	12.5/7.2 kV	1235	6.3185
832322	RICHARDS 22	12.5/7.2 kV	333	5.2842
832323	RICHARDS 23	12.5/7.2 kV	1554	4.9117
832324	RICHARDS 24	12.5/7.2 kV	1342	5.9972
833526	BETHANY 26	12.5/7.2 kV	2196	14.974
833527	BETHANY 27	12.5/7.2 kV	1751	14.601
833528	BETHANY 28	12.5/7.2 kV	2195	16.609
833529	BETHANY 29	12.5/7.2 kV	2118	10.795
833626	TENNESSEE 26	12.5/7.2 kV	1132	8.5117
833627	TENNESSEE 27	12.5/7.2 kV	1498	3.6229
833628	TENNESSEE 28	12.5/7.2 kV	1319	4.3309
833629	TENNESSEE 29	12.5/7.2 kV	1391	9.7417
833631	TENNESSEE 31	12.5/7.2 kV	1682	10.716
833635	TENNESSEE 35	12.5/7.2 kV	1662	8.9573
833721	EIGHTY FOURTH ST 21	12.5/7.2 kV	753	8.2625
833722	EIGHTY FOURTH ST 22	12.5/7.2 kV	1181	11.278
833723	EIGHTY FOURTH ST 23	12.5/7.2 kV	363	3.1738
833724	EIGHTY FOURTH ST 24	12.5/7.2 kV	298	4.282
833729	EIGHTY FOURTH ST 29	12.5/7.2 kV	1500	10.189
833731	EIGHTY FOURTH ST 31	12.5/7.2 kV	1939	14.104
833921	TULSA AVE 21	12.5/7.2 kV	618	2.9735
833922	TULSA AVE 22	12.5/7.2 kV	1723	12.903
833923	TULSA AVE 23	12.5/7.2 kV	1256	6.7426
833924	TULSA AVE 24	12.5/7.2 kV	809	7.0227
833925	TULSA AVE 25	12.5/7.2 kV	2214	15.174
833926	TULSA AVE 26	12.5/7.2 kV	1374	9.6857
834022	SILVER LAKE 22	12.5/7.2 kV	1383	2.5974
834024	SILVER LAKE 24	12.5/7.2 kV	2294	3.201
834026	SILVER LAKE 26	12.5/7.2 kV	1359	5.7067
834028	SILVER LAKE 28	12.5/7.2 kV	1280	3.5825
834029	SILVER LAKE 29	12.5/7.2 kV	1144	2.9413

