

Empire District Electric

**Infrastructure Policies,
Plans & Procedures**



SERVICES YOU COUNT ON

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Infrastructure Management

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Empire District Electric Company

602 S Joplin St., Joplin, Mo 64802

Introduction to Empire District's Infrastructure Policies, Plans & Procedures

The Empire District Electric Company developed the following policies, plans & procedures with the primary goal of providing long-term capacity, energy, transmission, and efficiency solutions while maintaining competitive rates. One of the key objectives of the policy is to increase the overall reliability of the electric system.

Empire operates in Missouri, Kansas, Oklahoma and Arkansas. The Company is divided in two districts for operations – Eastern & Western and each district has four service areas. All four states in which we operate have rules concerning reliability. Empire's plan is designed to comply with the rules of all four states.

The Missouri Public Service Commission enacted their rules on July 1, 2008. The infrastructure plans for the state of Missouri require completion of a four-year or six-year cycle through the entire system by June 30 of the year ending the cycle. The schedules included in this plan are designed to show at least one full cycle through the system. The schedules include a classification of each circuit based upon the number of customers per circuit mile.

Infrastructure Summary

The infrastructure plans for the distribution system are also designed to maintain a consistent number of miles across the system and in each of Empire's eight service areas. The schedule was developed to distribute the work load and the expense across each of the service areas. The goal was to sync the mid-cycle vegetation schedule with the detailed inspection schedule of the infrastructure to minimize the number of trips and times that Empire must gain access to private property. As a result, when the vegetation schedule needs to be adjusted the infrastructure schedule will also need to be adjusted. Since intrusive inspection are done a twelve year cycle, there schedules require a separate site visit and will be performed by circuit.

Detailed inspections are done on the equipment using a checklist. Each piece of equipment is assigned a passing grade or corrective action required. Equipment that is assigned the corrective action required will be scheduled for repair or replacement. Patrol inspections are scheduled by circuit (not done as part of normal daily activities) to insure the entire circuit is inspected and problems are properly documented.

The infrastructure plan for the transmission system also maintains a consistent number of miles across the system for budgetary reasons. The schedule was developed to complete entire lines to achieve maximum reliability on each line. The transmission system has a detailed inspection every three years and an aerial patrol done annually. The detailed and patrol inspections are performed the same as with the distribution system. Since intrusive inspection are done a twelve year cycle, there schedules require a separate site visit and will be performed by line from substation to substation.

For the remainder of 2008 Empire will continue to perform detailed inspections of all capacitors, regulators and 3-phase reclosers. As part of our normal daily activities, Empire will continue to report problems found in the system for repair or replacement. The aerial patrol inspection of the transmission system will be performed in the fall of 2008. There will be 68 miles of intrusive pole inspection on the transmission system as per our intrusive pole inspection schedule provided in the plan.

Section 1.1

Distribution System

Section 1.1.1

Detailed Inspection Schedule

Empire District Electric Company

Infrastructure Detailed Inspection Summary

4 Year Maintenance Cycle

	Total	Total	2008 Miles	2009 Miles	2010 Miles	2011 Miles	2012 Miles	2013 Miles	2014 Miles	2015 Miles	2016 Miles	2017 Miles	2018 Miles	2019 Miles	2020 Miles	2021 Miles
Area	Meters	Miles	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
209	17121	377.3	0.0	25.9	58.0	47.3	52.2	35.1	61.1	42.8	54.9	25.9	58.0	47.3	52.2	35.1
211	7859	143.2	0.0	28.0	0.0	13.4	18.5	33.3	20.3	17.5	12.2	28.0	0.0	13.4	18.5	33.3
212	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
213	7955	190.5	0.0	32.3	0.0	43.1	22.0	18.6	22.7	6.6	45.2	32.3	0.0	43.1	22.0	18.6
214	27424	427.0	0.0	42.7	59.4	56.9	49.0	49.8	62.6	59.3	47.3	42.7	59.4	56.9	49.0	49.8
215	9763	187.1	0.0	38.0	11.2	19.3	20.8	22.2	41.4	18.8	15.3	38.0	11.2	19.3	20.8	22.2
216	4324	84.0	0.0	10.0	20.9	0.0	0.0	15.3	3.2	0.0	34.5	10.0	20.9	0.0	0.0	15.3
217	10385	234.3	0.0	42.0	16.0	2.6	39.3	48.1	14.0	25.8	46.5	42.0	16.0	2.6	39.3	48.1
Total	84831	1643.5	0.0	219.0	165.6	182.6	201.8	222.3	225.3	170.9	256.1	219.0	165.6	182.6	201.8	222.3
Running			0.0%	13.3%	23.4%	34.5%	46.8%	60.3%	74.0%	84.4%	100.0%	113.3%	123.4%	134.5%	146.8%	160.3%

6 Year Maintenance Cycle

	Total	Total	2008 Miles	2009 Miles	2010 Miles	2011 Miles	2012 Miles	2013 Miles	2014 Miles	2015 Miles	2016 Miles	2017 Miles	2018 Miles	2019 Miles	2020 Miles	2021 Miles
Area	Meters	Miles	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
209	2921	113.8	0.0	16.7	0.0	0.0	0.0	0.0	0.0	33.7	42.4	0.0	21.0	0.0	0.0	16.7
211	13227	736.5	0.0	33.5	44.5	83.7	53.9	0.0	68.2	47.8	106.8	55.3	55.1	113.9	73.8	33.5
212	17021	829.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
213	9874	594.8	0.0	37.3	88.9	37.1	57.0	22.7	38.7	67.3	51.8	25.9	60.8	49.5	57.8	37.3
214	4587	265.5	0.0	0.0	23.1	65.1	0.0	0.0	28.5	71.3	43.0	0.0	0.0	0.0	34.5	0.0
215	12929	672.7	0.0	34.3	8.5	97.2	0.0	64.1	59.9	28.8	13.4	119.3	69.0	86.4	91.8	34.3
216	18488	833.6	0.0	49.8	35.9	74.2	56.4	55.3	43.2	34.4	55.4	91.4	0.0	85.7	52.4	49.8
217	8669	375.6	0.0	15.3	35.7	42.4	0.0	0.0	0.0	22.5	43.9	74.6	56.0	59.4	25.9	15.3
Total	87716	4421.7	0.0	186.9	236.5	399.7	167.3	142.1	238.5	305.8	356.7	366.4	261.9	395.0	336.2	186.9
Running			0.0%	4.2%	9.6%	18.6%	22.4%	25.6%	31.0%	37.9%	46.0%	54.3%	60.2%	69.1%	76.7%	81.0%

Empire District																
Totals	172547	6065.2	0.0	405.9	402.1	582.3	369.1	364.4	463.7	476.7	612.8	585.4	427.4	577.6	538.0	409.2

Company Totals

	Total	Total	2008 Miles	2009 Miles	2010 Miles	2011 Miles	2012 Miles	2013 Miles	2014 Miles	2015 Miles	2016 Miles	2017 Miles	2018 Miles	2019 Miles	2020 Miles	2021 Miles
Area	Meters	Miles	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
209	20042	491.2	0.0	42.6	58.0	47.3	52.2	35.1	61.1	76.6	97.3	25.9	79.0	47.3	52.2	51.8
211	21086	879.7	0.0	61.5	44.5	97.1	72.4	33.3	88.5	65.3	119.0	83.3	55.1	127.3	92.3	66.8
212	17021	829.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
213	17829	785.2	0.0	69.6	88.9	80.3	79.0	41.3	61.4	73.9	97.0	58.1	60.8	92.7	79.8	55.9
214	32011	692.5	0.0	42.7	82.5	122.0	49.0	49.8	91.1	130.6	90.3	42.7	59.4	56.9	83.5	49.8
215	22692	859.8	0.0	72.3	19.7	116.4	20.8	86.3	101.3	47.6	28.8	157.3	80.2	105.7	112.7	56.5
216	22812	917.7	0.0	59.8	56.8	74.2	56.4	70.6	46.4	34.4	90.0	101.4	20.9	85.7	52.4	65.1
217	19054	610.0	0.0	57.3	51.7	45.0	39.3	48.1	14.0	48.3	90.4	116.6	72.0	62.0	65.1	63.3
Total	172547	6065.2	0.0	405.9	402.1	582.3	369.1	364.4	463.7	476.7	612.8	585.4	427.4	577.6	538.0	409.2

Company Percentages/Year

	Total	Total	2008 Miles	2009 Miles	2010 Miles	2011 Miles	2012 Miles	2013 Miles	2014 Miles	2015 Miles	2016 Miles	2017 Miles	2018 Miles	2019 Miles	2020 Miles	2021 Miles
Area	Meters	Miles	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
209	20042	8.1%	0.0%	10.5%	14.4%	8.1%	14.1%	9.6%	13.2%	16.1%	15.9%	4.4%	18.5%	8.2%	9.7%	12.7%
211	21086	14.5%	0.0%	15.2%	11.1%	16.7%	19.6%	9.1%	19.1%	13.7%	19.4%	14.2%	12.9%	22.0%	17.2%	16.3%
212	17021	13.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
213	17829	12.9%	0.0%	17.1%	22.1%	13.8%	21.4%	11.3%	13.2%	15.5%	15.8%	9.9%	14.2%	16.0%	14.8%	13.7%
214	32011	11.4%	0.0%	10.5%	20.5%	20.9%	13.3%	13.7%	19.6%	27.4%	14.7%	7.3%	13.9%	9.8%	15.5%	12.2%
215	22692	14.2%	0.0%	17.8%	4.9%	20.0%	5.6%	23.7%	21.8%	10.0%	4.7%	26.9%	18.8%	18.3%	20.9%	13.8%
216	22812	15.1%	0.0%	14.7%	14.1%	12.7%	15.3%	19.4%	10.0%	7.2%	14.7%	17.3%	4.9%	14.8%	9.7%	15.9%
217	19054	10.1%	0.0%	14.1%	12.9%	7.7%	10.6%	13.2%	3.0%	10.1%	14.8%	19.9%	16.8%	10.7%	12.1%	15.5%
Total	172547	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

East/West Totals

	Total	Total	2008 Miles	2009 Miles	2010 Miles	2011 Miles	2012 Miles	2013 Miles	2014 Miles	2015 Miles	2016 Miles	2017 Miles	2018 Miles	2019 Miles	2020 Miles	2021 Miles
Area	Meters	Miles	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
East	78011	2766.1	0.0	231.0	243.1	269.7	242.9	157.7	225.0	264.1	403.7	284.0	266.8	329.4	289.4	237.8
West	94536	3299.0	0.0	174.9	159.0	312.6	126.2	206.7	238.7	212.6	209.0	301.4	160.6	248.2	248.6	171.3
Total	172547	6065.2	0.0	405.9	402.1	582.3	369.1	364.4	463.7	476.7	612.8	585.4	427.4	577.6	538.0	409.2

State Totals

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled	2021 Miles Scheduled
MO	150483	5042.3	0.0	405.9	402.1	582.3	369.1	364.4	463.7	476.7	612.8	585.4	427.4	577.6	538.0	409.2
KS	10387	529.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OK	7197	312.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AR	4480	172.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	172547	6056.6	0.0	405.9	402.1	582.3	369.1	364.4	463.7	476.7	612.8	585.4	427.4	577.6	538.0	409.2

State 4 Year Maintenance Totals

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled	2021 Miles Scheduled
MO	84268	1622.1	0.0	219.0	165.6	182.6	201.8	222.3	225.3	170.9	256.1	219.0	165.6	182.6	201.8	222.3
KS	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OK	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AR	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	84268	1622.1	0.0	219.0	165.6	182.6	201.8	222.3	225.3	170.9	256.1	219.0	165.6	182.6	201.8	222.3

State 6 Year Maintenance Totals

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled	2021 Miles Scheduled
MO	66215	3420.2	0.0	186.9	236.5	399.7	167.3	142.1	238.5	305.8	356.7	366.4	261.9	395.0	336.2	186.9
KS	10387	529.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OK	7197	312.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AR	4480	172.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	88279	4434.5	0.0	186.9	236.5	399.7	167.3	142.1	238.5	305.8	356.7	366.4	261.9	395.0	336.2	186.9

State 4 Year Maintenance Running Percentage for that State

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled	2021 Miles Scheduled
MO	84268	1622.1	0.0%	13.5%	23.7%	35.0%	47.4%	61.1%	75.0%	85.5%	101.3%	114.8%	125.0%	136.3%	148.7%	162.4%
KS	0	0.0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
OK	0	0.0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AR	0	0.0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	84268	1622.1	0.0%	13.5%	23.7%	35.0%	47.4%	61.1%	75.0%	85.5%	101.3%	114.8%	125.0%	136.3%	148.7%	162.4%

State 6 Year Maintenance Running Percentage for that State

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled	2021 Miles Scheduled
MO	66215	3420.2	0.0%	5.5%	12.4%	24.1%	29.0%	33.1%	40.1%	49.0%	59.5%	70.2%	77.8%	89.4%	99.2%	104.7%
KS	10387	529.6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
OK	7197	312.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AR	4480	172.4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	88279	4434.5	0.0%	5.5%	12.4%	24.1%	29.0%	33.1%	40.1%	49.0%	59.5%	70.2%	77.8%	89.4%	99.2%	104.7%

Empire District Electric

Infrastructure Management - Detailed Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
3121	209	312	MO	1053	17.8	59.1	4	0.0	0.0	0.0	0.0	0.0	0.0	17.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3311	209	331	MO	635	16.2	39.3	4	0.0	0.0	0.0	0.0	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.2	0.0
3312	209	331	MO	17	4.7	3.6	4	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0
3313	209	331	MO	486	12.3	39.7	4	0.0	0.0	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3
3314	209	331	MO	207	7.1	29.2	4	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0
3315	209	331	MO	1032	31.4	32.9	4	0.0	0.0	0.0	0.0	31.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.4	0.0
3871	209	387	MO	1215	14.6	83.3	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	0.0	0.0	0.0	0.0	0.0
3872	209	387	MO	896	13.2	68.0	4	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3873	209	387	MO	1815	40.2	45.1	4	0.0	0.0	0.0	40.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.2	0.0	0.0
3874	209	387	MO	186	6.5	28.7	4	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5
4101	209	410	MO	553	16.5	33.5	4	0.0	0.0	0.0	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4102	209	410	MO	800	20.9	38.3	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0
4131	209	413	MO	179	6.8	26.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0	0.0
4132	209	413	MO	408	6.2	66.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0
4133	209	413	MO	298	10.6	28.1	4	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6
4134	209	413	MO	782	15.2	51.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0	0.0	0.0	0.0	0.0
4135	209	413	MO	61	2.9	20.8	4	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4136	209	413	MO	601	7.0	85.6	4	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0
4137	209	413	MO	719	10.7	67.3	4	0.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4138	209	413	MO	694	12.6	55.2	4	0.0	12.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6	0.0	0.0	0.0	0.0
4331	209	433	MO	273	13.4	20.4	4	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0
4332	209	433	MO	203	5.7	35.5	4	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7
4333	209	433	MO	389	12.2	31.9	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0	0.0	0.0	0.0
4334	209	433	MO	377	7.1	52.7	4	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0
4381	209	438	MO	208	22.0	9.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0
4383	209	438	MO	319	12.9	24.7	4	0.0	0.0	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9	0.0	0.0	0.0
4385	209	438	MO	1090	17.4	62.7	4	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4	0.0	0.0	0.0
4386	209	438	MO	1625	13.5	120.4	4	0.0	0.0	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	0.0	0.0	0.0
Total				17121	377.3			0.0	25.9	58.0	47.3	52.2	35.1	61.1	42.8	54.9	25.9	58.0	47.3	52.2	35.1
2951	209	295	MO	1268	42.4	29.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.4	0.0	0.0	0.0	0.0	0.0
2952	209	295	MO	140	8.9	15.8	6	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
3122	209	312	MO	818	33.7	24.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7	0.0	0.0	0.0	0.0	0.0	0.0
3123	209	312	MO	670	21.0	31.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0
4561	209	456	MO	25	7.8	3.2	6	0.0	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8
Total				2921	113.8			0.0	16.7	0.0	0.0	0.0	0.0	0.0	33.7	42.4	0.0	21.0	0.0	0.0	16.7

Empire District Electric

Infrastructure Management - Detailed Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
1242	211	124	MO	663	7.5	88.8	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0
1243	211	124	MO	974	18.5	52.6	4	0.0	0.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.5	0.0
2211	211	221	MO	721	20.3	35.5	4	0.0	0.0	0.0	0.0	0.0	0.0	20.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3551	211	355	MO	1005	12.2	82.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0	0.0	0.0	0.0
3591	211	359	MO	984	21.6	45.6	4	0.0	0.0	0.0	0.0	0.0	21.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6
3593	211	359	MO	986	10.0	98.4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
3594	211	359	MO	524	13.4	39.2	4	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4	0.0	0.0
4511	211	451	MO	1546	28.0	55.2	4	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0
4512	211	451	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4513	211	451	MO	456	11.7	39.1	4	0.0	0.0	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7
Total				7859.0	143.2			0.0	28.0	0.0	13.4	18.5	33.3	20.3	17.5	12.2	28.0	0.0	13.4	18.5	33.3
1241	211	124	MO	831	31.1	26.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.1	0.0	0.0	0.0	0.0	0.0	0.0
1521	211	152	MO	1560	106.8	14.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.8	0.0	0.0	0.0	0.0	0.0
1522	211	152	MO	138	16.7	8.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0
1523	211	152	MO	697	55.0	12.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	0.0
2051	211	205	MO	210	21.3	9.9	6	0.0	21.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.3
2052	211	205	MO	440	18.8	23.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	0.0
2212	211	221	MO	1097	55.3	19.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.3	0.0	0.0	0.0	0.0
2622	211	262	MO	111	12.2	9.1	6	0.0	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2
3552	211	355	MO	550	18.4	29.9	6	0.0	0.0	0.0	0.0	0.0	0.0	18.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3553	211	355	MO	949	49.8	19.0	6	0.0	0.0	0.0	0.0	0.0	0.0	49.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3592	211	359	MO	1534	55.1	27.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.1	0.0	0.0	0.0
3621	211	362	MO	1135	73.5	15.4	6	0.0	0.0	0.0	73.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3901	211	390	MO	862	30.9	27.9	6	0.0	0.0	30.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3902	211	390	MO	93	10.3	9.1	6	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3903	211	390	MO	276	13.6	20.3	6	0.0	0.0	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4371	211	437	MO	2169	113.9	19.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	113.9	0.0	0.0
4372	211	437	MO	575	53.9	10.7	6	0.0	0.0	0.0	0.0	53.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				13227.0	736.5			0.0	33.5	44.5	83.7	53.9	0.0	68.2	47.8	106.8	55.3	55.1	113.9	73.8	33.5