Circuit Numb	Circuit Name	Voltage	Number of Cus	Length (miles)
834031	SILVER LAKE 31	12.5/7.2 kV	1673	5.6699
834033	SILVER LAKE 33	12.5/7.2 kV	1119	1.9213
834035	SILVER LAKE 35	12.5/7.2 kV	1392	4.0726
834221	BRADEN PARK 21	12.5/7.2 kV	742	2.3163
834223	BRADEN PARK 23	12.5/7.2 kV	1912	4.2342
834721	WILSHIRE 21	12.5/7.2 kV	928	7.3793
834722	WILSHIRE 22	12.5/7.2 kV	1643	11.706
834723	WILSHIRE 23	12.5/7.2 kV	1145	10.653
834724	WILSHIRE 24	12.5/7.2 kV	1038	8.3081
835221	QUAIL CREEK 21	12.5/7.2 kV	1530	2.7054
835222	QUAIL CREEK 22	12.5/7.2 kV	1500	3.829
835223	QUAIL CREEK 23	12.5/7.2 kV	637	2.0165
835224	QUAIL CREEK 24	12.5/7.2 kV	880	2.9462
835229	QUAIL CREEK 29	12.5/7.2 kV	1001	0.92
835231	QUAIL CREEK 31	12.5/7.2 kV	297	3.694
835921	YUKON 21	12.5/7.2 kV	1449	5.3466
835922	YUKON 22	12.5/7.2 kV	1626	9.7016
835923	YUKON 23	12.5/7.2 kV	1228	16.818
835924	YUKON 24	12.5/7.2 kV	1756	8.4389
836021	WOODLAWN 21	12.5/7.2 kV	1472	14.098
836022	WOODLAWN 22	12.5/7.2 kV	1298	12.209
836023	WOODLAWN 23	12.5/7.2 kV	1421	12.876
836024	WOODLAWN 24	12.5/7.2 kV	1360	23.394
836121	WESTERN AVE 21	12.5/7.2 kV	1479	10.042
836122	WESTERN AVE 22	12.5/7.2 kV	981	5.0718
836123	WESTERN AVE 23	12.5/7.2 kV	1220	9.2068
836124	WESTERN AVE 24	12.5/7.2 kV	1998	9.304
836125	WESTERN AVE 25	12.5/7.2 kV	2483	10.28
836126	WESTERN AVE 26	12.5/7.2 kV	469	4.6849
836127	WESTERN AVE 27	12.5/7.2 kV	2180	10.957
836128	WESTERN AVE 28	12.5/7.2 kV	992	8.0614
836521	LAKESIDE 21	12.5/7.2 kV	1689	10.178
836522	LAKESIDE 22	12.5/7.2 kV	2005	7.7814
836523	LAKESIDE 23	12.5/7.2 kV	1758	6.4801
836524	LAKESIDE 24	12.5/7.2 kV	1685	8.4135
838121	DIVISION AVE 21	12.5/7.2 kV	1773	9.5174
838122	DIVISION AVE 22	12.5/7.2 kV	975	3.1641
838123	DIVISION AVE 23	12.5/7.2 kV	1251	3.6902
838124	DIVISION AVE 24	12.5/7.2 kV	1603	3.4762
838129	DIVISION AVE 29	12.5/7.2 kV	1057	2.2159
838131	DIVISION AVE 31	12.5/7.2 kV	2110	9.487
839869	CHISHOLM CREEK 69	34.5/19.9 kV	3953	13.376
839871	CHISHOLM CREEK 71	34.5/19.9 kV	2681	12.239
841170	ACORN 70	34.5/19.9 kV	1110	38.14
841172	ACORN 72	34.5/19.9 kV	1230	17.24
841401	LINDSAY AVE 01	4.16/2.4 kV	0	0.0099
841402	LINDSAY AVE 02	4.16/2.4 kV	0	0.0099
841404	LINDSAY AVE 04	4.16/2.4 kV	0	0.0105
841621	DUNJEE 21	12.5/7.2 kV	1671	27.622
841623	DUNJEE 23	12.5/7.2 kV	2335	59.033
841723	ROUND BARN 23	12.5/7.2 kV	1035	67.25
842101	KETCH 01	12.5/7.2 kV	0	0.0045
843022	REMINGTON PARK 22	12.5/7.2 kV	711	16.697
843024	REMINGTON PARK 24	12.5/7.2 kV	196	5.9455
843421	DEEP FORK 21	12.5/7.2 kV	509	5.9828
843422	DEEP FORK 22	12.5/7.2 kV	800	36.227
845049	SPRING CREEK 49	24.9/14.4 kV	0	0.1695
845821	GREEN PASTURES 21	12.5/7.2 kV	1350	41.464
845822	GREEN PASTURES 22	12.5/7.2 kV	1068	41.637
845824	GREEN PASTURES 24	12.5/7.2 kV	933	64.13
846421	BRYANT 21	12.5/7.2 kV	1259	28.704
846422	BRYANT 22	12.5/7.2 kV	693	34.299
846921	MEMORIAL 21	12.5/7.2 kV	1286	9.4786

Circuit Numb	Circuit Name	Voltage	Number of Cu	Length (miles)
846922	MEMORIAL 22	12.5/7.2 kV	1560	16.245
846923	MEMORIAL 23	12.5/7.2 kV	1493	12.141
846924	MEMORIAL 24	12.5/7.2 kV	1155	4.8127
846961	MEMORIAL 61	34.5/19.9 kV	1333	8.3492
846963	MEMORIAL 63	34.5/19.9 kV	558	4.7168
846965	MEMORIAL 65	34.5/19.9 kV	41	2.8558
847121	NE 30TH ST 21	12.5/7.2 kV	449	8.8594
847122	NE 30TH ST 22	12.5/7.2 kV	796	29.87
847123	NE 30TH ST 23	12.5/7.2 kV	1440	17.126
847421	STONEWALL 21	12.5/7.2 kV	492	8.1571
847422	STONEWALL 22	12.5/7.2 kV	1711	13.466
847423	STONEWALL 23	12.5/7.2 kV	1136	11.749
847424	STONEWALL 24	12.5/7.2 kV	2188	18.381
847429	STONEWALL 29	12.5/7.2 kV	812	11.238
847431	STONEWALL 31	12.5/7.2 kV	403	6.7121
848123	DANFORTH 23	12.5/7.2 kV	0	0.0155
849329	KELLEY AVE 29	12.5/7.2 kV	438	8.1444
849331	KELLEY AVE 31	12.5/7.2 kV	1037	14.302
850623	PARK PLACE 23	12.5/7.2 kV	299	3.1364
850627	PARK PLACE 27	12.5/7.2 kV	595	5.3483
851101	TWENTY FIRST ST 01	4.16/2.4 kV	0	0.0026
851102	TWENTY FIRST ST 02	4.16/2.4 kV	0	0.0032
851103	TWENTY FIRST ST 03	4.16/2.4 kV	0	0.0013
851104	TWENTY FIRST ST 04	4.16/2.4 kV	0	0.0066
851922	NE 10TH ST 22	12.5/7.2 kV	1826	10.008
851924	NE 10TH ST 24	12.5/7.2 kV	1761	17.252
851926	NE 10TH ST 26	12.5/7.2 kV	2151	23.682
851928	NE 10TH ST 28	12.5/7.2 kV	2060	10.556
851929	NE 10TH ST 29	12.5/7.2 kV	1010	8.0173
851931	NE 10TH ST 31	12.5/7.2 kV	984	17.24
851933	NE 10TH ST 33	12.5/7.2 kV	1082	9.208
851935	NE 10TH ST 35	12.5/7.2 kV	2422	16.138
852222	MIDWAY 22	12.5/7.2 kV	2103	43.47
852224	MIDWAY 24	12.5/7.2 kV	1544	29.01
852229	MIDWAY 29	12.5/7.2 kV	1501	47.024
852231	MIDWAY 31	12.5/7.2 kV	1287	40.568
852261	MIDWAY 61	34.5/19.9 kV	3695	137.02
852263	MIDWAY 63	34.5/19.9 kV	1539	78.569
853001	CALIFORNIA 01	4.16/2.4 kV	0	0.0398
853621	WASHINGTON PARK 21	12.5/7.2 kV	2522	23.969
853622	WASHINGTON PARK 22	12.5/7.2 kV	1052	15.935
853623	WASHINGTON PARK 23	12.5/7.2 kV	89	1.4404
853624	WASHINGTON PARK 24	12.5/7.2 kV	771	7.6543
853661	WASHINGTON PARK 61	34.5/19.9 kV	1	0.1937
853663	WASHINGTON PARK 63	34.5/19.9 kV	3	0.4801
853670	WASHINGTON PARK 70	34.5/19.9 kV	1192	3.5456
853672	WASHINGTON PARK 72	34.5/19.9 kV	1	0.5126
854222	RENO 22	12.5/7.2 kV	1870	16.876
854224	RENO 24	12.5/7.2 kV	1259	18.684
854229	RENO 29	12.5/7.2 kV	1416	13.096
854231	RENO 31	12.5/7.2 kV	1038	10.011
861721	SUNNYLANE 21	12.5/7.2 kV	1555	4.9911
861722	SUNNYLANE 22	12.5/7.2 kV	1870	9.4795
861723	SUNNYLANE 23	12.5/7.2 kV	1557	8.7901
861724	SUNNYLANE 24	12.5/7.2 kV	2056	5.5764
861821	BARNES 21	12.5/7.2 kV	650	16.963
861822	BARNES 22	12.5/7.2 kV	526	12.935
862022	LIGHTNING CREEK 22	12.5/7.2 kV	1660	13.996
862024	LIGHTNING CREEK 24	12.5/7.2 kV	975	7.6303
862029	LIGHTNING CREEK 29	12.5/7.2 kV	1143	10.438
862031	LIGHTNING CREEK 31	12.5/7.2 kV	1613	18.482
862063	LIGHTNING CREEK 63	De-Energized	0	0.3078
862065	LIGHTNING CREEK 65	De-Energized	0	0.2728