Empire District Electric

Infrastructure Management - Detailed Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
0	#N/A	###	#N/A	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1861	212	186	OK	711	34.8	20.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2712	212	271	OK	1169	54.6	21.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2912	212	291	OK	714	25.4	28.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3631	212	363	OK	1233	62.1	19.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3771	212	377	OK	1086	66.4	16.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3772	212	377	OK	10	1.7	5.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3773	212	377	OK	119	17.2	6.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3811	212	381	OK	859	13.1	65.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3812	212	381	OK	720	16.0	44.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4281	212	428	OK	13	1.8	7.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6601	212	66	KS	787	49.4	15.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6602	212	66	KS	499	20.1	24.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2711	212	271	KS	237	59.6	4.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2781	212	278	KS	1	0.6	1.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2782	212	278	KS	1457	54.6	26.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2783	212	278	KS	1119	45.1	24.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2821	212	282	KS	424	9.9	42.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2822	212	282	KS	374	6.8	54.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2823	212	282	KS	524	25.4	20.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2824	212	282	KS	923	17.3	53.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2911	212	291	KS	1194	61.6	19.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2913	212	291	KS	879	12.8	68.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2914	212	291	KS	544	17.1	31.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2991	212	299	KS	1	0.4	2.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3391	212	339	KS	13	2.4	5.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4061	212	406	KS	1220	114.2	10.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4062	212	406	KS	4	2.1	1.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4251	212	425	KS	185	36.0	5.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4441	212	444	KS	2	0.5	4.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				17021.0	829.1			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Empire District Electric

Infrastructure Management - Detailed Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
3671	213	367	MO	1058	16.7	63.2	4	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7
3672	213	367	MO	145	1.8	79.2	4	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
3673	213	367	MO	257	21.6	11.9	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	0.0	0.0	0.0	0.0	0.0
3674	213	367	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3675	213	367	MO	414	6.6	62.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0
4091	213	409	MO	1105	22.7	48.7	4	0.0	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4182	213	418	MO	930	23.6	39.4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0
4311	213	431	MO	964	11.5	84.1	4	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0
4312	213	431	MO	1412	43.1	32.7	4	0.0	0.0	0.0	43.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.1	0.0	0.0
4313	213	431	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6021	213	602	MO	597	22.0	27.1	4	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0
6022	213	602	MO	400	5.0	79.7	4	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
6143	213	614	MO	363	8.8	41.2	4	0.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	0.0	0.0	0.0	0.0
6144	213	614	MO	310	7.0	44.4	4	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
Total				7955.0	190.5			0.0	32.3	0.0	43.1	22.0	18.6	22.7	6.6	45.2	32.3	0.0	43.1	22.0	18.6
2091	213	209	MO	815	57.0	14.3	6	0.0	0.0	0.0	0.0	57.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2092	213	209	MO	820	32.3	25.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.3	0.0	0.0	0.0
2171	213	217	MO	510	30.9	16.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.9	0.0
2172	213	217	MO	207	34.4	6.0	6	0.0	0.0	0.0	0.0	0.0	0.0	34.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2491	213	249	MO	60	14.5	4.2	6	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5
2501	213	250	MO	77	4.3	17.9	6	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2511	213	251	MO	592	22.7	26.1	6	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2621	213	262	MO	1094	88.9	12.3	6	0.0	0.0	88.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3041	213	304	MO	76	3.1	24.8	6	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1
3081	213	308	MO	549	28.4	19.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.4	0.0	0.0	0.0
3082	213	308	MO	320	11.2	28.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	0.0
3181	213	318	MO	686	49.5	13.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.5	0.0	0.0
3231	213	323	MO	357	18.8	19.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0	0.0	0.0	0.0
3232	213	323	MO	422	19.8	21.3	6	0.0	19.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.8
3421	213	342	MO	624	25.9	24.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.9	0.0	0.0	0.0	0.0
3422	213	342	MO	950	37.1	25.6	6	0.0	0.0	0.0	37.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4092	213	409	MO	386	26.9	14.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.9	0.0
4181	213	418	MO	453	21.8	20.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8	0.0	0.0	0.0	0.0	0.0
6141	213	614	MO	876	67.3	13.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.3	0.0	0.0	0.0	0.0	0.0	0.0
Total				9874.0	594.8			0.0	37.3	88.9	37.1	57.0	22.7	38.7	67.3	51.8	25.9	60.8	49.5	57.8	37.3

Empire District Electric

Infrastructure Management - Detailed Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
1225	214	59	MO	931	7.7	121.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0
1226	214	59	MO	339	4.2	80.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0
1227	214	59	MO	1164	20.3	57.3	4	0.0	0.0	0.0	0.0	0.0	0.0	20.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1228	214	59	MO	491	4.2	117.3	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0
1229	214	59	MO	1972	13.2	149.9	4	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0
401	214	64	MO	102	0.8	133.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
402	214	64	MO	107	1.9	57.6	4	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
403	214	64	MO	254	2.7	95.2	4	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
404	214	64	MO	166	1.3	131.4	4	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
405	214	64	MO	43	0.6	71.8	4	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
406	214	64	MO	70	0.7	103.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
407	214	64	MO	98	0.9	103.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
432	214	100	MO	83	1.1	76.8	4	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
433	214	100	MO	40	0.6	71.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
434	214	100	MO	28	0.8	35.4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1451	214	145	MO	481	12.4	38.8	4	0.0	0.0	0.0	0.0	0.0	12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4
1453	214	145	MO	1762	20.9	84.1	4	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.9	0.0	0.0
1454	214	145	MO	892	14.4	61.8	4	0.0	0.0	0.0	0.0	0.0	14.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4
1455	214	145	MO	505	8.3	60.9	4	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3
1261	214	258	MO	396	4.8	82.2	4	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1262	214	258	MO	198	5.5	35.8	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0
1263	214	258	MO	1364	15.3	89.0	4	0.0	0.0	0.0	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1264	214	258	MO	41	4.1	10.0	4	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1265	214	258	MO	1209	14.0	86.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0
1267	214	258	MO	70	4.4	16.0	4	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4
451	214	284	MO	0	0.4	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
452	214	284	MO	0	0.1	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
453	214	284	MO	126	1.0	124.0	4	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
454	214	284	MO	102	1.7	59.9	4	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
455	214	284	MO	73	0.9	79.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
456	214	284	MO	45	0.7	66.9	4	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
457	214	284	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1273	214	341	MO	863	9.2	93.3	4	0.0	0.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	0.0	0.0
1274	214	341	MO	8	2.1	3.9	4	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1281	214	360	MO	81	3.7	22.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0
1282	214	360	MO	891	13.5	66.0	4	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	0.0	0.0
1283	214	360	MO	363	7.5	48.7	4	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0
1284	214	360	MO	663	9.7	68.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0	0.0
1285	214	360	MO	1126	15.8	71.4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0	0.0
1286	214	360	MO	43	2.6	16.8	4	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0
1287	214	360	MO	1	0.4	2.5	4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0

Empire District Electric

Infrastructure Management - Detailed Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
1230	214	372	MO	1131	12.5	90.7	4	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0
1231	214	372	MO	3	0.2	16.6	4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
1232	214	372	MO	1143	15.1	75.7	4	0.0	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.1	0.0
1233	214	372	MO	629	5.0	127.0	4	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0
3911	214	391	MO	6	1.2	5.0	4	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0
3912	214	391	MO	1118	20.4	54.7	4	0.0	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.4	0.0
3914	214	391	MO	676	42.7	15.8	4	0.0	42.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.7	0.0	0.0	0.0	0.0
4222	214	422	MO	1533	13.4	114.1	4	0.0	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4	0.0
4223	214	422	MO	1207	13.2	91.3	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0
4224	214	422	MO	625	10.3	60.9	4	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3
4301	214	430	MO	606	7.1	85.8	4	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0
4302	214	430	MO	640	17.4	36.8	4	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4	0.0	0.0	0.0
4303	214	430	MO	767	28.7	26.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.7	0.0	0.0	0.0	0.0	0.0	0.0
4304	214	430	MO	130	3.3	39.8	4	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0
4471	214	447	MO	5	1.3	3.9	4	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0
4472	214	447	MO	14	1.2	11.5	4	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0
Total				27424.0	427.0			0.0	42.7	59.4	56.9	49.0	49.8	62.6	59.3	47.3	42.7	59.4	56.9	49.0	49.8
1452	214	145	MO	397	21.0	18.9	6	0.0	0.0	21.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145D	214	145	MO	1	0.2	6.5	6	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1271	214	341	MO	874	43.0	20.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.0	0.0	0.0	0.0	0.0	0.0
1272	214	341	MO	13	1.9	6.9	6	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3891	214	389	MO	392	28.5	13.8	6	0.0	0.0	0.0	0.0	0.0	0.0	28.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3892	214	389	MO	1193	71.3	16.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.3	0.0	0.0	0.0	0.0	0.0	0.0
3913	214	391	MO	1258	65.1	19.3	6	0.0	0.0	0.0	65.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4221	214	422	MO	459	34.5	13.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.5	0.0
Total				4587.0	265.5			0.0	0.0	23.1	65.1	0.0	0.0	28.5	71.3	43.0	0.0	0.0	0.0	34.5	0.0

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Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
1050	215	105	MO	1381	15.3	90.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0	0.0
1051	215	105	MO	1018	18.8	54.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0
1052	215	105	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1094	215	109	MO	968	26.7	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	26.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1101	215	110	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1102	215	110	MO	589	14.7	40.2	4	0.0	0.0	0.0	0.0	0.0	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1103	215	110	MO	839	19.3	43.5	4	0.0	0.0	0.0	19.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3	0.0	0.0
3661	215	366	MO	1064	22.0	0.0	4	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0
4321	215	432	MO	4	0.9	4.4	4	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0
4322	215	432	MO	85	2.6	32.8	4	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0
4323	215	432	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4324	215	432	MO	979	20.8	47.0	4	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	0.0
4361	215	436	MO	1420	22.2	64.0	4	0.0	0.0	0.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2
4362	215	436	MO	774	7.7	100.4	4	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0
4363	215	436	MO	642	16.0	40.0	4	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0
Total				9763.0	187.1			0.0	38.0	11.2	19.3	20.8	22.2	41.4	18.8	15.3	38.0	11.2	19.3	20.8	22.2
1081	215	108	MO	20	4.4	4.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0
1082	215	108	MO	1252	119.3	10.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	119.3	0.0	0.0	0.0	0.0
1083	215	108	MO	1	1.4	0.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
1084	215	108	MO	5	1.2	4.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0
1091	215	109	MO	1545	97.2	15.9	6	0.0	0.0	0.0	97.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1092	215	109	MO	1111	43.6	25.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.6	0.0
1093	215	109	MO	206	8.5	24.4	6	0.0	0.0	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2492	215	249	MO	29	6.5	4.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0
3662	215	366	MO	1022	61.2	16.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.2	0.0	0.0
3663	215	366	MO	267	28.8	9.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.8	0.0	0.0	0.0	0.0	0.0	0.0
3951	215	395	MO	1041	48.3	21.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.3	0.0
3952	215	395	MO	360	36.9	9.8	6	0.0	0.0	0.0	0.0	0.0	0.0	36.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4031	215	403	MO	620	23.0	26.9	6	0.0	0.0	0.0	0.0	0.0	0.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4171	215	417	MO	1071	34.3	31.3	6	0.0	34.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.3
4172	215	417	MO	2140	69.0	31.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.0	0.0	0.0	0.0
4211	215	421	MO	1472	64.1	23.0	6	0.0	0.0	0.0	0.0	0.0	64.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4212	215	421	MO	767	25.2	30.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.2	0.0	0.0
Total				12929.0	672.7			0.0	34.3	8.5	97.2	0.0	64.1	59.9	28.8	13.4	119.3	69.0	86.4	91.8	34.3

Empire District Electric

Infrastructure Management - Detailed Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
5601	216	56	MO	77	2.9	26.3	4	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0
5602	216	56	MO	479	10.0	47.8	4	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
5641	216	56	MO	403	3.2	125.4	4	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5642	216	56	MO	205	1.9	105.1	4	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0
2961	216	296	MO	1643	34.5	47.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.5	0.0	0.0	0.0	0.0	0.0
2962	216	296	MO	238	7.8	30.6	4	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8
2963	216	296	MO	1	0.3	3.1	4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
3982	216	398	MO	718	7.5	95.1	4	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
4142	216	414	MO	560	15.7	35.6	4	0.0	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7	0.0	0.0	0.0
Total				4324.0	84.0			0.0	10.0	20.9	0.0	0.0	15.3	3.2	0.0	34.5	10.0	20.9	0.0	0.0	15.3
5603	216	56	MO	1176	43.2	27.2	6	0.0	0.0	0.0	0.0	0.0	0.0	43.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1311	216	131	MO	238	22.9	10.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.9	0.0	0.0	0.0	0.0	0.0
1312	216	131	MO	873	49.8	17.5	6	0.0	49.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.8
1841	216	184	MO	1497	56.4	26.5	6	0.0	0.0	0.0	0.0	56.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1842	216	184	MO	192	16.3	11.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	0.0	0.0	0.0	0.0
1843	216	184	MO	1027	43.7	23.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.7	0.0	0.0	0.0	0.0
3221	216	322	MO	1162	34.4	33.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.4	0.0	0.0	0.0	0.0	0.0	0.0
3222	216	322	MO	936	32.3	29.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.3	0.0	0.0
3261	216	326	AR	266	7.7	34.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3262	216	326	AR	36	1.0	36.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3263	216	326	AR	111	16.3	6.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3471	216	347	MO	156	16.3	9.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	0.0	0.0	0.0	0.0
3472	216	347	MO	1464	52.4	27.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.4	0.0
3751	216	375	MO	1112	53.4	20.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.4	0.0	0.0
3752	216	375	OK	563	21.6	26.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3921	216	392	AR	427	12.1	35.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3922	216	392	AR	1703	56.6	30.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3923	216	392	AR	1	4.2	0.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3981	216	398	MO	1236	73.5	16.8	6	0.0	0.0	0.0	73.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3991	216	399	MO	658	55.3	11.9	6	0.0	0.0	0.0	0.0	0.0	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3992	216	399	MO	160	8.4	19.0	6	0.0	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4141	216	414	MO	86	14.5	6.0	6	0.0	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4431	216	443	MO	1265	47.6	26.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.6	0.0	0.0	0.0	0.0
4432	216	443	MO	206	13.0	15.9	6	0.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4433	216	443	MO	1	0.7	1.4	6	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7001	216	700	AR	1276	52.6	24.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7002	216	700	AR	660	27.6	23.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				18488.0	833.6			0.0	49.8	35.9	74.2	56.4	55.3	43.2	34.4	55.4	91.4	0.0	85.7	52.4	49.8

Empire District Electric

Infrastructure Management - Detailed Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
1141	217	114	MO	864	16.0	53.9	4	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0
3301	217	330	MO	200	2.6	77.0	4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0
3302	217	330	MO	607	14.0	43.3	4	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3303	217	330	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3304	217	330	MO	942	14.5	64.9	4	0.0	0.0	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5
3305	217	330	MO	8	0.7	12.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
3702	217	370	MO	601	14.2	42.4	4	0.0	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0
4151	217	415	MO	1091	27.8	39.2	4	0.0	27.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8	0.0	0.0	0.0	0.0
4152	217	415	MO	803	25.0	32.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0
4153	217	415	MO	1012	25.8	39.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8	0.0	0.0	0.0	0.0	0.0	0.0
4154	217	415	MO	951	20.8	45.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	0.0
4155	217	415	MO	1692	39.3	43.1	4	0.0	0.0	0.0	0.0	39.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.3	0.0
4156	217	415	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4342	217	434	MO	1614	33.5	48.1	4	0.0	0.0	0.0	0.0	0.0	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.5
Total				10385	234.3			0.0	42.0	16.0	2.6	39.3	48.1	14.0	25.8	46.5	42.0	16.0	2.6	39.3	48.1
8001	217	80	MO	4	0.6	7.2	6	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1142	217	114	MO	198	15.3	12.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0	0.0
1211	217	121	MO	1388	74.6	18.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.6	0.0	0.0	0.0	0.0
1212	217	121	MO	67	9.7	6.9	6	0.0	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1213	217	121	MO	519	28.6	18.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0
3331	217	333	MO	2	0.5	4.3	6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3691	217	369	MO	1241	56.0	22.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	0.0	0.0	0.0
3692	217	369	MO	1063	35.7	29.8	6	0.0	0.0	35.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3693	217	369	MO	527	15.3	34.5	6	0.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3
3701	217	370	MO	478	25.9	18.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.9	0.0
3971	217	397	MO	625	22.5	27.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5	0.0	0.0	0.0	0.0	0.0	0.0
4341	217	434	MO	1805	59.4	30.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.4	0.0	0.0
4343	217	434	MO	752	31.7	23.7	6	0.0	0.0	0.0	31.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				8669	375.6			0.0	15.3	35.7	42.4	0.0	0.0	0.0	22.5	43.9	74.6	56.0	59.4	25.9	15.3

Section 1.1.2

Detailed Inspection Checklist



The Empire District Electric Company Detailed Inspection Standard

TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Equipment Testing and Maintenance Requirements

- General:** The following equipment-testing requirements and related procedures were developed as a key element in a preventive maintenance program. The procedures were developed using manufacturers' recommendations, industry standards, and past service history. The following equipment sheets contain the requirements for detailed inspections, testing, and required overhauls for line equipment. Patrol inspections will consist of visual inspection of the listed equipment done according to the schedule on page 3 plus recording of recloser counters to determine when to take them out of service to rebuild them.
- Procedures** The required diagnostic testing for specific types of equipment is summarized in this attachment. Table 1 on Page 2 summarizes the specific intervals for these tests. In addition to the diagnostic testing for specific types of equipment, the inspections identified on the equipment sheets must also be performed at the time of the testing.



The Empire District Electric Company Detailed Inspection Standard

TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

System Inspection Cycles

	Patrol		Detailed & Intrusive		Notes
	Urban	Rural	Urban	Rural	
Poles/Overhead Structures					
Wood	4	6	12	12	Note 1
Non-wood	4	6	12	12	Note 2
Conductors, Transformers, Reclosers, Regulators, Capacitors, Switching/Protective Devices, and Streetlighting					
Overhead	4	6	8	12	
Underground-direct buried and conduit	4	6	8	12	Note 3
Vaults, and Other underground structures	4	6	8	12	

Note 1: No intrusive inspection required for first 12 years after installation, however, intrusive inspection required between years 12 and 18. For poles/structures greater than 12 years of age at inception of program, intrusive inspections must be completed within 12 years.

Note 2: No detailed inspection required for first 12 years after installation, however, detailed inspection required between years 12 and 18. For poles/structures greater than 12 years of age at inception of program, detailed inspections must be completed within 12 years.

Note 3: Some components of underground-direct buried and conduit distribution systems are above ground (e.g., pad-mounted transformers, pad-mounted switches, pad-mounted reclosers, etc.) The inspection intervals also apply to these above ground devices. These inspection requirements do not apply to direct-buried cable or cable installed in underground conduit.



The Empire District Electric Company Detailed Inspection Standard

TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Capacitor Bank, Overhead–Fixed or Switched, Equipment Sheet

- 1. Equipment:** Capacitor bank, overhead and pad-mounted.
- 2. Subtype:** 300, 600 and 1200 kVars, fixed or switched, pad-mounted or overhead.
- 3. Safety:** Shut down bank for a minimum of 5 minutes before re-energizing.
- 4. Inspection:** Make a visual inspection to check the condition of bushings, switches, capacitor tanks, cutouts, fuses, control cabinets, associated potential and current transformers, etc.
- 4. Testing:**

To maintain the system power factor per [Empire District Electric Substation Load Information and Power Factor](#), requires that capacitors be checked and operated before the summer peak. When the only action is to place the capacitor off-line, testing is not required.

 - a. Fixed Capacitors: All fixed capacitors that are required for seasonal peaks must be tested and placed on line by June 1 for the summer peak. Fixed capacitors that are not required for seasonal peaks must be placed offline by June 1 for the summer peak.
 - b. Switched Capacitors: All switched capacitors that are required for seasonal peaks must be tested and placed on auto by June 1 for the summer. Switched capacitors that are not required for seasonal peaks must be configured to be normally off-line by June 1 for the summer peak.

Note: It is strongly recommended that electronic controls that are normally configured with time or temperature as the prime operating criteria during peak seasons be configured to automatically switch to operate only under voltage controls in the off-peak seasons. If so, it is not necessary to visit the banks in the off-peak seasons.

Excluded Capacitor Banks: Capacitors excluded by [Empire District Electric](#), or emergency banks or banks that cause operation, overload, or voltage problems, must be tested annually.

Testing Fixed Banks:

 - a. With the capacitor energized, take and record clamp-on ammeter readings on each phase.
 - b. If the current readings are outside of the ranges shown in Table 1.3, investigate for possible bad units, connections, etc.



The Empire District Electric Company Detailed Inspection Standard

TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Table 1.3. Ampere Readings for Capacitor Banks¹

	Circuit Voltage			
	4 kV		12 kV	
Bank kvars	Min	Max	Min	Max
300	39	52		
600	79	103	27	36
1,200			54	71

¹With allowance for normal variations in both circuit voltages and unit capacitance, capacitor banks should have load currents with the following ranges.

Testing Switched Banks:

- a. With the fuses closed and the switches in both the open and closed positions:
 1. Check that the operating-level position or indicating flag is operating properly.
 2. Take and record voltage readings.
 3. Take and record clamp-on ammeter readings on each phase.
 4. Non-zero current readings with the switches open indicate a failed switch.
 5. If the current readings with the switches closed are outside the values shown in Table 1.3 above, investigate for possible bad units, connectors, etc.
- b. Return the capacitor to automatic and to open or closed, as appropriate.
- c. Record the counter readings.
- d. Verify that the control is running and set properly.

Capacitor control settings should be reviewed by the System Planning & Protection Department before the summer peak in all areas. If changes in the settings are required, a request should be forwarded to the System Planning & Protection Department so it can coordinate operation with the scheduled testing.

6. Maintenance: Replace as necessary



The Empire District Electric Company Detailed Inspection Standard

TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Recloser & Sectionalizer Equipment Sheet

- 1. Equipment:** Recloser or Sectionalizer, overhead.
- 2. Subtypes:** Hydraulic.
Electronic - Form 3A. Microprocessor – Form 4C.
- 3. Safety:** Before operating control verify grounding system is adequate.
- 4. Inspection:** Make a visual inspection during testing to check the condition of the bushings, tank, bypass and disconnect switches, lightning arresters, associated potential and current transformers (if present), etc.
- 5. Testing:** New Reclosers and Controllers: New reclosers and controllers are completely tested at the factory, in accordance with the applicable ANSI and IEEE standards, and there is no need to duplicate this testing. On new reclosers, check only for shipping damage, such as broken or cracked bushings, oil leaks, etc. After the recloser is installed, perform a “trip check” to ensure that the control, cable, and recloser are functioning properly. To perform the “trip check,” use the soldering-gun test described in the manufacturer’s manual that comes with the recloser.
- Overhauled Reclosers: Overhauled reclosers must be completely shop-tested before installation, in accordance with the manufacturer’s instructions. After the recloser is installed, perform a “trip check” to ensure that the control, cable, and recloser are functioning properly. To perform the “trip check,” use the soldering gun test described in the manufacturer’s manual that comes with the recloser.
- 3 Phase Reclosers must be tested and thoroughly inspected annually. 1 Phase Reclosers must be tested and thoroughly inspected based upon the inspection schedule on page 3. Record the results of the tests and inspections.
- Make a visual inspection to check the condition of the bushings, tank, bypass and disconnect switches, lightning arresters, associated potential and current transformers (if present), etc.
 - Record the counter readings.
 - Check that the non-reclosing lever or switch is in the proper position. On reclosers with ground tripping, check that the ground-trip switch is in the “cut in” position.
 - Check the indicating lights and battery charger, and perform a battery test.
 - Record the duty-cycle monitor reading for each phase on Form 4C

6. Testing Recloser Batteries:

The batteries used with reclosers must be field-tested to ensure that the recloser operates properly.

Instructions for Field Testing Form 3A Controller Batteries (Nickel-Cadmium, Code 563208) Note: For voltage values outside the ranges shown



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TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

below, refer to the "Field Equipment Inspection and Testing Job Aid." This job aid provides detailed procedures to analyze and correct this situation.

- a. Perform the battery field test with a Cooper/McGraw-Edison battery-test voltmeter (Catalog No. KA638 ME) or other suitable equipment.
- b. Use a meter to check the open-circuit voltage of the battery. If the battery voltage is below 24 volts, the battery is either discharged or faulty and should be replaced.
- c. If the battery's voltage is above 24 volts, perform a power-delivery check. To perform this check, record the open-circuit voltage and discharge the battery through the 10-ohm resistor, which is incorporated in the battery-test voltmeter, for approximately 2 to 3 seconds. With ambient temperatures above 20°F, the battery voltage should not drop more than 3 volts below the open-circuit voltage. If the voltage drop is greater than 3 volts, the battery should be replaced immediately or the recloser should be bypassed until a replacement battery is installed.

Instructions for Field Testing Form 4C Controller Batteries (Sealed Lead-Acid, Code 340244) Note: For voltage values outside the ranges shown below, refer to the "Field Equipment Inspection and Testing Job Aid." This job aid provides detailed procedures to analyze and correct this situation.

a. Testing with the control connected to the ac power source - Use the following procedure to test the performance of the control battery while it is connected to ac power: Initial conditions: An ac power source is connected to the control, the battery circuit is connected, and the Meter Range switch is set to Low.

- Press the Battery Meter Selector switch in the Volts position for 5 seconds.
- The battery voltage should read 27-29 Vdc.
- With the Battery Meter Selector switch depressed, press the BatteryLoad
- Test switch for 5 seconds (which places a 5-ohm load on the battery). The voltage drop should not exceed 3.0 Vdc.

b. Testing with the control not connected to the ac power source - The control battery may be tested if the ac power is disconnected and the control is operating on battery power only. Initial conditions: The ac power is disconnected, the battery circuit is connected, and the Meter Range switch is set to Low.

- Press the Battery Meter Selector switch in the Volts position for 5 seconds. The battery voltage should read 25-27 Vdc. If the battery charge is less than 23.2 Vdc, recharge the battery before performing the battery-load test described below.
- With the Battery Meter Selector switch depressed, press the Battery Load Test switch for 5 seconds (which places a 5-ohm load on the battery). The voltage drop should not exceed 3.0 Vdc. If the voltage drop is greater than 3 volts, the battery should be replaced immediately or the recloser should be bypassed until a replacement battery is installed.



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7. Maintenance: Battery-Replacement Procedures

a. Form 3A Control

1. Note the position of the recloser (open or closed).
2. Put the Ground Relay toggle switch in the CUT-OUT position.
3. Disconnect the control cable from the control cabinet.
4. De-energize battery charger voltage by opening the battery charger fuse block switch.
5. Operate the Manual Control Switch to OPEN.
6. Unplug and remove the old control battery.
7. Install and plug in the new control battery.
8. Close the battery charger fuse block switch to energize the battery charger voltage.
9. Move the Manual Control Switch to CLOSE, to ensure that control is reset to the home position.
10. If the recloser position was noted as closed, skip this step. If the recloser position was noted as open, move the Manual Control Switch to Open.
11. Reconnect the control cable to the control cabinet.
12. Put the Ground Relay toggle switch in the CUT-IN position.
13. Verify the recloser is in the proper position (open or closed).

b. Form 4C Control

1. Note the position of the recloser (either open or closed).
2. Place the ground-relay toggle switch in the cutout position.
3. Disconnect the control cable from the control cabinet.
4. De-energize the ac power to the control. (Remove the ac supply fuses from the controller.)
5. Unplug and remove the old control battery.
6. Install and plug in the new control battery.
7. Apply ac power to the control.
8. Reconnect the control cable to the control cabinet.
9. Place the ground-relay toggle switch in the cut-in position.
10. Reset the control clock.
11. Perform a battery test to confirm that the new battery passes the above tests.
12. Verify that the recloser is in the proper position (either open or closed).



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8. Overhauls:

Reclosers must be removed and overhauled as required, which is determined by the maximum number of operations from the simulated duty-cycle-monitor computer program. Also, reclosers must be maintained or overhauled based on the results of inspections, infrared imaging, operations, etc. (for example, broken bushings, gunshots, leaking oil, etc.). Reclosers in a coastal and/or corrosive environment must be closely inspected (from a bucket truck) 10 years after being installed new or overhauled. If this close inspection reveals extreme external corrosion, the recloser must be removed and overhauled. If the close inspection does not reveal any problems, the next time frame for a close inspection of the recloser must be established based on the findings of the current close inspection. The requirement for a close inspection is in addition to the removal and overhaul requirements established by the simulated duty-cycle-monitor computer program.

- Reclosers equipped with external ground relays should have the relays tested at the time of the overhaul.
- Reclosers equipped with microprocessor controls (such as a Form 4C control) have a duty-cycle-monitor that indicates when maintenance is required. This monitor, instead of the simulated duty cycle listed above, must be used to establish the overhaul requirements.

Overhaul Procedures

Refer to Work Policy 11 (WP11)



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TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Regulators, Overhead Equipment Sheet

- 1. Equipment:** Regulators, overhead.
- 2. Subtype:** Pole-bolted or platform-mounted.
- 3. Inspection:** Make a visual inspection to check the condition of the bushings, tank, bypass, disconnect switches, lightning arrestors, etc.
- 4. Testing:** The regulator's control setting must be reviewed and checked at least once a year, and adjusted, if necessary.
 - a. Check the condition of the bushings, tank, bypass, disconnect switches, lightning arrestors, etc.
 - b. Record the voltmeter readings.
 - c. Record the indicator position and the minimum-maximum range.
 - d. Check that the regulator is operating properly. Place the regulator on manual control, raise the voltage, reset the control to automatic, and note if the regulator returns to the proper position. Check that the counter is operating properly. Repeat this procedure, except lower the voltage instead of raising it.
 - e. Record the counter reading.
 - f. Reset the range indicators, if present.
 - g. Before leaving, check that the regulator controls are on automatic.
- 5. Maintenance:** Regulators should be removed from the line and returned to the shop for overhaul every 500,000 operations or after a period not to exceed 10 years, whichever comes first.



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TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Switch, Overhead – Overhead Air (Solid Blade, Old-Style, Torsion-Type and U.S. Switch) Equipment Sheet

- 1. Equipment:** Switch, overhead.
- 2. Subtype:** Overhead air.
 - a. Old-style, torsion-type.
 - b. U.S. switch.
- 3. Inspection:** Overhead air switches must be inspected when operating the switch. When U.S. style switches are in the closed position, check to ensure that all phases are fully closed (the switch blade must be parallel with the phase unit channel) and all interrupters are latched. In addition, the control rod must have a slight compression load (approximately 1¼ inches of compression for 30 feet of rod) against the switch when it is in the closed position (i.e., the fiberglass control rod should have a slight bow in it). Note the following to determine if the closed U.S. style switch is fully latched:
 - The Cooper switch is properly latched if the interrupter arm has passed through the catch arm.
 - Check for arrestors installed on both sides of switch.
- 4. Testing:** Thermal/Infared scan.
- 5. Maintenance:** As required by the results of inspections, infrared surveys, operations, etc. After a few years, a switch may become stiff and difficult to operate. If that occurs, sparingly apply "Conducto-Lube" (Code 495346) to the overhead switch contacts.



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TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Switch, Underground – Pad-Mounted Equipment Sheet

- 1. Equipment:** Switch, underground.
- 2. Subtype:** Pad-mounted, solid-blade, and/or fuse.
- a. PMH 3 - gang-operated switch only.
 - b. PMH 4, 5, 6, 9, and 11, 12, 13 - with expulsion and gang-operated switch.
- Note: PHM 4 - expulsion fuse only.
- 3. Inspection:** Pad-mounted switches and/or fuses must be inspected when operating the device.
- 4. Testing:** None required.
- 5. Maintenance:** As required by the results of inspections, infrared surveys, operations, etc.



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TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Transformers, Overhead Equipment Sheet

- 1) Equipment:** Transformers, overhead.
- 2) Inspection:** As needed.
- Check the insulators and bushings for cracks, tracks, and flash marks.
- On a transformer equipped with a lightening arrester(s)
- a) Check for isolator activation.
 - b) Insure primary lead is connected to the primary bushing.
- Check for leaking oil.
- Check for excessive corrosion.
- Check the temperature by doing a thermal/infrared scan.
- Record the ambient temperature.
- Inspect security of cabinet/locks.
- 3) Testing:** none.
- 4) Maintenance:** None in the field.



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TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Transformers – Pad-Mounted, Dead-Front & Live-Front (Low-Profile, Single-Phase and Three-Phase) Equipment Sheet

- 1) Equipment:** Transformers, underground.
- 2) Subtype:** Pad-mounted, dead-front.
 - a) Low-profile, single-phase transformer with single-phase
 - b) Three-phase transformers.
- 3) Inspection:** All dead-front, pad-mounted transformers must be inspected externally and internally for abnormal conditions, as needed. The inspection results and any abnormal conditions that are found must be documented and corrected. Abnormal conditions include:
 - Shrubs or trees within a 5-foot operating space on three sides and 10-foot operating space in the front that will interfere with equipment operation.
 - Missing or unintelligible high voltage signs or equipment identification numbers.
 - A cabinet that is damaged or unsecured, has a missing lock, or is unsafe to the public.
 - The lack of a barrier post needed for vehicular protection.
 - Fiber barriers in the primary compartment that show signs of tracking.
 - Conduct a thermal/infrared scan.
 - Record the ambient temperature.
- 4) Testing:** None required.
- 5) Maintenance:** None in the field.



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TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Pole – Transmission & Distribution

- 1. Equipment:** Transmission or distribution.
- 2. Subtype:** wood or steel
- 3. Inspection:** Check the structural integrity of the pole and note number and size of woodpecker holes and any current bracing.. Check that all anchors, guys and tie wires are adequately attached and properly tensioned. Check all crossarms, pins, insulators, ground wires and any attached electric equipment to insure that they are adequately attached. Insure that the pole has an Empire District pole identifier.
- 4. Testing:** Intrusive inspection will drill and treat with core hardener.
- 5. Maintenance:** Tighten attachments, guys and anchors. Add C-brace to support structural integrity.



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TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Vaults

- 1. Equipment:** Underground
- 2. Subtype:** Concrete
- 3. Inspection:** Check the structural integrity of the vault lid. Ensure that lid is properly sealed. Remove any woody vegetation growing next to vault.
- 4. Testing:** None
- 5. Maintenance:** As required by the results of inspections.



The Empire District Electric Company Detailed Inspection Standard

TITLE: Electric Maintenance Requirements for Distribution & Transmission Equipment

Streetlight Equipment Sheets

- 1. Equipment:** Streetlight.
- 2. Subtype:** Pole-bolted. Mounted on distribution pole. Mounted on streetlight only pole or post.
- 3. Inspection:** All streetlights must be inspected per the table on page 3. The inspection must include: checking for missing or illegible numbers, broken lens, dayburning lamps, secure inspection plate, secure installation. In addition, the need for repainting steel poles should also be assessed. Record the results of the inspection. Currently rely on cities/municipalities to report lights not working.
- 4. Testing:** Wood poles must be hammer tested per the table on page 3. Do not bore test centerbored wood poles. Record the results of the inspections.
- 5. Maintenance:** As identified during inspection.