Circuit Numb	Circuit Name	Voltage	Number of Cus	Length (miles)
862134	DRAPER LAKE 34	12.5/7.2 kV	926	48.932
862171	DRAPER LAKE 71	34.5/19.9 kV	2944	171.03
862173	DRAPER LAKE 73	34.5/19.9 kV	152	17.575
862621	TROSPER 21	12.5/7.2 kV	2341	17.982
862622	TROSPER 22	12.5/7.2 kV	453	11.863
862623	TROSPER 23	12.5/7.2 kV	520	12.342
862624	TROSPER 24	12.5/7.2 kV	1187	10.944
862625	TROSPER 25	12.5/7.2 kV	1462	17.564
862627	TROSPER 27	12.5/7.2 kV	2143	10.598
865021	GLENDALE 21	12.5/7.2 kV	1203	9.9731
865022	GLENDALE 22	12.5/7.2 kV	1375	10.585
865023	GLENDALE 23	12.5/7.2 kV	1277	10.389
865024	GLENDALE 24	12.5/7.2 kV	1164	8.688
865029	GLENDALE 29	12.5/7.2 kV	1816	10.866
865031	GLENDALE 31	12.5/7.2 kV	1565	10.312
865421	MOORE 21	12.5/7.2 kV	1913	6.5129
865422	MOORE 22	12.5/7.2 kV	1227	9.6608
865423	MOORE 23	12.5/7.2 kV	1555	4.5724
865424	MOORE 24	12.5/7.2 kV	1330	2.8083
865429	MOORE 29	12.5/7.2 kV	1564	11.356
865431	MOORE 31	12.5/7.2 kV	1372	10.951
865621	FOSTER 21	12.5/7.2 kV	613	7.8625
865622	FOSTER 22	12.5/7.2 kV	268	4.2877
865623	FOSTER 23	12.5/7.2 kV	793	3.844
865624	FOSTER 24	12.5/7.2 kV	304	9.1573
865629	FOSTER 29	12.5/7.2 kV	888	14.313
865631	FOSTER 31	12.5/7.2 kV	374	4.1354
866221	SE 15TH ST 21	12.5/7.2 kV	1311	8.1536
866222	SE 15TH ST 22	12.5/7.2 kV	2437	35.482
866223	SE 15TH ST 23	12.5/7.2 kV	1530	24.09
866224	SE 15TH ST 24	12.5/7.2 kV	1691	23.115
868099	ELM CREEK 99	12.5/7.2 kV	0	0.0019
868501	TINKER FIELD 4 01	12.5/7.2 kV	0	0.0087
868522	TINKER FIELD 4 22	12.5/7.2 kV	0	0.4626
868531	TINKER FIELD 4 31	12.5/7.2 kV	0	1.4828
868535	TINKER FIELD 4 35	12.5/7.2 kV	0	1.1449
868641	GENERAL MOTORS 41	12.5/7.2 kV	0	0.0086
868643	GENERAL MOTORS 43	12.5/7.2 kV	0	0.0086
868701	TINKER FIELD NO 5 01	12.5/7.2 kV	0	0.0019
868721	TINKER FIELD NO 5 21	12.5/7.2 kV	0	0.2213
868724	TINKER FIELD NO 5 24	12.5/7.2 kV	0	2.7564
868739	TINKER FIELD NO 5 39	12.5/7.2 kV	0	1.2399
869021	WILD MARY 21	12.5/7.2 kV	1757	17.986
869023	WILD MARY 23	12.5/7.2 kV	1706	12.412
869221	AIR DEPOT 21	12.5/7.2 kV	428	3.7928
869223	AIR DEPOT 23	12.5/7.2 kV	1202	5.3718
869701	TINKER FIELD NO 3 01	12.5/7.2 kV	0	0.0087
869723	TINKER FIELD NO 3 23	12.5/7.2 kV	1	1.9353
869727	TINKER FIELD NO 3 27	12.5/7.2 kV	0	0.0046
870522	NORMAN 22	12.5/7.2 kV	792	4.9866
870523	NORMAN 23	12.5/7.2 kV	96	0.5077
870621	BOYD 21	12.5/7.2 kV	944	7.3463
870622	BOYD 22	12.5/7.2 kV	1302	7.7594
870623	BOYD 23	12.5/7.2 kV	1982	12.277
870624	BOYD 24	12.5/7.2 kV	659	5.5082
870629	BOYD 29	12.5/7.2 kV	1303	9.6039
870631	BOYD 31	12.5/7.2 kV	1279	7.4944
870721	WILKINSON 21	12.5/7.2 kV	1671	5.2975
870722	WILKINSON 22	12.5/7.2 kV	1579	20.51
870723	WILKINSON 23	12.5/7.2 kV	1638	3.7179
870724	WILKINSON 24	12.5/7.2 kV	2064	7.076
870769	WILKINSON 69	34.5/19.9 kV	2348	12.519
870771	WILKINSON 71	34.5/19.9 kV	2445	65.766

Circuit Numb	Circuit Name	Voltage	Number of Cus	Length (miles)
870821	CEDAR LANE 21	12.5/7.2 kV	1117	7.2517
870822	CEDAR LANE 22	12.5/7.2 kV	1856	6.4239
870823	CEDAR LANE 23	12.5/7.2 kV	2338	11.331
870824	CEDAR LANE 24	12.5/7.2 kV	1590	10.768
870921	LITTLE RIVER LAKE 21	12.5/7.2 kV	730	60.533
871101	TEXAS PL STELLA 01	4.16/2.4 kV	0	0.0077
871421	LITTLE AXE 21	12.5/7.2 kV	675	67.616
871521	ETOWAH 21	12.5/7.2 kV	59	23.139
871721	TURNER 21	12.5/7.2 kV	1780	4.7247
871723	TURNER 23	12.5/7.2 kV	923	11.687
871922	PLEASANT VALLEY 22	12.5/7.2 kV	1068	5.0808
871924	PLEASANT VALLEY 24	12.5/7.2 kV	745	10.291
872122	SPRING HILL 22	12.5/7.2 kV	16	7.7915
872123	SPRING HILL 23	12.5/7.2 kV	8	6.6335
872229	MILLENNIUM 29	12.5/7.2 kV	1917	11.473
872231	MILLENNIUM 31	12.5/7.2 kV	2357	29.155
872321	INDIAN HILL 21	12.5/7.2 kV	1251	16.03
872323	INDIAN HILL 23	12.5/7.2 kV	1917	10.379
872421	WESTINGHOUSE NORMAN 21	12.5/7.2 kV	0	0.0082
872621	NOBLE 21	12.5/7.2 kV	1089	10.957
872623	NOBLE 23	12.5/7.2 kV	1315	8.7247
872721	STUBBEMAN 21	12.5/7.2 kV	886	5.7865
872722	STUBBEMAN 22	12.5/7.2 kV	988	4.8968
872723	STUBBEMAN 23	12.5/7.2 kV	141	5.9076
872724	STUBBEMAN 24	12.5/7.2 kV	1334	12.188
872729	STUBBEMAN 29	12.5/7.2 kV	707	8.0963
872731	STUBBEMAN 31	12.5/7.2 kV	1382	9.6427
872821	CHERRY CREEK 21	12.5/7.2 kV	1062	1.5027
872822	CHERRY CREEK 22	12.5/7.2 kV	723	1.1449
872823	CHERRY CREEK 23	12.5/7.2 kV	279	1.0333
872824	CHERRY CREEK 24	12.5/7.2 kV	1198	2.0948
872829	CHERRY CREEK 29	12.5/7.2 kV	1773	1.5898
872831	CHERRY CREEK 31	12.5/7.2 kV	1866	7.0613
880501	GUTHRIE 01	De-Energized	0	0.0009
880503	GUTHRIE 03	De-Energized	0	0.0009
880621	COTTONWOOD CREEK 21	12.5/7.2 kV	1960	70.476
880622	COTTONWOOD CREEK 22	12.5/7.2 kV	1258	29.403
880623	COTTONWOOD CREEK 23	12.5/7.2 kV	1473	37.157
880624	COTTONWOOD CREEK 24	12.5/7.2 kV	752	38.136
880721	CRESCENT 21	12.5/7.2 kV	1019	29.767
880723	CRESCENT 23	12.5/7.2 kV	921	50.614
880921	LANGSTON 21	12.5/7.2 kV	0	0.0098
881001	ORLANDO 01	2.4 kV	0	0.7052
881003	ORLANDO 03	2.4 kV	4	0.9786
881341	FITZGERALD CREEK 41	24.9/14.4 kV	298	23.128
881342	FITZGERALD CREEK 42	24.9/14.4 kV	929	29.539
881424	PINE STREET 24	12.5/7.2 kV	1337	17.908
881429	PINE STREET 29	12.5/7.2 kV	1764	63.787
881444	PINE STREET 44	24.9/14.4 kV	177	34.707
881481	PINE STREET 81	4.16/2.4 kV	0	0.0286
881921	LIBERTY LAKE 21	12.5/7.2 kV	1450	52.79
881923	LIBERTY LAKE 23	12.5/7.2 kV	1702	34.557
882221	WATERLOO 21	12.5/7.2 kV	1100	13.9
882222	WATERLOO 22	12.5/7.2 kV	1139	32.533
882223	WATERLOO 23	12.5/7.2 kV	1262	66.559
882224	WATERLOO 24	12.5/7.2 kV	1888	43.347
888850	EDMOND DIST	12.5/7.2 kV	2	0.0213
888851	EDMOND DIST	12.5/7.2 kV	0	0.0658
888853	EDMOND DIST	12.5/7.2 kV	8	0.0951
888854	EDMOND DIST	12.5/7.2 kV	0	0.1805
888855	EDMOND DIST	12.5/7.2 kV	0	0.1344
888856	EDMOND DIST	12.5/7.2 kV	0	0.2238
888857	EDMOND DIST	12.5/7.2 kV	0	0.1794