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**TITLE: Electric Maintenance Requirements
for Distribution & Transmission Equipment**

Primary Pedestal

- 1. Equipment:** Above ground pedestal.
- 2. Subtype:** Metal cabinet.
- 3. Inspection:** Check mounting and security lock. Perform thermal/infrared scan.
- 4. Testing:** None
- 5. Maintenance:** As identified during inspection.

Section 1.1.3

Patrol Inspection Schedule

Empire District Electric Company

Infrastructure Patrol Summary

4 Year Maintenance Cycle

	Total	Total	2008 Miles	2009 Miles	2010 Miles	2011 Miles	2012 Miles	2013 Miles	2014 Miles	2015 Miles	2016 Miles	2017 Miles	2018 Miles	2019 Miles	2020 Miles	2021 Miles
Area	Meters	Miles	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
209	17121	377.3	0.0	35.1	61.1	42.8	54.9	25.9	58.0	47.3	52.2	35.1	61.1	42.8	54.9	25.9
211	7859	143.2	0.0	33.3	20.3	17.5	12.2	28.0	0.0	13.4	18.5	33.3	20.3	17.5	12.2	28.0
212	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
213	7955	190.5	0.0	18.6	22.7	6.6	45.2	32.3	0.0	43.1	22.0	18.6	22.7	6.6	45.2	32.3
214	27424	427.0	0.0	49.8	62.6	59.3	47.3	42.7	59.4	56.9	49.0	49.8	62.6	59.3	47.3	42.7
215	9763	187.1	0.0	22.2	41.4	18.8	15.3	38.0	11.2	19.3	20.8	22.2	41.4	18.8	15.3	38.0
216	4324	84.0	0.0	15.3	3.2	0.0	34.5	10.0	20.9	0.0	0.0	15.3	3.2	0.0	34.5	10.0
217	10385	234.3	0.0	48.1	14.0	25.8	46.5	42.0	16.0	2.6	39.3	48.1	14.0	25.8	46.5	42.0
Total	84831	1643	0.0	222.3	225.3	170.9	256.1	219.0	165.6	182.6	201.8	222.3	225.3	170.9	256.1	219.0
Running			0.0%	13.5%	27.2%	37.6%	53.2%	66.5%	76.6%	87.7%	100.0%	113.5%	127.2%	137.6%	153.2%	166.5%

6 Year Maintenance Cycle

	Total	Total	2008 Miles	2009 Miles	2010 Miles	2011 Miles	2012 Miles	2013 Miles	2014 Miles	2015 Miles	2016 Miles	2017 Miles	2018 Miles	2019 Miles	2020 Miles	2021 Miles
Area	Meters	Miles	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
209	2921	113.8	0.0	33.7	42.4	0.0	21.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	33.7
211	13227	736.5	0.0	47.8	106.8	55.3	55.1	113.9	73.8	33.5	44.5	83.7	53.9	0.0	68.2	47.8
212	17021	829.1	0.0	0.0	78.8	70.8	114.2	66.4	92.9	0.0	78.8	70.8	114.2	66.4	92.9	0.0
213	9874	594.8	0.0	67.3	51.8	25.9	60.8	49.5	57.8	37.3	88.9	37.1	57.0	22.7	38.7	67.3
214	4587	265.5	0.0	71.3	43.0	0.0	0.0	0.0	34.5	0.0	23.1	65.1	0.0	0.0	28.5	71.3
215	12929	672.7	0.0	28.8	13.4	119.3	69.0	86.4	91.8	34.3	8.5	97.2	0.0	64.1	59.9	28.8
216	18488	833.6	0.0	34.4	76.3	91.4	56.6	107.3	52.4	49.8	63.4	74.2	109.0	59.5	59.4	34.4
217	8669	375.6	0.0	22.5	43.9	74.6	56.0	59.4	25.9	15.3	35.7	42.4	0.0	0.0	0.0	22.5
Total	87716	4421.7	0.0	305.8	456.4	437.2	432.6	482.9	429.1	186.9	342.9	470.5	334.1	212.7	347.6	305.8
Running			0.0%	6.9%	17.2%	27.1%	36.9%	47.8%	57.5%	61.8%	69.5%	80.2%	87.7%	92.5%	100.4%	107.3%

Empire District																
Totals	172547	6065.2	0.0	528.1	681.7	608.1	688.7	702.0	594.7	369.5	544.7	692.8	559.4	383.6	603.6	524.8

Company Totals

	Total	Total	2008 Miles	2009 Miles	2010 Miles	2011 Miles	2012 Miles	2013 Miles	2014 Miles	2015 Miles	2016 Miles	2017 Miles	2018 Miles	2019 Miles	2020 Miles	2021 Miles
Area	Meters	Miles	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
209	20042	491.2	0.0	68.8	103.5	42.8	75.9	25.9	58.0	64.0	52.2	35.1	61.1	42.8	54.9	59.7
211	21086	879.7	0.0	81.1	127.0	72.8	67.3	142.0	73.8	46.9	63.0	117.0	74.2	17.5	80.4	75.9
212	17021	829.1	0.0	0.0	78.8	70.8	114.2	66.4	92.9	0.0	78.8	70.8	114.2	66.4	92.9	0.0
213	17829	785.2	0.0	85.9	74.5	32.5	106.0	81.8	57.8	80.5	110.9	55.7	79.6	29.3	83.9	99.6
214	32011	692.5	0.0	121.1	105.6	59.3	47.3	42.7	94.0	56.9	72.0	114.9	62.6	59.3	75.8	114.0
215	22692	859.8	0.0	51.0	54.8	138.0	84.4	124.4	103.1	53.5	29.3	119.4	41.4	82.9	75.2	66.9
216	22812	917.7	0.0	49.7	79.5	91.4	91.1	117.3	73.4	49.8	63.4	89.5	112.2	59.5	94.0	44.4
217	19054	610.0	0.0	70.5	57.9	100.4	102.5	101.4	41.9	17.9	75.0	90.4	14.0	25.8	46.5	64.5
Total	172547	6065.2	0.0	528.1	681.7	608.1	688.7	702.0	594.7	369.5	544.7	692.8	559.4	383.6	603.6	524.8

Company Percentages/Year

	Total	Total	2008 Miles	2009 Miles	2010 Miles	2011 Miles	2012 Miles	2013 Miles	2014 Miles	2015 Miles	2016 Miles	2017 Miles	2018 Miles	2019 Miles	2020 Miles	2021 Miles
Area	Meters	Miles	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
209	20042	8.1%	0.0%	13.0%	15.2%	7.0%	11.0%	3.7%	9.7%	17.3%	9.6%	5.1%	10.9%	11.2%	9.1%	11.4%
211	21086	14.5%	0.0%	15.4%	18.6%	12.0%	9.8%	20.2%	12.4%	12.7%	11.6%	16.9%	13.3%	4.6%	13.3%	14.5%
212	17021	13.7%	0.0%	0.0%	11.6%	11.6%	16.6%	9.5%	15.6%	0.0%	14.5%	10.2%	20.4%	17.3%	15.4%	0.0%
213	17829	12.9%	0.0%	16.3%	10.9%	5.3%	15.4%	11.7%	9.7%	21.8%	20.4%	8.0%	14.2%	7.6%	13.9%	19.0%
214	32011	11.4%	0.0%	22.9%	15.5%	9.8%	6.9%	6.1%	15.8%	15.4%	13.2%	16.6%	11.2%	15.5%	12.6%	21.7%
215	22692	14.2%	0.0%	9.7%	8.0%	22.7%	12.2%	17.7%	17.3%	14.5%	5.4%	17.2%	7.4%	21.6%	12.5%	12.7%
216	22812	15.1%	0.0%	9.4%	11.7%	15.0%	13.2%	16.7%	12.3%	13.5%	11.6%	12.9%	20.1%	15.5%	15.6%	8.5%
217	19054	10.1%	0.0%	13.4%	8.5%	16.5%	14.9%	14.4%	7.0%	4.8%	13.8%	13.1%	2.5%	6.7%	7.7%	12.3%
Total	172547	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

East/West Totals

	Total	Total	2008 Miles	2009 Miles	2010 Miles	2011 Miles	2012 Miles	2013 Miles	2014 Miles	2015 Miles	2016 Miles	2017 Miles	2018 Miles	2019 Miles	2020 Miles	2021 Miles
Area	Meters	Miles	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
East	78011	2766.1	0.0	306.3	362.9	248.6	351.7	351.1	231.4	209.3	301.1	298.2	229.0	115.5	265.8	299.6
West	94536	3299.0	0.0	221.8	318.8	359.5	337.0	350.8	363.3	160.2	243.6	394.6	330.4	268.1	337.9	225.3
Total	172547	6065.2	0.0	528.1	681.7	608.1	688.7	702.0	594.7	369.5	544.7	692.8	559.4	383.6	603.6	524.8

State Totals

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled	2021 Miles Scheduled
MO	150483	5042	0.0	528.1	582.0	537.3	517.9	614.0	501.8	369.5	438.3	622.0	392.6	313.0	494.5	524.8
KS	10387	529.6	0.0	0.0	61.6	36.0	114.2	0.0	12.8	0.0	61.6	36.0	114.2	0.0	12.8	0.0
OK	7197	312	0.0	0.0	17.2	34.8	0.0	87.9	80.1	0.0	17.2	34.8	0.0	66.4	80.1	0.0
AR	4480	172.4	0.0	0.0	20.9	0.0	56.6	0.0	0.0	0.0	27.6	0.0	52.6	4.2	16.3	0.0
Total	172547	6056.6	0.0	528.1	681.7	608.1	688.7	702.0	594.7	369.5	544.7	692.8	559.4	383.6	603.6	524.8

State 4 Year Maintenance Totals

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled	2021 Miles Scheduled
MO	84268	1622	0.0	222.3	225.3	170.9	256.1	219.0	165.6	182.6	201.8	222.3	225.3	170.9	256.1	219.0
KS	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OK	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AR	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	84268	1622.1	0.0	222.3	225.3	170.9	256.1	219.0	165.6	182.6	201.8	222.3	225.3	170.9	256.1	219.0

State 6 Year Maintenance Totals

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled	2021 Miles Scheduled
MO	66215	3420.2	0.0	305.8	356.7	366.4	261.9	373.4	336.2	186.9	236.5	399.7	167.3	142.1	238.5	305.8
KS	10387	529.6	0.0	0.0	61.6	36.0	114.2	0.0	12.8	0.0	61.6	36.0	114.2	0.0	12.8	0.0
OK	7197	312	0.0	0.0	17.2	34.8	0.0	87.9	80.1	0.0	17.2	34.8	0.0	66.4	80.1	0.0
AR	4480	172.4	0.0	0.0	20.9	0.0	56.6	0.0	0.0	0.0	27.6	0.0	52.6	4.2	16.3	0.0
Total	88279	4434.5	0.0	305.8	456.4	437.2	432.6	461.4	429.1	186.9	342.9	470.5	334.1	212.7	347.6	305.8

State 4 Year Maintenance Running Percentage for that State

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled	2021 Miles Scheduled
MO	84268	1622.1	0.0%	13.7%	27.6%	38.1%	53.9%	67.4%	77.6%	88.9%	101.3%	115.0%	128.9%	139.4%	155.2%	168.7%
KS	0	0.0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
OK	0	0.0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AR	0	0.0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	84268	1622.1	0.0%	13.7%	27.6%	38.1%	53.9%	67.4%	77.6%	88.9%	101.3%	115.0%	128.9%	139.4%	155.2%	168.7%

State 6 Year Maintenance Running Percentage for that State

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled	2021 Miles Scheduled
MO	66215	3420.2	0.0%	8.9%	19.4%	30.1%	37.7%	48.7%	58.5%	64.0%	70.9%	82.6%	87.4%	91.6%	98.6%	107.5%
KS	10387	529.6	0.0%	0.0%	11.6%	18.4%	40.0%	40.0%	42.4%	42.4%	54.0%	60.8%	82.4%	82.4%	84.8%	84.8%
OK	7197	312.3	0.0%	0.0%	5.5%	16.7%	16.7%	44.8%	70.5%	70.5%	76.0%	87.1%	87.1%	108.4%	134.0%	134.0%
AR	4480	172.4	0.0%	0.0%	12.1%	12.1%	44.9%	44.9%	44.9%	44.9%	60.9%	60.9%	91.4%	93.9%	103.3%	103.3%
Total	88279	4434.5	0.0%	8.9%	48.6%	77.3%	139.3%	178.4%	216.3%	221.7%	261.8%	291.4%	348.4%	376.3%	420.7%	429.7%

Empire District Electric

Infrastructure Management - Patrol Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
3121	209	312	MO	1053	17.8	59.1	4	0.0	0.0	17.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8	0.0	0.0	0.0
3311	209	331	MO	635	16.2	39.3	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.2	0.0	0.0	0.0	0.0	0.0
3312	209	331	MO	17	4.7	3.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0
3313	209	331	MO	486	12.3	39.7	4	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0
3314	209	331	MO	207	7.1	29.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0
3315	209	331	MO	1032	31.4	32.9	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.4	0.0	0.0	0.0	0.0	0.0
3871	209	387	MO	1215	14.6	83.3	4	0.0	0.0	0.0	0.0	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	0.0
3872	209	387	MO	896	13.2	68.0	4	0.0	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0	0.0
3873	209	387	MO	1815	40.2	45.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.2	0.0	0.0	0.0	0.0	0.0	0.0
3874	209	387	MO	186	6.5	28.7	4	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0
4101	209	410	MO	553	16.5	33.5	4	0.0	0.0	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.5	0.0	0.0	0.0
4102	209	410	MO	800	20.9	38.3	4	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.9	0.0	0.0
4131	209	413	MO	179	6.8	26.5	4	0.0	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	0.0
4132	209	413	MO	408	6.2	66.2	4	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0
4133	209	413	MO	298	10.6	28.1	4	0.0	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0
4134	209	413	MO	782	15.2	51.5	4	0.0	0.0	0.0	0.0	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0
4135	209	413	MO	61	2.9	20.8	4	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0
4136	209	413	MO	601	7.0	85.6	4	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4137	209	413	MO	719	10.7	67.3	4	0.0	0.0	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0	0.0
4138	209	413	MO	694	12.6	55.2	4	0.0	0.0	0.0	0.0	0.0	12.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6
4331	209	433	MO	273	13.4	20.4	4	0.0	0.0	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4
4332	209	433	MO	203	5.7	35.5	4	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0
4333	209	433	MO	389	12.2	31.9	4	0.0	0.0	0.0	0.0	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	0.0
4334	209	433	MO	377	7.1	52.7	4	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4381	209	438	MO	208	22.0	9.5	4	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0
4383	209	438	MO	319	12.9	24.7	4	0.0	0.0	0.0	0.0	0.0	0.0	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4385	209	438	MO	1090	17.4	62.7	4	0.0	0.0	0.0	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4386	209	438	MO	1625	13.5	120.4	4	0.0	0.0	0.0	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				17121	377.3			0.0	35.1	61.1	42.8	54.9	25.9	58.0	47.3	52.2	35.1	61.1	42.8	54.9	25.9
2951	209	295	MO	1268	42.4	29.9	6	0.0	0.0	42.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2952	209	295	MO	140	8.9	15.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0
3122	209	312	MO	818	33.7	24.3	6	0.0	33.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7
3123	209	312	MO	670	21.0	31.8	6	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4561	209	456	MO	25	7.8	3.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0	0.0	0.0	0.0	0.0
Total				2921	113.8			0.0	33.7	42.4	0.0	21.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	33.7

Empire District Electric

Infrastructure Management - Patrol Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
1242	211	124	MO	663	7.5	88.8	4	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0
1243	211	124	MO	974	18.5	52.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0	0.0
2211	211	221	MO	721	20.3	35.5	4	0.0	0.0	20.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3	0.0	0.0	0.0
3551	211	355	MO	1005	12.2	82.2	4	0.0	0.0	0.0	0.0	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	0.0
3591	211	359	MO	984	21.6	45.6	4	0.0	21.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	0.0	0.0	0.0	0.0
3593	211	359	MO	986	10.0	98.4	4	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0
3594	211	359	MO	524	13.4	39.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0
4511	211	451	MO	1546	28.0	55.2	4	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0
4512	211	451	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4513	211	451	MO	456	11.7	39.1	4	0.0	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.0
Total				7859.0	143.2			0.0	33.3	20.3	17.5	12.2	28.0	0.0	13.4	18.5	33.3	20.3	17.5	12.2	28.0
1241	211	124	MO	831	31.1	26.7	6	0.0	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.1
1521	211	152	MO	1560	106.8	14.6	6	0.0	0.0	106.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1522	211	152	MO	138	16.7	8.3	6	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7
1523	211	152	MO	697	55.0	12.7	6	0.0	0.0	0.0	0.0	0.0	0.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2051	211	205	MO	210	21.3	9.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	0.0	0.0
2052	211	205	MO	440	18.8	23.4	6	0.0	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2212	211	221	MO	1097	55.3	19.8	6	0.0	0.0	0.0	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2622	211	262	MO	111	12.2	9.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0	0.0	0.0	0.0	0.0
3552	211	355	MO	550	18.4	29.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.4	0.0
3553	211	355	MO	949	49.8	19.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.8	0.0
3592	211	359	MO	1534	55.1	27.9	6	0.0	0.0	0.0	0.0	55.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3621	211	362	MO	1135	73.5	15.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.5	0.0	0.0	0.0	0.0
3901	211	390	MO	862	30.9	27.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.9	0.0	0.0	0.0	0.0	0.0
3902	211	390	MO	93	10.3	9.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0
3903	211	390	MO	276	13.6	20.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	0.0	0.0	0.0	0.0	0.0
4371	211	437	MO	2169	113.9	19.0	6	0.0	0.0	0.0	0.0	0.0	113.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4372	211	437	MO	575	53.9	10.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.9	0.0	0.0	0.0
Total				13227.0	736.5			0.0	47.8	106.8	55.3	55.1	113.9	73.8	33.5	44.5	83.7	53.9	0.0	68.2	47.8

Empire District Electric

Infrastructure Management - Patrol Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
0	#N/A	###	#N/A	#N/A	#N/A	#N/A	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1861	212	186	OK	711	34.8	20.4	6	0.0	0.0	0.0	34.8	0.0	0.0	0.0	0.0	0.0	34.8	0.0	0.0	0.0	0.0
2712	212	271	OK	1169	54.6	21.4	6	0.0	0.0	0.0	0.0	0.0	0.0	54.6	0.0	0.0	0.0	0.0	0.0	54.6	0.0
2912	212	291	OK	714	25.4	28.1	6	0.0	0.0	0.0	0.0	0.0	0.0	25.4	0.0	0.0	0.0	0.0	0.0	25.4	0.0
3631	212	363	OK	1233	62.1	19.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3771	212	377	OK	1086	66.4	16.4	6	0.0	0.0	0.0	0.0	0.0	66.4	0.0	0.0	0.0	0.0	0.0	66.4	0.0	0.0
3772	212	377	OK	10	1.7	5.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3773	212	377	OK	119	17.2	6.9	6	0.0	0.0	17.2	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0	0.0	0.0	0.0
3811	212	381	OK	859	13.1	65.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3812	212	381	OK	720	16.0	44.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4281	212	428	OK	13	1.8	7.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6601	212	66	KS	787	49.4	15.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6602	212	66	KS	499	20.1	24.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2711	212	271	KS	237	59.6	4.0	6	0.0	0.0	59.6	0.0	0.0	0.0	0.0	0.0	59.6	0.0	0.0	0.0	0.0	0.0
2781	212	278	KS	1	0.6	1.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2782	212	278	KS	1457	54.6	26.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2783	212	278	KS	1119	45.1	24.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2821	212	282	KS	424	9.9	42.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2822	212	282	KS	374	6.8	54.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2823	212	282	KS	524	25.4	20.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2824	212	282	KS	923	17.3	53.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2911	212	291	KS	1194	61.6	19.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2913	212	291	KS	879	12.8	68.7	6	0.0	0.0	0.0	0.0	0.0	0.0	12.8	0.0	0.0	0.0	0.0	0.0	12.8	0.0
2914	212	291	KS	544	17.1	31.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2991	212	299	KS	1	0.4	2.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3391	212	339	KS	13	2.4	5.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4061	212	406	KS	1220	114.2	10.7	6	0.0	0.0	0.0	0.0	114.2	0.0	0.0	0.0	0.0	0.0	114.2	0.0	0.0	0.0
4062	212	406	KS	4	2.1	1.9	6	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0
4251	212	425	KS	185	36.0	5.1	6	0.0	0.0	0.0	36.0	0.0	0.0	0.0	0.0	0.0	36.0	0.0	0.0	0.0	0.0
4441	212	444	KS	2	0.5	4.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				17021.0	829.1			0.0	0.0	78.8	70.8	114.2	66.4	92.9	0.0	78.8	70.8	114.2	66.4	92.9	0.0

Empire District Electric

Infrastructure Management - Patrol Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
3671	213	367	MO	1058	16.7	63.2	4	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0
3672	213	367	MO	145	1.8	79.2	4	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0
3673	213	367	MO	257	21.6	11.9	4	0.0	0.0	0.0	0.0	21.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	0.0
3674	213	367	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3675	213	367	MO	414	6.6	62.7	4	0.0	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0
4091	213	409	MO	1105	22.7	48.7	4	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0	0.0
4182	213	418	MO	930	23.6	39.4	4	0.0	0.0	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6	0.0
4311	213	431	MO	964	11.5	84.1	4	0.0	0.0	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5
4312	213	431	MO	1412	43.1	32.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.1	0.0	0.0	0.0	0.0	0.0	0.0
4313	213	431	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6021	213	602	MO	597	22.0	27.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0
6022	213	602	MO	400	5.0	79.7	4	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
6143	213	614	MO	363	8.8	41.2	4	0.0	0.0	0.0	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8
6144	213	614	MO	310	7.0	44.4	4	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Total				7955.0	190.5			0.0	18.6	22.7	6.6	45.2	32.3	0.0	43.1	22.0	18.6	22.7	6.6	45.2	32.3
2091	213	209	MO	815	57.0	14.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.0	0.0	0.0	0.0
2092	213	209	MO	820	32.3	25.4	6	0.0	0.0	0.0	0.0	32.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2171	213	217	MO	510	30.9	16.5	6	0.0	0.0	0.0	0.0	0.0	0.0	30.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2172	213	217	MO	207	34.4	6.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.4	0.0
2491	213	249	MO	60	14.5	4.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0
2501	213	250	MO	77	4.3	17.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0
2511	213	251	MO	592	22.7	26.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0
2621	213	262	MO	1094	88.9	12.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.9	0.0	0.0	0.0	0.0	0.0
3041	213	304	MO	76	3.1	24.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0
3081	213	308	MO	549	28.4	19.3	6	0.0	0.0	0.0	0.0	28.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3082	213	308	MO	320	11.2	28.6	6	0.0	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3181	213	318	MO	686	49.5	13.8	6	0.0	0.0	0.0	0.0	0.0	49.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3231	213	323	MO	357	18.8	19.0	6	0.0	0.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3232	213	323	MO	422	19.8	21.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.8	0.0	0.0	0.0	0.0	0.0	0.0
3421	213	342	MO	624	25.9	24.1	6	0.0	0.0	0.0	25.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3422	213	342	MO	950	37.1	25.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.1	0.0	0.0	0.0	0.0
4092	213	409	MO	386	26.9	14.4	6	0.0	0.0	0.0	0.0	0.0	0.0	26.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4181	213	418	MO	453	21.8	20.8	6	0.0	0.0	21.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6141	213	614	MO	876	67.3	13.0	6	0.0	67.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.3
Total				9874.0	594.8			0.0	67.3	51.8	25.9	60.8	49.5	57.8	37.3	88.9	37.1	57.0	22.7	38.7	67.3

Empire District Electric

Infrastructure Management - Patrol Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
1225	214	59	MO	931	7.7	121.5	4	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0
1226	214	59	MO	339	4.2	80.7	4	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0
1227	214	59	MO	1164	20.3	57.3	4	0.0	0.0	20.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3	0.0	0.0	0.0
1228	214	59	MO	491	4.2	117.3	4	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0
1229	214	59	MO	1972	13.2	149.9	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0
401	214	64	MO	102	0.8	133.1	4	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
402	214	64	MO	107	1.9	57.6	4	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0
403	214	64	MO	254	2.7	95.2	4	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0
404	214	64	MO	166	1.3	131.4	4	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0
405	214	64	MO	43	0.6	71.8	4	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
406	214	64	MO	70	0.7	103.5	4	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0
407	214	64	MO	98	0.9	103.6	4	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0
432	214	100	MO	83	1.1	76.8	4	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
433	214	100	MO	40	0.6	71.0	4	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
434	214	100	MO	28	0.8	35.4	4	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
1451	214	145	MO	481	12.4	38.8	4	0.0	12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4	0.0	0.0	0.0	0.0
1453	214	145	MO	1762	20.9	84.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0
1454	214	145	MO	892	14.4	61.8	4	0.0	14.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4	0.0	0.0	0.0	0.0
1455	214	145	MO	505	8.3	60.9	4	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
1261	214	258	MO	396	4.8	82.2	4	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0
1262	214	258	MO	198	5.5	35.8	4	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	0.0
1263	214	258	MO	1364	15.3	89.0	4	0.0	0.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3	0.0	0.0	0.0
1264	214	258	MO	41	4.1	10.0	4	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0
1265	214	258	MO	1209	14.0	86.6	4	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0
1267	214	258	MO	70	4.4	16.0	4	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0
451	214	284	MO	0	0.4	0.0	4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
452	214	284	MO	0	0.1	0.0	4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
453	214	284	MO	126	1.0	124.0	4	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
454	214	284	MO	102	1.7	59.9	4	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0
455	214	284	MO	73	0.9	79.1	4	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0
456	214	284	MO	45	0.7	66.9	4	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0
457	214	284	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1273	214	341	MO	863	9.2	93.3	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0	0.0
1274	214	341	MO	8	2.1	3.9	4	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0
1281	214	360	MO	81	3.7	22.0	4	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0
1282	214	360	MO	891	13.5	66.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0	0.0	0.0
1283	214	360	MO	363	7.5	48.7	4	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1284	214	360	MO	663	9.7	68.2	4	0.0	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7	0.0	0.0
1285	214	360	MO	1126	15.8	71.4	4	0.0	0.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8	0.0
1286	214	360	MO	43	2.6	16.8	4	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1287	214	360	MO	1	0.4	2.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Empire District Electric

Infrastructure Management - Patrol Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
1230	214	372	MO	1131	12.5	90.7	4	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1231	214	372	MO	3	0.2	16.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1232	214	372	MO	1143	15.1	75.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0	0.0
1233	214	372	MO	629	5.0	127.0	4	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3911	214	391	MO	6	1.2	5.0	4	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3912	214	391	MO	1118	20.4	54.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0	0.0
3914	214	391	MO	676	42.7	15.8	4	0.0	0.0	0.0	0.0	0.0	42.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.7
4222	214	422	MO	1533	13.4	114.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0
4223	214	422	MO	1207	13.2	91.3	4	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0
4224	214	422	MO	625	10.3	60.9	4	0.0	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0
4301	214	430	MO	606	7.1	85.8	4	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4302	214	430	MO	640	17.4	36.8	4	0.0	0.0	0.0	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4303	214	430	MO	767	28.7	26.7	4	0.0	0.0	0.0	28.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.7	0.0	0.0
4304	214	430	MO	130	3.3	39.8	4	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4471	214	447	MO	5	1.3	3.9	4	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4472	214	447	MO	14	1.2	11.5	4	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				27424.0	427.0			0.0	49.8	62.6	59.3	47.3	42.7	59.4	56.9	49.0	49.8	62.6	59.3	47.3	42.7
1452	214	145	MO	397	21.0	18.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	0.0	0.0
145D	214	145	MO	1	0.2	6.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
1271	214	341	MO	874	43.0	20.3	6	0.0	0.0	43.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1272	214	341	MO	13	1.9	6.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0
3891	214	389	MO	392	28.5	13.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5	0.0
3892	214	389	MO	1193	71.3	16.7	6	0.0	71.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.3
3913	214	391	MO	1258	65.1	19.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.1	0.0	0.0	0.0	0.0
4221	214	422	MO	459	34.5	13.3	6	0.0	0.0	0.0	0.0	0.0	0.0	34.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				4587.0	265.5			0.0	71.3	43.0	0.0	0.0	0.0	34.5	0.0	23.1	65.1	0.0	0.0	28.5	71.3

Empire District Electric

Infrastructure Management - Patrol Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
1050	215	105	MO	1381	15.3	90.1	4	0.0	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3	0.0
1051	215	105	MO	1018	18.8	54.2	4	0.0	0.0	0.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0
1052	215	105	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1094	215	109	MO	968	26.7	0.0	4	0.0	0.0	26.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.7	0.0	0.0	0.0
1101	215	110	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1102	215	110	MO	589	14.7	40.2	4	0.0	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.7	0.0	0.0	0.0
1103	215	110	MO	839	19.3	43.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3	0.0	0.0	0.0	0.0	0.0	0.0
3661	215	366	MO	1064	22.0	48.4	4	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0
4321	215	432	MO	4	0.9	4.4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4322	215	432	MO	85	2.6	32.8	4	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4323	215	432	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4324	215	432	MO	979	20.8	47.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	0.0
4361	215	436	MO	1420	22.2	64.0	4	0.0	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0
4362	215	436	MO	774	7.7	100.4	4	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4363	215	436	MO	642	16.0	40.0	4	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0
Total				9763.0	187.1			0.0	22.2	41.4	18.8	15.3	38.0	11.2	19.3	20.8	22.2	41.4	18.8	15.3	38.0
1081	215	108	MO	20	4.4	4.5	6	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1082	215	108	MO	1252	119.3	10.5	6	0.0	0.0	0.0	119.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1083	215	108	MO	1	1.4	0.7	6	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1084	215	108	MO	5	1.2	4.2	6	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1091	215	109	MO	1545	97.2	15.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.2	0.0	0.0	0.0	0.0
1092	215	109	MO	1111	43.6	25.5	6	0.0	0.0	0.0	0.0	0.0	0.0	43.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1093	215	109	MO	206	8.5	24.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0	0.0	0.0	0.0	0.0
2492	215	249	MO	29	6.5	4.5	6	0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3662	215	366	MO	1022	61.2	16.7	6	0.0	0.0	0.0	0.0	0.0	61.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3663	215	366	MO	267	28.8	9.3	6	0.0	28.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.8
3951	215	395	MO	1041	48.3	21.6	6	0.0	0.0	0.0	0.0	0.0	0.0	48.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3952	215	395	MO	360	36.9	9.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.9	0.0
4031	215	403	MO	620	23.0	26.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	0.0
4171	215	417	MO	1071	34.3	31.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.3	0.0	0.0	0.0	0.0	0.0	0.0
4172	215	417	MO	2140	69.0	31.0	6	0.0	0.0	0.0	0.0	69.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4211	215	421	MO	1472	64.1	23.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.1	0.0	0.0
4212	215	421	MO	767	25.2	30.5	6	0.0	0.0	0.0	0.0	0.0	25.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				12929.0	672.7			0.0	28.8	13.4	119.3	69.0	86.4	91.8	34.3	8.5	97.2	0.0	64.1	59.9	28.8

Empire District Electric

Infrastructure Management - Patrol Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
5601	216	56	MO	77	2.9	26.3	4	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5602	216	56	MO	479	10.0	47.8	4	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
5641	216	56	MO	403	3.2	125.4	4	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0
5642	216	56	MO	205	1.9	105.1	4	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2961	216	296	MO	1643	34.5	47.6	4	0.0	0.0	0.0	0.0	34.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.5	0.0
2962	216	296	MO	238	7.8	30.6	4	0.0	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0	0.0	0.0
2963	216	296	MO	1	0.3	3.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3982	216	398	MO	718	7.5	95.1	4	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0
4142	216	414	MO	560	15.7	35.6	4	0.0	0.0	0.0	0.0	0.0	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total				4324.0	84.0			0.0	15.3	3.2	0.0	34.5	10.0	20.9	0.0	0.0	15.3	3.2	0.0	34.5	10.0
5603	216	56	MO	1176	43.2	27.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.2	0.0
1311	216	131	MO	238	22.9	10.4	6	0.0	0.0	22.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1312	216	131	MO	873	49.8	17.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.8	0.0	0.0	0.0	0.0	0.0	0.0
1841	216	184	MO	1497	56.4	26.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.4	0.0	0.0	0.0
1842	216	184	MO	192	16.3	11.8	6	0.0	0.0	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1843	216	184	MO	1027	43.7	23.5	6	0.0	0.0	0.0	43.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3221	216	322	MO	1162	34.4	33.8	6	0.0	34.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.4
3222	216	322	MO	936	32.3	29.0	6	0.0	0.0	0.0	0.0	0.0	32.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3261	216	326	AR	266	7.7	34.4	6	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3262	216	326	AR	36	1.0	36.8	6	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3263	216	326	AR	111	16.3	6.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0
3471	216	347	MO	156	16.3	9.6	6	0.0	0.0	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3472	216	347	MO	1464	52.4	27.9	6	0.0	0.0	0.0	0.0	0.0	0.0	52.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3751	216	375	MO	1112	53.4	20.8	6	0.0	0.0	0.0	0.0	0.0	53.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3752	216	375	OK	563	21.6	26.1	6	0.0	0.0	0.0	0.0	0.0	21.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3921	216	392	AR	427	12.1	35.1	6	0.0	0.0	12.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3922	216	392	AR	1703	56.6	30.1	6	0.0	0.0	0.0	0.0	56.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3923	216	392	AR	1	4.2	0.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0
3981	216	398	MO	1236	73.5	16.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.5	0.0	0.0	0.0	0.0
3991	216	399	MO	658	55.3	11.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.3	0.0	0.0
3992	216	399	MO	160	8.4	19.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0	0.0	0.0	0.0
4141	216	414	MO	86	14.5	6.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0	0.0
4431	216	443	MO	1265	47.6	26.6	6	0.0	0.0	0.0	47.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4432	216	443	MO	206	13.0	15.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0
4433	216	443	MO	1	0.7	1.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
7001	216	700	AR	1276	52.6	24.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.6	0.0	0.0	0.0
7002	216	700	AR	660	27.6	23.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.6	0.0	0.0	0.0	0.0	0.0
Total				18488.0	833.6			0.0	34.4	76.3	91.4	56.6	107.3	52.4	49.8	63.4	74.2	109.0	59.5	59.4	34.4

Empire District Electric

Infrastructure Management - Patrol Inspection

Circuit ID	Area	Sub	State	Total Meters	Total Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned	2021 Planned
1141	217	114	MO	864	16.0	53.9	4	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3301	217	330	MO	200	2.6	77.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0
3302	217	330	MO	607	14.0	43.3	4	0.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0
3303	217	330	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3304	217	330	MO	942	14.5	64.9	4	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0
3305	217	330	MO	8	0.7	12.2	4	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
3702	217	370	MO	601	14.2	42.4	4	0.0	0.0	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2
4151	217	415	MO	1091	27.8	39.2	4	0.0	0.0	0.0	0.0	0.0	27.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8
4152	217	415	MO	803	25.0	32.1	4	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0
4153	217	415	MO	1012	25.8	39.2	4	0.0	0.0	0.0	25.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8	0.0	0.0
4154	217	415	MO	951	20.8	45.6	4	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	0.0
4155	217	415	MO	1692	39.3	43.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.3	0.0	0.0	0.0	0.0	0.0
4156	217	415	MO	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4342	217	434	MO	1614	33.5	48.1	4	0.0	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.5	0.0	0.0	0.0	0.0
Total				10385	234.3			0.0	48.1	14.0	25.8	46.5	42.0	16.0	2.6	39.3	48.1	14.0	25.8	46.5	42.0
8001	217	80	MO	4	0.6	7.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
1142	217	114	MO	198	15.3	12.9	6	0.0	0.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1211	217	121	MO	1388	74.6	18.6	6	0.0	0.0	0.0	74.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1212	217	121	MO	67	9.7	6.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7	0.0	0.0	0.0	0.0
1213	217	121	MO	519	28.6	18.2	6	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3331	217	333	MO	2	0.5	4.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
3691	217	369	MO	1241	56.0	22.2	6	0.0	0.0	0.0	0.0	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3692	217	369	MO	1063	35.7	29.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.7	0.0	0.0	0.0	0.0	0.0
3693	217	369	MO	527	15.3	34.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0
3701	217	370	MO	478	25.9	18.5	6	0.0	0.0	0.0	0.0	0.0	0.0	25.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3971	217	397	MO	625	22.5	27.8	6	0.0	22.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5
4341	217	434	MO	1805	59.4	30.4	6	0.0	0.0	0.0	0.0	0.0	59.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4343	217	434	MO	752	31.7	23.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.7	0.0	0.0	0.0	0.0
Total				8669	375.6			0.0	22.5	43.9	74.6	56.0	59.4	25.9	15.3	35.7	42.4	0.0	0.0	0.0	22.5

Section 1.1.4

Patrol Description

Empire District Electric Company

Patrol Inspection – The patrol inspection will be a visual inspection of the equipment used in the transmission and/or distribution system with no more than binoculars. The patrol inspection will be performed by circuit using the patrol inspection schedule and not performed as part of the normal daily activities, thus insuring the entire circuit is patrolled and all documentation is complete.