Circuit Numb	Circuit Name	Voltage	Number of Cu	Length (miles)
888858	EDMOND DIST	12.5/7.2 kV	2	0.0912
888859	EDMOND DIST	12.5/7.2 kV	0	0.0701
888860	EDMOND DIST	12.5/7.2 kV	0	0.0564
888861	EDMOND DIST	12.5/7.2 kV	5	0.1441
888862	EDMOND DIST	12.5/7.2 kV	4	0.3153
888863	EDMOND DIST	12.5/7.2 kV	0	0.1303
888864	EDMOND DIST	12.5/7.2 kV	2	0.3338
888881	EDMOND DIST	12.5/7.2 kV	1	0.4127
888882	EDMOND DIST	12.5/7.2 kV	2	1.566
888883	EDMOND DIST	12.5/7.2 kV	14	0.6685
888884	EDMOND DIST	12.5/7.2 kV	5	0.4889
888885	EDMOND DIST	12.5/7.2 kV	3	0.1798
888886	EDMOND DIST	12.5/7.2 kV	4	0.1602
888887	EDMOND DIST	12.5/7.2 kV	3	0.4711
888888	EDMOND DIST	12.5/7.2 kV	26	1.6529
890239	TATONGA 39	12.5/7.2 kV	0	0.3572
890501	EL RENO 01	4.16/2.4 kV	0	0.0011
890502	EL RENO 02	4.16/2.4 kV	0	0.0012
890503	EL RENO 03	4.16/2.4 kV	0	0.0011
890521	EL RENO 21	12.5/7.2 kV	2162	24.869
890522	EL RENO 22	12.5/7.2 kV	2081	82.858
890523	EL RENO 23	12.5/7.2 kV	1338	30.318
890524	EL RENO 24	12.5/7.2 kV	1697	12.221
890622	SOUTHARD 22	12.5/7.2 kV	0	0.0867
890646	SOUTHARD 46	24.9/14.4 kV	18	31.874
890647	SOUTHARD 47	24.9/14.4 kV	1175	93.978
890649	SOUTHARD 49	24.9/14.4 kV	348	80.569
890701	CANTON 01	4.16/2.4 kV	201	3.9422
890702	CANTON 02	4.16/2.4 kV	0	0.0044
890846	ROMAN NOSE 46	24.9/14.4 kV	64	11.517
890847	ROMAN NOSE 47	24.9/14.4 kV	444	157.63
890946	KINGFISHER 46	De-Energized	0	0.0013
891021	OKARCHE 21	12.5/7.2 kV	734	38.348
891221	WATONGA 21	12.5/7.2 kV	0	0.0063
891501	SERVICE PL EL RENO 01	2.4 kV	0	0.0075
892122	JENSEN RD 22	12.5/7.2 kV	905	10.29
892161	JENSEN RD 61	34.5/19.9 kV	834	68.47
892163	JENSEN RD 63	34.5/19.9 kV	763	44.412
892169	JENSEN RD 69	34.5/19.9 kV	487	52.389
Total				18587