Section 1.1.5

Intrusive Pole Inspection Schedule

Empire District Electric Company

Distribution System -- Intrusive Pole Inspection

12 Year Maintenance Cycle

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled
209	20042	352.7	0.0	39.4	34.2	29.6	33.0	26.1	22.7	32.5	32.1	27.8	20.7	22.0	32.5
211	21086	816.2	0.0	53.2	105.3	70.1	52.0	68.5	76.6	66.3	67.5	72.1	111.5	22.2	50.8
212	17021	820.5	0.0	59.6	54.5	61.7	66.0	90.3	69.5	59.3	54.4	61.1	69.5	113.1	61.6
213	17829	746.7	0.0	65.0	56.7	50.7	65.2	88.7	49.3	60.0	78.0	62.1	42.0	63.6	65.4
214	31620	581.7	0.0	45.7	49.1	41.0	42.3	44.4	51.5	49.0	51.2	47.2	54.1	48.9	57.0
215	22692	802.2	0.0	118.6	56.8	48.1	93.6	54.4	55.9	58.2	68.7	65.3	57.6	59.7	65.2
216	22812	886.4	0.0	71.9	66.2	73.0	72.6	75.5	66.4	75.6	78.8	72.9	82.9	72.8	77.7
217	19054	494.8	0.0	34.2	73.7	42.2	38.4	51.3	45.4	19.0	23.0	35.7	25.6	51.9	54.4
Total	172156	5501.1	0.0	487.6	496.6	416.4	463.1	499.3	437.3	420.0	453.7	444.1	464.0	454.3	464.7
Running			0.0%	8.9%	17.9%	25.5%	33.9%	43.0%	50.9%	58.5%	66.8%	74.9%	83.3%	91.6%	100.0%

State Totals

Area	Total Meters	Total Miles	2008 Miles Scheduled	2009 Miles Scheduled	2010 Miles Scheduled	2011 Miles Scheduled	2012 Miles Scheduled	2013 Miles Scheduled	2014 Miles Scheduled	2015 Miles Scheduled	2016 Miles Scheduled	2017 Miles Scheduled	2018 Miles Scheduled	2019 Miles Scheduled	2020 Miles Scheduled
MO	150092	4486.8	0.0	428.0	442.1	354.8	397.1	384.8	367.8	285.1	383.1	383.0	394.5	341.2	325.3
KS	10387	529.6	0.0	0.0	0.0	0.0	0.0	41.2	69.5	59.3	54.4	61.1	69.5	113.1	61.6
OK	7197	312.3	0.0	59.6	54.5	61.7	66.0	49.2	0.0	21.4	0.0	0.0	0.0	0.0	0.0
AR	4480	172.4	0.0	0.0	0.0	0.0	0.0	24.2	0.0	54.2	16.3	0.0	0.0	0.0	77.7
Total	172156	5501.1	0.0	487.6	496.6	416.4	463.1	499.3	437.3	420.0	453.7	444.1	464.0	454.3	464.7

Empire District Electric

Distribution System -- Intrusive Pole Inspection

Circuit ID	Area	Sub	Total Meters	OH Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned
2951	209	295	1268	39.4	29.9	6	0.0	39.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2952	209	295	140	8.3	15.8	6	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3121	209	312	1053	16.5	59.1	4	0.0	0.0	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3122	209	312	818	29.6	24.3	6	0.0	0.0	0.0	29.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3123	209	312	670	17.7	31.8	6	0.0	0.0	17.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3311	209	331	635	8.9	39.3	4	0.0	0.0	0.0	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3312	209	331	17	4.1	3.6	4	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3313	209	331	486	5.7	39.7	4	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3314	209	331	207	6.0	29.2	4	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3315	209	331	1032	26.1	32.9	4	0.0	0.0	0.0	0.0	0.0	26.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3871	209	387	1215	11.2	83.3	4	0.0	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0
3872	209	387	896	11.5	68.0	4	0.0	0.0	0.0	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0
3873	209	387	1815	32.5	45.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5	0.0	0.0	0.0	0.0	0.0
3874	209	387	186	3.4	28.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0
4101	209	410	553	13.2	33.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0
4102	209	410	800	15.5	38.3	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.5	0.0	0.0	0.0	0.0
4131	209	413	179	4.9	26.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0	0.0	0.0
4132	209	413	408	4.9	66.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0	0.0
4133	209	413	298	6.1	28.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0
4134	209	413	782	8.2	51.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0	0.0
4135	209	413	61	1.3	20.8	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0
4136	209	413	601	2.5	85.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0
4137	209	413	719	9.3	67.3	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	0.0	0.0
4138	209	413	694	11.4	55.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4	0.0	0.0
4331	209	433	273	8.3	20.4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0
4332	209	433	203	3.6	35.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0
4333	209	433	389	5.4	31.9	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0
4334	209	433	377	4.6	52.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0
4381	209	438	208	12.4	9.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4
4383	209	438	319	9.3	24.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3
4385	209	438	1090	6.8	62.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8
4386	209	438	1625	3.0	120.4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
4561	209	456	25	0.9	3.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Total			20042	352.7			0.0	39.4	34.2	29.6	33.0	26.1	22.7	32.5	32.1	27.8	20.7	22.0	32.5

Empire District Electric

Distribution System -- Intrusive Pole Inspection

Circuit ID	Area	Sub	Total Meters	OH Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned
1241	211	124	831	28.8	26.7	6	0.0	28.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1242	211	124	663	7.2	88.8	4	0.0	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1243	211	124	974	17.1	52.6	4	0.0	17.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1521	211	152	1560	105.3	14.6	6	0.0	0.0	105.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1522	211	152	138	16.1	8.3	6	0.0	0.0	0.0	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1523	211	152	697	54.0	12.7	6	0.0	0.0	0.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2051	211	205	210	21.3	9.9	6	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2052	211	205	440	18.8	23.4	6	0.0	0.0	0.0	0.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2211	211	221	721	19.9	35.5	6	0.0	0.0	0.0	0.0	0.0	19.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2212	211	221	1097	48.6	19.8	6	0.0	0.0	0.0	0.0	0.0	48.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2622	211	262	111	12.0	9.1	6	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3551	211	355	1005	10.2	82.2	4	0.0	0.0	0.0	0.0	0.0	0.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0
3552	211	355	550	17.3	29.9	6	0.0	0.0	0.0	0.0	0.0	0.0	17.3	0.0	0.0	0.0	0.0	0.0	0.0
3553	211	355	949	49.2	19.0	6	0.0	0.0	0.0	0.0	0.0	0.0	49.2	0.0	0.0	0.0	0.0	0.0	0.0
3591	211	359	984	15.8	45.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0	0.0
3592	211	359	1534	50.5	27.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.5	0.0	0.0	0.0	0.0	0.0
3593	211	359	986	5.3	98.4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0
3594	211	359	524	9.2	39.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	0.0	0.0	0.0	0.0
3621	211	362	1135	72.1	15.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.1	0.0	0.0	0.0
3901	211	390	862	29.9	27.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.9	0.0	0.0	0.0	0.0
3902	211	390	93	9.9	9.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	0.0	0.0	0.0	0.0
3903	211	390	276	13.3	20.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0
4371	211	437	2169	111.5	19.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	111.5	0.0	0.0
4372	211	437	575	50.8	10.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.8
4511	211	451	1546	18.4	55.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.4	0.0
4512	211	451	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4513	211	451	456	3.8	39.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0
Total			21086	816.2			0.0	53.2	105.3	70.1	52.0	68.5	76.6	66.3	67.5	72.1	111.5	22.2	50.8

Empire District Electric

Distribution System -- Intrusive Pole Inspection

Circuit ID	Area	Sub	Total Meters	OH Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned
1861	212	186	711	34.6	20.4	6	0.0	34.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2712	212	271	1169	54.5	21.4	6	0.0	0.0	54.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2912	212	291	714	25.0	28.1	6	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3631	212	363	1233	61.7	19.8	6	0.0	0.0	0.0	61.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3771	212	377	1086	66.0	16.4	6	0.0	0.0	0.0	0.0	66.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3772	212	377	10	1.4	5.8	6	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3773	212	377	119	17.2	6.9	6	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3811	212	381	859	13.0	65.7	6	0.0	0.0	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3812	212	381	720	16.0	44.9	6	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4281	212	428	13	1.6	7.2	6	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6601	212	66	787	49.4	15.9	6	0.0	0.0	0.0	0.0	0.0	0.0	49.4	0.0	0.0	0.0	0.0	0.0	0.0
6602	212	66	499	20.1	24.8	6	0.0	0.0	0.0	0.0	0.0	0.0	20.1	0.0	0.0	0.0	0.0	0.0	0.0
2711	212	271	237	59.3	4.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.3	0.0	0.0	0.0	0.0	0.0
2781	212	278	1	0.6	1.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
2782	212	278	1457	53.7	26.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.7	0.0	0.0	0.0	0.0
2783	212	278	1119	44.7	24.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.7	0.0	0.0	0.0
2821	212	282	424	9.6	42.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.0
2822	212	282	374	6.7	54.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0
2823	212	282	524	25.1	20.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.1	0.0	0.0
2824	212	282	923	15.0	53.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
2911	212	291	1194	61.6	19.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.6
2913	212	291	879	12.8	68.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.8	0.0	0.0
2914	212	291	544	16.6	31.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.6	0.0	0.0
2991	212	299	1	0.4	2.6	6	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3391	212	339	13	2.3	5.5	6	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4061	212	406	1220	113.1	10.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	113.1	0.0
4062	212	406	4	2.1	1.9	6	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4251	212	425	185	36.0	5.1	6	0.0	0.0	0.0	0.0	0.0	36.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4441	212	444	2	0.4	4.1	6	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total			17021	820.5			0.0	59.6	54.5	61.7	66.0	90.3	69.5	59.3	54.4	61.1	69.5	113.1	61.6

Empire District Electric

Distribution System -- Intrusive Pole Inspection

Circuit ID	Area	Sub	Total Meters	OH Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned
2091	213	209	815	56.7	14.3	6	0.0	0.0	56.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2092	213	209	820	32.0	25.4	6	0.0	0.0	0.0	32.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2171	213	217	510	30.6	16.5	6	0.0	30.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2172	213	217	207	34.4	6.0	6	0.0	34.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2491	213	249	60	14.5	4.2	6	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2501	213	250	77	4.2	17.9	6	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2511	213	251	592	22.5	26.1	6	0.0	0.0	0.0	0.0	22.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2621	213	262	1094	88.7	12.3	6	0.0	0.0	0.0	0.0	0.0	88.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3041	213	304	76	3.1	24.8	6	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3081	213	308	549	28.4	19.3	6	0.0	0.0	0.0	0.0	28.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3082	213	308	320	11.2	28.6	6	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3181	213	318	686	49.3	13.8	6	0.0	0.0	0.0	0.0	0.0	0.0	49.3	0.0	0.0	0.0	0.0	0.0	0.0
3231	213	323	357	18.7	19.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.7	0.0	0.0	0.0	0.0
3232	213	323	422	18.8	21.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0	0.0	0.0
3421	213	342	624	25.0	24.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0
3422	213	342	950	35.0	25.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0	0.0
3671	213	367	1058	13.9	63.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9	0.0	0.0	0.0	0.0
3672	213	367	145	1.8	79.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0
3673	213	367	257	19.9	11.9	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.9	0.0	0.0	0.0	0.0
3674	213	367	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3675	213	367	414	4.8	62.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0
4091	213	409	1105	20.2	48.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	0.0	0.0	0.0
4092	213	409	386	26.2	14.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.2	0.0	0.0	0.0
4181	213	418	453	20.3	20.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3	0.0	0.0
4182	213	418	930	21.8	39.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8	0.0	0.0
4311	213	431	964	9.1	84.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0
4312	213	431	1412	30.6	32.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6	0.0
4313	213	431	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6021	213	602	597	19.5	27.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.5	0.0
6022	213	602	400	4.5	79.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0
6141	213	614	876	65.4	13.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.4
6143	213	614	363	8.8	41.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	0.0	0.0	0.0
6144	213	614	310	7.0	44.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0
Total			17829	746.7			0.0	65.0	56.7	50.7	65.2	88.7	49.3	60.0	78.0	62.1	42.0	63.6	65.4

Empire District Electric

Distribution System -- Intrusive Pole Inspection

Circuit ID	Area	Sub	Total Meters	OH Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned
401	214	64	102	0.7	133.1	4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
402	214	64	107	1.9	57.6	4	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
403	214	64	254	2.7	95.2	4	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
404	214	64	166	1.2	131.4	4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
405	214	64	43	0.5	71.8	4	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
406	214	64	70	0.7	103.5	4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
407	214	64	98	0.9	103.6	4	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
432	214	100	83	1.0	76.8	4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
433	214	100	40	0.6	71.0	4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
434	214	100	28	0.7	35.4	4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
451	214	284	0	0.4	0.0	4	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
452	214	284	0	0.1	0.0	4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
453	214	284	126	1.0	124.0	4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
454	214	284	102	1.7	59.9	4	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
455	214	284	73	0.7	79.1	4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
456	214	284	45	0.5	66.9	4	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
457	214	284	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1225	214	59	931	7.5	121.5	4	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1226	214	59	339	3.7	80.7	4	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1227	214	59	1164	19.3	57.3	4	0.0	19.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1228	214	59	491	4.1	117.3	4	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1229	214	59	1972	13.1	149.9	4	0.0	0.0	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1230	214	372	1131	12.4	90.7	4	0.0	0.0	12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1231	214	372	3	0.2	16.6	4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1232	214	372	1143	14.5	75.7	4	0.0	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1233	214	372	629	4.9	127.0	4	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1261	214	258	396	4.0	82.2	4	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1262	214	258	198	5.4	35.8	4	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1263	214	258	1364	14.8	89.0	4	0.0	0.0	0.0	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1264	214	258	41	3.8	10.0	4	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1265	214	258	1209	9.7	86.6	4	0.0	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1267	214	258	70	3.3	16.0	4	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1271	214	341	874	42.3	20.3	6	0.0	0.0	0.0	0.0	42.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1272	214	341	13	1.2	6.9	6	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1273	214	341	863	8.6	93.3	4	0.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1274	214	341	8	2.0	3.9	4	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1281	214	360	81	1.9	22.0	4	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1282	214	360	891	12.3	66.0	4	0.0	0.0	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Empire District Electric

Distribution System -- Intrusive Pole Inspection

Circuit ID	Area	Sub	Total Meters	OH Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned
1283	214	360	363	1.8	48.7	4	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1284	214	360	663	9.1	68.2	4	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1285	214	360	1126	6.0	71.4	4	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1286	214	360	43	1.3	16.8	4	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1287	214	360	1	0.3	2.5	4	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1451	214	145	481	11.2	38.8	4	0.0	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0
1452	214	145	397	19.9	18.9	6	0.0	0.0	0.0	0.0	0.0	0.0	19.9	0.0	0.0	0.0	0.0	0.0	0.0
1453	214	145	1762	20.4	84.1	4	0.0	0.0	0.0	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0	0.0	0.0
1454	214	145	892	14.2	61.8	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0	0.0
1455	214	145	505	7.9	60.9	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	0.0	0.0	0.0	0.0	0.0
3891	214	389	1193	26.9	41.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.9	0.0	0.0	0.0	0.0	0.0
3892	214	391	6	51.2	0.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.2	0.0	0.0	0.0	0.0
3911	214	391	1118	0.4	926.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
3912	214	391	1258	15.6	61.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6	0.0	0.0	0.0
3913	214	391	676	54.1	10.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.1	0.0	0.0
3914	214	422	459	38.0	10.7	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.0	0.0
4221	214	422	1533	31.2	44.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.2	0.0	0.0	0.0
4222	214	422	1207	10.9	89.8	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9	0.0
4223	214	422	625	10.6	47.3	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6
4224	214	430	606	7.5	59.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
4301	214	430	640	4.5	90.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
4302	214	430	767	10.4	44.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4
4303	214	430	130	20.6	4.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.6
4304	214	447	5	1.3	1.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
4471	214	447	14	0.8	10.9	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
4472	214	145	1	1.0	0.8	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
145D	214	145	1	0.1	6.5	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total			31620.0	581.7			0.0	45.7	49.1	41.0	42.3	44.4	51.5	49.0	51.2	47.2	54.1	48.9	57.0