Circuit Name		Circuit #	Miles	Mean Bid Price		
CLYDE 21	4	422021	17.92	$ 8,060	CPM	$ 3,998.97
CLYDE 23	4	422023	65.79	$ 26,250		
CLEO 22	4	451922	23.16	$ 28,209		
ALINE 21	4	452221	6.69	$ 24,369		
SALINE 21	4	452821	27.92	$ 27,569		
SALINE 23	4	452823	19.11	$ 14,999		
ALVA 21	4	470521	46.09	$ 28,714		
ALVA 22	4	470522	14.32	$ 31,828		
ALVA 23	4	470523	4.79	$ 14,320		
KNOBHILL 21	4	470721	90.97	$ 69,998		
KNOBHILL 22	4	470722	152.46	$ 60,832		
ROUND BARN 23	4	841723	67.28	$ 218,477		
TOWER HEIGHTS 21	4	510721	7.3	$ 77,619		
TOWER HEIGHTS 22	4	510722	11.06	$ 105,791		
TOWER HEIGHTS 23	4	510723	19.44	$ 192,855		
TOWER HEIGHTS 24	4	510724	14.11	$ 131,563		
BERWYN 23	4	512423	102.32	$ 271,266		
CYPRESS 21	4	720821	48.28	$ 369,600		
WEWOKA 21	4	750521	108.47	$ 245,534		
CHESTNUT 21	4	411221	16.07	$ 76,313		
SO 4TH ST 22	4	413522	29.74	$ 89,198		
SO 4TH ST 24	4	413524	21.51	$ 160,548		
GLENDALE 24	4	865024	8.87	$ 60,862		
GLENDALE 31	4	865031	10.31	$ 86,453		
SE 15TH ST 22	4	866222	30.97	$ 114,520		
SE 15TH ST 23	4	866223	23.94	$ 98,490		
POTEAU 22	4	350522	51.63	$ 264,770		
HOWE 21	4	350721	9.9	$ 42,787		
HEAVENER 22	4	351422	64.09	$ 332,756		
VANOSS 22	4	580922	51.89	$ 166,210		
KELLYVILLE 29	5	322029	54.93	$ 148,338		
Porum	5	331421	64.93	$ 228,883		
HEMLOCK 21	5	410621	14.42	$ 52,831		
HEMLOCK 22	5	410622	15.41	$ 99,015		
HEMLOCK 23	5	410623	18.36	$ 100,239		
HEMLOCK 24	5	410624	18.14	$ 87,513		
CHESTNUT 22	5	411222	18.52	$ 124,227		
GLENWOOD 29	5	411929	5.8	$ 23,532		
Imo	5	415322	20.95	$ 59,523		
CEDAR AVE 24	5	460624	30.91	$ 123,617		
WOODWARD DISTRICT 47	5	460847	13	$ 63,217		
Healdton	5	530521	102.29	$ 333,580		
Pauls Valley	5	560522	27.4	$ 154,501		
Pauls Valley	5	560523	0.76	$ 2,732		
MAYSVILLE 21	5	561121	13.05	$ 106,669		

Circuit Name		Circuit #	Miles	Mean Bid Price
MAYSVILLE 22	5	561122	47.73	$ 172,569
RUSH CREEK 21	5	561921	16.5	$ 160,604
MILL CREEK 23	5	570723	17.95	$ 124,514
BYNG SPA 22	5	581322	41.03	$ 281,025
Blue River	5	581923	32.24	$ 114,167
RUSSETT 64	5	590764	119.18	$ 550,558
WARWICK 41	5	711941	96.71	$ 418,776
Wewoka	5	750524	45.89	$ 234,847
BRISTOW 21	5	770621	77.21	$ 490,097
BRISTOW 26	5	770626	7.94	$ 85,955
SW 64TH ST 21	5	812921	10.97	$ 80,998
KENTUCKY 21	5	813221	14.5	$ 165,196
MERIDIAN 21	5	822121	4.1	$ 15,764
MERIDIAN 26	5	822126	6.62	$ 36,377
STONEWALL 29	5	847429	11.24	$ 143,968
BOYD 21	5	870621	7.32	$ 170,658
BOYD 22	5	870622	7.91	$ 106,257
BOYD 23	5	870623	12.45	$ 245,649
BOYD 24	5	870624	5.51	$ 90,082
PLEASANT VALLEY 22	5	871922	4.13	$ 21,635
STUBBEMAN 23	5	872723	6.06	$ 11,791
CHERRY CREEK 22	5	872822	1.14	$ 6,827
CHERRY CREEK 29	5	872829	1.59	$ 35,325
CHERRY CREEK 31	5	872831	7.06	$ 32,979
COTTONWOOD CREEK 23	5	880623	37.16	$ 229,218
Fitzgerald Creek	5	881342	29.46	$ 212,932
Pine Street	5	881424	17.91	$ 155,144
Jenson	5	892122	10.29	$ 42,363
FOUR CORNERS 21	5	422521	23.44	$ 35,944
DEER CREEK 48	5	424048	72.05	$ 123,839
NE 10TH ST 22	5	851922	10.01	$ 72,932
COTTONWOOD CREEK 21	5	880621	70.26	$ 274,743
COTTONWOOD CREEK 22	5	880622	29.32	$ 128,204
EL RENO 22	5	890522	82.55	$ 186,739
EL RENO 23	5	890523	30.36	$ 86,641
OKARCHE 21	5	891021	38.12	$ 59,523