Empire District Electric

Distribution System -- Intrusive Pole Inspection

Circuit ID	Area	Sub	Total Meters	OH Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned
1050	215	105	1381	14.7	90.1	4	0.0	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1051	215	105	1018	17.0	54.2	4	0.0	0.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1052	215	105	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1081	215	108	20	4.3	4.5	6	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1082	215	108	1252	118.6	10.5	6	0.0	118.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1083	215	108	1	1.3	0.7	6	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1084	215	108	5	1.2	4.2	6	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1091	215	109	1545	93.6	15.9	6	0.0	0.0	0.0	0.0	93.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1092	215	109	1111	37.6	25.5	6	0.0	0.0	0.0	37.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1093	215	109	206	8.1	24.4	6	0.0	0.0	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1094	215	109	968	24.5	36.2	6	0.0	0.0	0.0	0.0	0.0	24.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1101	215	110	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1102	215	110	589	11.6	40.2	4	0.0	0.0	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1103	215	110	839	18.3	43.5	4	0.0	0.0	0.0	0.0	0.0	18.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2492	215	249	29	6.5	4.5	6	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0
3661	215	366	1064	20.6	48.4	6	0.0	0.0	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	0.0	0.0
3662	215	366	1022	58.2	16.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.2	0.0	0.0	0.0	0.0	0.0
3663	215	366	267	28.8	9.3	6	0.0	0.0	0.0	0.0	0.0	0.0	28.8	0.0	0.0	0.0	0.0	0.0	0.0
3951	215	395	1041	46.0	21.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.0	0.0	0.0	0.0	0.0
3952	215	395	360	33.9	9.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.9	0.0	0.0	0.0
4031	215	403	620	22.7	26.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0	0.0	0.0
4171	215	417	1071	31.4	31.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.4	0.0	0.0	0.0
4172	215	417	2140	57.6	31.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.6	0.0	0.0
4211	215	421	1472	59.7	23.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.7	0.0
4212	215	421	767	24.3	30.5	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3
4321	215	432	4	0.6	4.4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
4322	215	432	85	1.8	32.8	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
4323	215	432	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4324	215	432	979	16.8	47.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.8
4361	215	436	1420	21.6	64.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6
4362	215	436	774	7.3	100.4	4	0.0	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4363	215	436	642	13.5	40.0	4	0.0	0.0	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total			22692.0	802.2			0.0	118.6	56.8	48.1	93.6	54.4	55.9	58.2	68.7	65.3	57.6	59.7	65.2

Empire District Electric

Distribution System -- Intrusive Pole Inspection

Circuit ID	Area	Sub	Total Meters	OH Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned
1311	216	131	238	22.9	10.4	6	0.0	22.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1312	216	131	873	49.1	17.5	6	0.0	49.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1841	216	184	1497	50.6	26.5	6	0.0	0.0	50.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1842	216	184	192	15.6	11.8	6	0.0	0.0	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1843	216	184	1027	42.8	23.5	6	0.0	0.0	0.0	42.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2961	216	296	1643	30.2	47.6	4	0.0	0.0	0.0	30.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2962	216	296	238	6.8	30.6	4	0.0	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2963	216	296	1	0.3	3.1	4	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3221	216	322	1162	33.5	33.8	6	0.0	0.0	0.0	0.0	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3222	216	322	936	32.0	29.0	6	0.0	0.0	0.0	0.0	32.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3261	216	326	266	7.1	34.4	6	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3262	216	326	36	1.0	36.8	6	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3263	216	326	111	16.1	6.8	6	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3471	216	347	156	16.3	9.6	6	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	0.0	0.0	0.0	0.0	0.0
3472	216	347	1464	51.3	27.9	6	0.0	0.0	0.0	0.0	0.0	51.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3751	216	375	1112	50.1	20.8	6	0.0	0.0	0.0	0.0	0.0	0.0	50.1	0.0	0.0	0.0	0.0	0.0	0.0
3752	216	375	563	21.4	26.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.4	0.0	0.0	0.0	0.0	0.0
3921	216	392	427	12.1	35.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1	0.0	0.0	0.0	0.0
3922	216	392	1703	54.2	30.1	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.2	0.0	0.0	0.0	0.0	0.0
3923	216	392	1	4.2	0.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0
3981	216	398	1236	72.9	16.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.9	0.0	0.0	0.0
3982	216	398	718	7.3	95.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0
3991	216	399	658	55.3	11.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.3	0.0	0.0	0.0	0.0
3992	216	399	160	8.4	19.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0
4141	216	414	86	13.8	6.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	0.0	0.0
4142	216	414	560	15.5	35.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.5	0.0	0.0
4431	216	443	1265	45.1	26.6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.1	0.0	0.0
4432	216	443	206	13.0	15.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	0.0
4433	216	443	1	0.5	1.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
5601	216	56	77	2.9	26.3	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0
5602	216	56	479	10.0	47.8	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0
5603	216	56	1176	41.2	27.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.2	0.0
5641	216	56	403	3.2	125.4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0
5642	216	56	205	1.9	105.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0
7001	216	700	1276	50.3	24.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.3
7002	216	700	660	27.4	23.9	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4
Total			22812.0	886.4			0.0	71.9	66.2	73.0	72.6	75.5	66.4	75.6	78.8	72.9	82.9	72.8	77.7

Empire District Electric

Distribution System -- Intrusive Pole Inspection

Circuit ID	Area	Sub	Total Meters	OH Miles	Customers /Mile	Maint. Schedule	2008 Planned	2009 Planned	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2017 Planned	2018 Planned	2019 Planned	2020 Planned
1141	217	114	864	12.0	53.9	4	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1142	217	114	198	12.5	12.9	6	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1211	217	121	1388	73.7	18.6	6	0.0	0.0	73.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1212	217	121	67	9.7	6.9	6	0.0	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1213	217	121	519	28.4	18.2	6	0.0	0.0	0.0	28.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3301	217	330	200	2.6	77.0	4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3302	217	330	607	11.2	43.3	4	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3303	217	330	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3304	217	330	942	10.6	64.9	4	0.0	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0	0.0	0.0
3305	217	330	8	0.4	12.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
3331	217	333	2	0.5	4.3	6	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
3691	217	369	1241	51.3	22.2	6	0.0	0.0	0.0	0.0	0.0	51.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3692	217	369	1063	23.8	29.8	6	0.0	0.0	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3693	217	369	527	14.5	34.5	6	0.0	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3701	217	370	478	22.1	18.5	6	0.0	0.0	0.0	0.0	0.0	0.0	22.1	0.0	0.0	0.0	0.0	0.0	0.0
3702	217	370	601	11.9	42.4	6	0.0	0.0	0.0	0.0	0.0	0.0	11.9	0.0	0.0	0.0	0.0	0.0	0.0
3971	217	397	625	19.0	27.8	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	0.0	0.0	0.0	0.0	0.0
4151	217	415	1091	23.0	39.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	0.0	0.0	0.0	0.0
4152	217	415	803	18.1	32.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.1	0.0	0.0	0.0
4153	217	415	1012	17.6	39.2	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.6	0.0	0.0	0.0
4154	217	415	951	6.8	45.6	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	0.0	0.0
4155	217	415	1692	18.8	43.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0
4156	217	415	0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4341	217	434	1805	51.9	30.4	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.9	0.0
4342	217	434	1614	26.3	48.1	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.3
4343	217	434	752	27.6	23.7	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.6
8001	217	80	4	0.6	7.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Total			19054	494.8			0.0	34.2	73.7	42.2	38.4	51.3	45.4	19.0	23.0	35.7	25.6	51.9	54.4

Section 1.2

Transmission System

Section 1.2.1

Detailed Inspection Schedule

Empire District Electric Company

Transmission System -- Infrastructure Detailed Inspection

Line #	NERC	KV	From -- Expanded	To -- Expanded	Total Miles	EDE Miles	2008	2009	2010	2011	2012	2013	2014
345	NERC	345.0	SUB 383 - MONETT	BROOKLINE 345	36.39	22.15		22.15			22.15		
ENTERGY	NERC	161.0	SUB 312 - POWERSITE	ENTERGY	0.01	0.01		0.01			0.01		
39-1	NERC	69.0	SUB 415 - BLACKHAWK JCT.	KAMO	6.00	6.00		6.00			6.00		
81-0	NERC	161.0	SUB 94 - COLUMBUS SOUTHEAST	SUB 452 - RIVERTON	7.70	7.70			7.70			7.70	
81-0	NERC	161.0	NEOSHO 161 KV	SUB 94 - COLUMBUS SOUTHEAST	18.09	18.09			18.09			18.09	
84-0	NERC	161.0	LITCHFIELD 161 KV	SUB 349 - ASBURY	6.48	6.48			6.48			6.48	
84-0	NERC	161.0	CARTHAGE	SUB 395 - CARTHAGE SOUTHWEST	4.10	4.10			4.10			4.10	
84-0	NERC	161.0	SUB 349 - ASBURY	SUB 421 - PURCELL SOUTHWEST	11.70	11.70			11.70			11.70	
84-0	NERC	161.0	SUB 395 - CARTHAGE SOUTHWEST	SUB 421 - PURCELL SOUTHWEST	7.70	7.70			7.70			7.70	
86-0	NERC	161.0	SUB 452 - RIVERTON	SUB 404 - HOCKERVILLE	8.10	8.10			8.10			8.10	
88-0	NERC	161.0	SUB 382 - LARUSSEL	SUB 383 - MONETT	18.00	18.00			18.00			18.00	
89-0	NERC	161.0	TABLE ROCK	SUB 438 - RIVERSIDE	3.10	3.10				3.10			3.10
91-0	NERC	161.0	SUB 392 - DECATUR SOUTH	FLINT CREEK POWER PLANT	5.0000	5.00				5.00			5.00
91-1	NERC	161.0	GROVE	SUB 435 - NOEL SOUTHWEST	14.41	14.41				14.41			14.41
93-0	NERC	161.0	SUB 368 - DADEVILLE EAST	MORGAN AEC 440 SUB	0.70	0.70				0.70			0.70
PSO-GRDA	NERC	138.0	VINITA JUNCTION 138KV	SUB 404 - HOCKERVILLE	36.32	0.00							
01-3		69.0	SUB SEKAN	SUB 444 - SHERWIN CITY	2.46	2.46			2.46			2.46	
01-0		69.0	SUB 282 - COLUMBUS TENNESSEE ST.	SUB 94 - COLUMBUS SOUTHEAST	2.00	2.00						2.00	
01-0		69.0	SUB 94 - COLUMBUS SOUTHEAST	SUB 167 - RIVERTON	7.20	7.20			7.20			7.20	
01-1		69.0	SUB 282 - COLUMBUS TENNESSEE ST.	SUB 282 - COLUMBUS TENNESSEE ST.	1.80	1.80			1.80			1.80	
01-1		69.0	SUB SEKAN	SUB 425 - SHERMAN CITY	7.20	7.20			7.20			7.20	
01-2		69.0	SUB SEKAN	SUB SEKAN	1.00	0.00						0.00	
01-2		69.0	SUB 282 - COLUMBUS TENNESSEE ST.	SUB SEKAN	3.80	0.00			0.00			0.00	
06-0		69.0	SUB 428 - FAIRLAND SOUTHWEST	SUB 363 - FAIRLAND WEST	1.70	1.70			1.70			1.70	
06-0		69.0	SUB 167 - RIVERTON	SUB 406 - RIVERTON SOUTH	0.40	0.40			0.40			0.40	
06-0		69.0	SUB 271 - BAXTER SPRINGS WEST	SUB 291 - BAXTER SPRINGS 12TH ST.	5.60	5.60			5.60			5.60	
06-0		69.0	SUB 271 - BAXTER SPRINGS WEST	SUB 404 - HOCKERVILLE	4.00	4.00			4.00			4.00	
06-0		69.0	SUB 291 - BAXTER SPRINGS 12TH ST.	SUB 406 - RIVERTON SOUTH	2.80	2.80			2.80			2.80	
06-0		69.0	SUB 377 - QUAPAW (EAGLE PICHER)	SUB 404 - HOCKERVILLE	2.40	2.40			2.40			2.40	
06-1		69.0	SUB 291 - BAXTER SPRINGS	SUB 291 - BAXTER SPRINGS 12TH ST.	2.94	2.94			2.94			2.94	
06-2		69.0	SUB 381 - COMMERCE NORTH	SUB 381 - COMMERCE NORTH	3.60	3.60			3.60			3.60	
06-2		69.0	SUB 381 - COMMERCE NORTH	SUB 363 - FAIRLAND WEST	20.40	20.40			20.40			20.40	
06-2		69.0	SUB 381 - COMMERCE NORTH	SUB 377 - QUAPAW (EAGLE PICHER)	0.40	0.40			0.40			0.40	
08-0		69.0	SUB 250 - ARCOLA NORTH	SUB 614 - GREENFIELD	13.20	13.20		13.20			13.20		
08-1		69.0	SUB 250 - ARCOLA NORTH	SUB 631 - STOCKTON CITY	11.60	11.60		11.60			11.60		
08-1		69.0	SUB 324 - STOCKTON NORTHWEST	SUB 631 - STOCKTON CITY	0.40	0.40		0.40			0.40		
08-2		34.5	SUB 308 - HUMANSVILLE WEST	SUB 283 - DUNNEGAN	6.86	6.86		6.86			6.86		
08-2		34.5	SUB 308 - HUMANSVILLE WEST	SUB 304 - CAPLINGER	13.73	13.73		13.73			13.73		
08-2		34.5	SUB 324 - STOCKTON NORTHWEST	SUB 304 - CAPLINGER	5.70	5.70		5.70			5.70		
08-3		34.5	SUB 308 - HUMANSVILLE WEST	SUB 318 - COLLINS SOUTH	7.46	7.46		7.46			7.46		
08-4		69.0	SUB 418 - AEC STOCKTON	SUB 631 - STOCKTON CITY	2.20	2.20		2.20			2.20		
20-0		34.5	SUB 217 - FAIRPLAY EAST	SUB 283 - DUNNEGAN	6.84	6.84		6.84			6.84		
20-0		69.0	SUB EXPLORER PLEASANT HOPE TAP	SUB EXPLORER PLEASANT HOPE	1.50	1.50		1.50			1.50		
20-0		69.0	SUB EXPLORER PLEASANT HOPE TAP	SUB 73 - BOLIVAR BURNS	6.90	6.90		6.90			6.90		
20-0		69.0	SUB EXPLORER PLEASANT HOPE TAP	SUB 323 - BRIGHTON EAST	3.20	3.20		3.20			3.20		
20-0		69.0	SUB 209 - HERMITAGE	SUB 73 - BOLIVAR BURNS	24.79	24.79		24.79			24.79		
20-0		69.0	SUB 80 - MARSHFIELD JCT.	SUB 170 - NICHOLS ST.	8.80	8.80		8.80			8.80		
20-0		69.0	SUB 80 - MARSHFIELD JCT.	SUB 323 - BRIGHTON EAST	8.00	8.00		8.00			8.00		
21-0		69.0	SUB 184 - NEOSHO SOUTH JCT.	SUB 314 - NEOSHO LINDE	1.20	1.20		1.20			1.20		