Mara's Workpapers

OKLAHOMA GAS AND ELECTRIC COMPANY
PRO FORMA ADJUSTMENT - OPERATING INCOME
VEGETATION MANAGEMENT DISTRIBUTION CYCLE
TEST YEAR ENDING 6/30/15
CAUSE NO. PUD 201500273

Line No.	Description	# Miles	Avg. Cost per Mile		FERC Account	Amount	Original Budget	Difference
	Oklahoma- Direct Assigned							
1	Test Year Expense - Distribution Cycle Trimming	3175	3,683		593	11,694,446	5,637,438	1,239,803
2	Test Year Expense - Distribution Non Cycle/Hardening				593	2,249,397	17,722,064	(5,593,975)
3	Test Year Expense - Distribution Substations				592	328,535	$ 23,359,503	(4,354,171)
4	**Total Test Year**					**$ 14,272,378**	2,073,523	(657,027)
5	Distribution Cycle Trimming: 2015-2016 Category 1	1162	5,921	4 year	593	6,877,242	357,877	-
6	Distribution Cycle Trimming: 2015-2016 Category 2	3485	3,481	4 year	593	12,128,090	$ 25,790,903	(5,011,198)
7	Distribution Cycle Trimming: 2015-2016	4646	4,091	4 year	593	$ 19,005,331		
8	Distribution Non Cycle				593	1,416,496		
9	Distribution Substations				592	357,877		
10	Total OK Pro Forma Distribution Expense					$ 20,779,704		
12	**Pro Forma Adjustment - Increase in O&M Expense**				**Direct Assign-OK**	**$ 6,507,326**	**$ 11,518,525**	(5,011,198)

PURPOSE: Compliance with OAC 165:35-25-15
Each utility shall, at a minimum, perform vegetation management on a 4-year cycle, unless needed otherwise or unless otherwise ordered by the Commission. The utility may request an exemption from this requirement by submitting an alternative(s) to the 4-year cycle to the Commission in its annual vegetation management plan for review and hearing. This adjustment is made to include the cost of distribution related vegetation management.

Section H - Operating Income Statement
W/P H-2-43

OKLAHOMA GAS AND ELECTRIC COMPANY
PRO FORMA ADJUSTMENT - OPERATING INCOME
VEGETATION MANAGEMENT DISTRIBUTION CYCLE
TEST YEAR ENDING 6/30/15
CAUSE NO. PUD 201500273

Line No.	Description	# Miles	Avg. Cost per Mile		FERC Account		Amount
	Oklahoma- Direct Assigned						
1	Test Year Expense - Distribution Cycle Trimming	3175	3,683		593		11,694,446
2	Test Year Expense - Distribution Non Cycle/Hardening				593		2,249,397
3	Test Year Expense - Distribution Substations				592		328,535
4	**Total Test Year**					**$**	**14,272,378**
5	Distribution Cycle Trimming: 2015-2016	1670	3,376	4 year	593		5,637,438
6	Distribution Cycle Trimming: 2015-2016	18	4,544	4 Yr. Mod.	593		83,376
7	Distribution Cycle Trimming: 2015-2016	2890	6,103	4 Yr. Mod.	593		17,638,689
8	Distribution Cycle Trimming: 2015-2016	4578	5,102	4 Yr. Mod.	593	$	23,359,503
9	Distribution Non Cycle				593		2,073,523
10	Distribution Substations				592		357,877
11	Total OK Pro Forma Distribution Expense					$	25,790,903
12	**Pro Forma Adjustment - Increase in O&M Expense**				**Direct Assign-OK**	**$**	**11,518,525**

PURPOSE: Compliance with OAC 165:35-25-15
Each utility shall, at a minimum, perform vegetation management on a 4-year cycle, unless needed otherwise or unless otherwise ordered by the Commission. The utility may request an exemption from this requirement by submitting an alternative(s) to the 4-year cycle to the Commission in its annual vegetation management plan for review and hearing. This adjustment is made to include the cost of distribution related vegetation management.

CERTIFICATE OF SERVICE

On this 21st day of March, 2016, a true and correct copy of the above and foregoing *Responsive Testimony and Exhibits of Kevin J. Mara on Behalf of E. Scott Pruitt, Oklahoma Attorney General*, was sent via electronic mail to the following interested parties:

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Cause No. PUD 201500273
Responsive Testimony and Exhibits of Kevin J. Mara
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