Empire District Electric Company

Transmission System -- Infrastructure Detailed Inspection

Line #	NERC	KV	From -- Expanded	To -- Expanded	Total Miles	EDE Miles	2008	2009	2010	2011	2012	2013	2014
21-0		69.0	SUB 184 - NEOSHO SOUTH JCT.	SUB 322 - ANDERSON SOUTHWEST	15.20	15.20		15.20			15.20		
21-0		69.0	SUB 326 - DECATUR NORTH	SUB 392 - DECATUR SOUTH	1.60	1.60		1.60			1.60		
21-0		69.0	SUB 326 - DECATUR NORTH	SUB 700 - GRAVETTE	4.40	4.40		4.40			4.40		
21-0		69.0	SUB 435 - NOEL SOUTHWEST	SUB 700 - GRAVETTE	10.40	10.40		10.40			10.40		
21-0		69.0	SUB 443 - NOEL CITY	SUB 322 - ANDERSON SOUTHWEST	7.20	7.20		7.20			7.20		
21-0		69.0	SUB 443 - NOEL CITY	SUB 435 - NOEL SOUTHWEST	2.40	2.40		2.40			2.40		
21-1		69.0	SUB 56 - NEOSHO WEST	SUB 314 - NEOSHO LINDE	2.80	2.80		2.80			2.80		
21-2		69.0	SUB 184 - NEOSHO SOUTH JCT.	SUB 296 - NEOSHO SOUTHEAST (ROCKETDYNE)	2.40	2.40		2.40			2.40		
21-3		69.0	SUB 414 - SOUTHWEST CITY	SUB 435 - NOEL SOUTHWEST	2.40	2.40		2.40			2.40		
25-0		69.0	SUB 59 - JOPLIN 26TH ST.	SUB 64 - JOPLIN 10TH ST.	1.60	1.60			1.60			1.60	
26-0		69.0	SUB 121 - ASH GROVE H.T.	SUB 260 - LAWRENCEBURG SHELL	11.60	11.60			11.60			11.60	
26-0		69.0	SUB 121 - ASH GROVE H.T.	SUB 445 - WILLARD	6.68	6.68			6.68			6.68	
26-0		69.0	SUB 260 - LAWRENCEBURG SHELL	SUB 338 - HEATONVILLE CHEROKEE	6.80	6.80			6.80			6.80	
26-0		69.0	SUB 262 - ALBATROSS	SUB 338 - HEATONVILLE CHEROKEE	4.80	4.80			4.80			4.80	
26-0		69.0	SUB 262 - ALBATROSS	SUB 351 - MOUNT VERNON EAST	5.60	5.60			5.60			5.60	
26-0		69.0	SUB 351 - MOUNT VERNON EAST	SUB 420 - MT. VERNON EAST	0.80	0.80			0.80			0.80	
26-0		69.0	SUB 355 - AURORA WEST	SUB 420 - MT. VERNON EAST	10.00	10.00			10.00			10.00	
26-0		69.0	SUB 80 - MARSHFIELD JCT.	SUB 445 - WILLARD	6.35	6.35			6.35			6.35	
26-0		69.0	SUB 80 - MARSHFIELD JCT.	SUB 397 - FAIRGROVE SOUTH	8.80	8.80			8.80			8.80	
26-0		69.0	SUB 124 - AURORA H.T.	SUB 355 - AURORA WEST	2.80	2.80			2.80			2.80	
26-1		69.0	SUB 351 - MOUNT VERNON EAST	MT. VERNON CITY 348	1.00	1.00			1.00			1.00	
26-2		69.0	SUB 364 - RESCUE EXPLORER	SUB 262 - ALBATROSS	7.20	7.20			7.20			7.20	
26-4		69.0	SUB 121 - ASH GROVE H.T.	SUB 368 - DADEVILLE EAST	15.60	15.60			15.60			15.60	
26-5		69.0	SUB 445 - WILLARD	SUB 369 - WILLARD	2.10	2.10			2.10			2.10	
27-0		34.5	SUB 299 - CHETOPA CITY	SUB 271 - BAXTER SPRINGS WEST	14.90	14.90				14.90			14.90
27-0		34.5	SUB 300 - CHETOPA SOUTH	SUB 388 - CHETOPA TWIN VALLEY	0.30	0.30				0.30			0.30
27-0		34.5	SUB 388 - CHETOPA TWIN VALLEY	SUB 186 - WELCH NORTH	11.18	11.18				11.18			11.18
27-0		69.0	SUB 66 - SCAMMON SOUTH	SUB 94 - COLUMBUS SOUTHEAST	10.30	10.30				10.30			10.30
27-1		69.0	SUB 94 - COLUMBUS SOUTHEAST	SUB 271 - BAXTER SPRINGS WEST	7.20	7.20				7.20			7.20
27-3		34.5	SUB 299 - CHETOPA CITY	SUB 299 - CHETOPA CITY	0.82	0.82				0.82			0.82
27-3		34.5	SUB 299 - CHETOPA CITY	SUB 300 - CHETOPA SOUTH	0.25	0.25				0.25			0.25
29-0		69.0	SUB 145 - JOPLIN WEST 7TH	SUB 278 - GALENA NORTHEAST	8.00	8.00				8.00			8.00
29-0		69.0	SUB 167 - RIVERTON	SUB 278 - GALENA NORTHEAST	8.80	8.80				8.80			8.80
30-0		69.0	SUB 124 - AURORA H.T.	SUB 152 - MONETT H.T.	11.20	11.20		11.20			11.20		
30-0		69.0	SUB 124 - AURORA H.T.	SUB 437 - MARIONVILLE NORTHWEST	8.40	8.40		8.40			8.40		
30-0		69.0	SUB 131 - DIAMOND JCT.	SUB 393 - REINMILLER	12.43	12.43		12.43			12.43		
30-0		69.0	SUB 152 - MONETT H.T.	SUB 383 - MONETT	2.00	2.00		2.00			2.00		
30-0		69.0	SUB 170 - NICHOLS ST.	SUB 345 - REPUBLIC NORTHEAST	10.80	10.80		10.80			10.80		
30-0		69.0	SUB 205 - WENTWORTH WEST	SUB 362 - SARCOXIE SOUTHWEST	3.20	3.20			3.20			3.20	
30-0		69.0	SUB 205 - WENTWORTH WEST	SUB 383 - MONETT	13.20	13.20		13.20			13.20		
30-0		69.0	SUB 221 - BILLINGS NORTHEAST	SUB 359 - REPUBLIC EAST	6.04	6.04		6.04			6.04		
30-0		69.0	SUB 221 - BILLINGS NORTHEAST	SUB 437 - MARIONVILLE NORTHWEST	8.00	8.00		8.00			8.00		
30-0		69.0	SUB 345 - REPUBLIC NORTHEAST	SUB 359 - REPUBLIC EAST	5.20	5.20		5.20			5.20		
30-0		69.0	SUB 347 - GRANBY JUNCTION	SUB 131 - DIAMOND JCT.	1.50	1.50		1.50			1.50		
30-0		69.0	SUB 393 - REINMILLER	SUB 447 - 32ND & STEPHENS	3.10	3.10		3.10			3.10		
30-0		69.0	SUB 59 - JOPLIN 26TH ST.	SUB 258 - GATEWAY SOUTH	1.60	1.60		1.60			1.60		
30-1		69.0	SUB 109 - ATLAS JCT.	SUB 315 - SOLAR (ATLAS POWDER CO.)	2.80	2.80		2.80			2.80		
30-1		69.0	SUB 315 - SOLAR TAP (ATLAS POWDER CO.)	SUB 393 - REINMILLER	4.00	4.00		4.00			4.00		
30-3		69.0	SUB 347 - GRANBY JUNCTION	SUB 242 - DIAMOND SHELL	1.00	1.00		1.00			1.00		

Empire District Electric Company

Transmission System -- Infrastructure Detailed Inspection

Line #	NERC	KV	From -- Expanded	To -- Expanded	Total Miles	EDE Miles	2008	2009	2010	2011	2012	2013	2014
30-4		69.0	SUB 347 - GRANBY JUNCTION	SUB 347 - GRANBY	4.00	4.00		4.00			4.00		
30-5		69.0	SUB 131 - DIAMOND JCT.	SUB 362 - SARCOXIE SOUTHWEST	8.80	8.80		8.80			8.80		
30-5		69.0	SUB 362 - SARCOXIE	SUB 362 - SARCOXIE SOUTHWEST	4.33	4.33		4.33			4.33		
30-6		69.0	SUB 376 - MONETT CITY SOUTH J2	SUB 383 - MONETT	9.20	9.20			9.20			9.20	
30-7		69.0	SUB 311 - MONETT CITY	SUB 311 - MONETT CITY	0.40	0.40			0.40			0.40	
30-7		69.0	SUB 352 - MONETT CITY NORTH	SUB 352 - MONETT CITY NORTH	0.40	0.40			0.40			0.40	
30-7		69.0	SUB 352 - MONETT CITY NORTH	SUB 311 - MONETT CITY	1.20	1.20			1.20			1.20	
30-7		69.0	SUB 352 - MONETT CITY NORTH	SUB 383 - MONETT	2.80	2.80			2.80			2.80	
30-7		69.0	SUB 376 - MONETT CITY SOUTH J2	SUB 376 - MONETT CITY SOUTH	0.40	0.40			0.40			0.40	
30-7		69.0	SUB 376 - MONETT CITY SOUTH J2	SUB 416 - MONETT CITY EAST	1.20	1.20			1.20			1.20	
30-7		69.0	SUB 416 - MONETT CITY EAST	SUB 390 - PURDY SOUTH	8.80	8.80			8.80			8.80	
30-8		69.0	SUB 416 - MONETT CITY EAST	SUB 416 - MONETT CITY EAST	0.40	0.40			0.40			0.40	
30-9		69.0	SUB 258 - GATEWAY SOUTH	SUB 447 - 32ND & STEPHENS	1.00	1.00			1.00			1.00	
31-0		69.0	SUB 59 - JOPLIN 26TH ST.	SUB 167 - RIVERTON	6.40	6.40				6.40			6.40
32-0		69.0	SUB 100 - JOPLIN 2ND ST.	SUB 284 - JOPLIN EAST 5TH ST.	0.40	0.40				0.40			0.40
32-0		69.0	SUB 108 - CARTHAGE NORTHWEST	SUB 109 - ATLAS JCT.	12.00	12.00				12.00			12.00
32-0		69.0	SUB 109 - ATLAS JCT.	SUB 360 - JOPLIN NORTHEAST	3.19	3.19				3.19			3.19
32-0		69.0	SUB 360 - JOPLIN NORTHEAST	SUB 372 - JOPLIN 2ND & DIVISION	2.80	2.80				2.80			2.80
32-0		69.0	SUB 64 - JOPLIN 10TH ST.	SUB 145 - JOPLIN WEST 7TH	2.40	2.40				2.40			2.40
32-0		69.0	SUB 64 - JOPLIN 10TH ST.	SUB 284 - JOPLIN EAST 5TH ST.	0.80	0.80				0.80			0.80
32-1		69.0	SUB 100 - JOPLIN 2ND ST.	SUB 372 - JOPLIN 2ND & DIVISION	0.40	0.40				0.40			0.40
32-2		69.0	SUB 109 - ATLAS JCT.	SUB 315 - SOLAR TAP (ATLAS POWDER CO.)	0.40	0.40		0.40			0.40		
32-2		69.0	SUB 315 - SOLAR (ATLAS POWDER CO.)	SUB 315 - SOLAR TAP (ATLAS POWDER CO.)	2.23	2.23		2.23			2.23		
33-0		69.0	SUB 108 - CARTHAGE NORTHWEST	SUB 110 - ORONOGO JCT.	11.20	11.20		11.20			11.20		
33-0		69.0	SUB 108 - CARTHAGE NORTHWEST	SUB 403 - JASPER WEST TAP	8.80	8.80		8.80			8.80		
33-0		69.0	SUB 110 - ORONOGO JCT.	SUB 341 - JOPLIN NORTHWEST	5.20	5.20		5.20			5.20		
33-0		69.0	SUB 145 - JOPLIN WEST 7TH	SUB 341 - JOPLIN NORTHWEST	3.20	3.20		3.20			3.20		
33-0		69.0	SUB 217 - FAIRPLAY EAST	SUB 368 - DADEVILLE EAST	13.60	13.60		13.60			13.60		
33-0		69.0	SUB 217 - FAIRPLAY EAST	SUB 602 - BOLIVAR PLANT	8.00	8.00		8.00			8.00		
33-0		69.0	SUB 249 - BOSTON EAST	SUB 251 - GOLDEN CITY NORTH	8.80	8.80		8.80			8.80		
33-0		69.0	SUB 249 - BOSTON EAST	SUB 403 - JASPER WEST TAP	8.70	8.70		8.70			8.70		
33-0		69.0	SUB 251 - GOLDEN CITY NORTH	SUB 400 - LOCKWOOD	7.60	7.60		7.60			7.60		
33-0		69.0	SUB 367 - BOLIVAR SOUTHEAST	SUB 602 - BOLIVAR PLANT	1.60	1.60		1.60			1.60		
33-0		69.0	SUB 400 - LOCKWOOD	SUB 614 - GREENFIELD	7.60	7.60		7.60			7.60		
33-0		69.0	SUB 403 - JASPER WEST	SUB 403 - JASPER WEST TAP	2.80	2.80		2.80			2.80		
33-0		69.0	SUB 73 - BOLIVAR BURNS	SUB 367 - BOLIVAR SOUTHEAST	5.60	5.60		5.60			5.60		
33-0		69.0	SUB CU PUMP STATION TAP	SUB 368 - DADEVILLE EAST	5.00	5.00		5.00			5.00		
33-0		69.0	SUB CU PUMP STATION TAP	SUB 614 - GREENFIELD	19.50	19.50		19.50			19.50		
33-3		69.0	SUB CU PUMP STATION TAP	SUB CU PUMP STATION	1.20	1.20			1.20			1.20	
34-0		69.0	SUB 109 - ATLAS JCT.	SUB 280 - OAKLAND EAST	3.20	3.20		3.20			3.20		
34-0		69.0	SUB 110 - ORONOGO JCT.	SUB 280 - OAKLAND EAST	1.60	1.60		1.60			1.60		
34-0		161.0	SUB 109 - ATLAS JCT.	SUB 432 - JOPLIN OAKLAND NORTH	4.90	4.90		4.90			4.90		
34-1		69.0	SUB 105 - WEBB CITY - TOM STREET	SUB 280 - OAKLAND EAST	2.02	2.02		2.02			2.02		
35-0		69.0	SUB EXPLORER SPRING CITY TAP	SUB EXPLORER SPRING CITY	1.00	1.00				1.00			1.00
35-0		69.0	SUB EXPLORER SPRING CITY TAP	SUB 389 - JOPLIN SOUTHWEST	2.95	2.95				2.95			2.95
35-0		69.0	SUB 389 - JOPLIN SOUTHWEST	SUB 430 - JOPLIN 32ND & OLIVER	3.20	3.20				3.20			3.20
35-0		69.0	SUB 59 - JOPLIN 26TH ST.	SUB 430 - JOPLIN 32ND & OLIVER	1.60	1.60				1.60			1.60
35-1		69.0	SUB EXPLORER SPRING CITY TAP	SUB 375 - SENECA	5.00	5.00				5.00			5.00
35-1		69.0	SUB 375 - SENECA	SUB 375 - SENECA	5.10	5.10				5.10			5.10

Empire District Electric Company

Transmission System -- Infrastructure Detailed Inspection

Line #	NERC	KV	From -- Expanded	To -- Expanded	Total Miles	EDE Miles	2008	2009	2010	2011	2012	2013	2014
35-1		69.0	SUB 56 - NEOSHO WEST	SUB 375 - SENECA	11.20	11.20				11.20			11.20
36-0		69.0	SUB 167 - RIVERTON	SUB 339 - GULF JAYHAWK	2.16	2.16			2.16			2.16	
38-0		69.0	SUB 243 - BUFFALO SHELL	SUB 333 - FAIRGROVE CHEROKEE	10.30	10.30			10.30			10.30	
38-0		69.0	SUB 333 - FAIRGROVE CHEROKEE	SUB 397 - FAIRGROVE SOUTH	24.00	24.00			24.00			24.00	
38-0		69.0	SUB 243 - BUFFALO SHELL	SUB 243 - BUFFALO SHELL	0.21	0.21			0.21			0.21	
38-0		69.0	SUB 370 - STRAFFORD	SUB 397 - FAIRGROVE SOUTH	5.60	5.60			5.60			5.60	
38-0		69.0	SUB KAMO-STRAFFORD	SUB 370 - STRAFFORD	3.70	3.70			3.70			3.70	
38-0		69.0	SUB KAMO-STRAFFORD	SUB 415 - BLACKHAWK JCT.	16.90	16.90			16.90			16.90	
38-2		69.0	SUB 243 - BUFFALO SHELL	SUB 342 - BUFFALO SOUTH	4.51	4.51			4.51			4.51	
38-2		69.0	SUB 73 - BOLIVAR BURNS	SUB 342 - BUFFALO SOUTH	10.00	10.00			10.00			10.00	
38-3		69.0	SUB 409 - BUFFALO SOUTH	SUB 342 - BUFFALO SOUTH	5.24	5.24			5.24			5.24	
39-0		69.0	SUB 114 - NIXA NORTH	SUB 170 - NICHOLS ST.	13.60	13.60			13.60			13.60	
39-0		69.0	SUB 114 - NIXA NORTH	SUB 415 - BLACKHAWK JCT.	4.80	4.80			4.80			4.80	
39-0		69.0	SUB 312 - POWERSITE	SUB 410 - FORSYTH NORTH	3.20	3.20			3.20			3.20	
39-0		69.0	SUB 330 - OZARK NORTHWEST	SUB 415 - BLACKHAWK JCT.	2.40	2.40			2.40			2.40	
39-0		69.0	SUB 330 - OZARK NORTHWEST	SUB 434 - OZARK SOUTHEAST	2.00	2.00			2.00			2.00	
39-0		69.0	SUB 410 - FORSYTH NORTH	SUB 434 - OZARK SOUTHEAST	26.00	26.00			26.00			26.00	
40-0		69.0	SUB 292 - TIPTON FORD	SUB 332 - NEOSHO CHEROKEE	4.40	4.40			4.40			4.40	
40-0		69.0	SUB 296 - NEOSHO SOUTHEAST (ROCKETDYN	SUB 398 - NEOSHO NORTHEAST	6.40	6.40			6.40			6.40	
40-0		69.0	SUB 332 - NEOSHO CHEROKEE	SUB 398 - NEOSHO NORTHEAST	6.40	6.40			6.40			6.40	
79-0		161.0	SUB 124 - AURORA H.T.	SUB 383 - MONETT	11.50	11.50				11.50			11.50
79-0		161.0	SUB 389 - JOPLIN SOUTHWEST	SUB 439 - STATELINE	6.60	6.60				6.60			6.60
79-0		161.0	SUB 292 - TIPTON FORD	SUB 383 - MONETT	29.10	29.10				29.10			29.10
79-0		161.0	SUB 292 - TIPTON FORD	SUB 389 - JOPLIN SOUTHWEST	7.20	7.20				7.20			7.20
79-0		161.0	SUB 452 - RIVERTON	SUB 439 - STATELINE	9.00	9.00				9.00			9.00
80-0		161.0	SUB 124 - AURORA H.T.	SUB 295 - REEDS SPRING	11.50	11.50				11.50			11.50
80-0		161.0	SUB 295 - REEDS SPRING	SUB 424 - AEC REEDS SPRING	1.50	1.50				1.50			1.50
80-0		161.0	SUB 312 - POWERSITE	SUB 331 - BRANSON NORTH	7.90	7.90				7.90			7.90
80-0		161.0	SUB 331 - BRANSON NORTH	SUB 412 - BRANSON NORTHWEST	1.10	1.10				1.10			1.10
80-0		161.0	SUB 412 - BRANSON NORTHWEST	SUB 424 - AEC REEDS SPRING	7.60	7.60				7.60			7.60
80-1		161.0	SUB 413 - BRANSON SOUTHWEST	SUB 438 - RIVERSIDE	3.80	3.80				3.80			3.80
80-1		161.0	SUB 412 - BRANSON NORTHWEST	SUB 433 - GRETN	2.60	2.60				2.60			2.60
80-1		161.0	SUB 413 - BRANSON SOUTHWEST	SUB 433 - GRETN	2.60	2.60				2.60			2.60
82-0		161.0	SUB 110 - ORONOGO JCT.	SUB 452 - RIVERTON	13.40	13.40				13.40			13.40
83-0		161.0	CARTHAGE	SUB 109 - ATLAS JCT.	8.20	8.20				8.20			8.20
83-0		161.0	SUB 110 - ORONOGO JCT.	SUB 432 - JOPLIN OAKLAND NORTH	1.80	1.80				1.80			1.80
85-0		161.0	SUB 110 - ORONOGO JCT.	SUB 417 - JOPLIN FIR RD.	3.20	3.20				3.20			3.20
85-0		161.0	SUB 349 - ASBURY	SUB 366 - CARL JUNCTION	13.10	13.10				13.10			13.10
85-0		161.0	SUB 366 - CARL JUNCTION	SUB 417 - JOPLIN FIR RD.	2.40	2.40				2.40			2.40
87-0		161.0	SUB 124 - AURORA H.T.	SUB 446 - CHESAPEAKE	13.50	13.50				13.50			13.50
87-0		161.0	SUB 368 - DADEVILLE EAST	SUB 431 - BOLIVAR SOUTH	17.20	17.20				17.20			17.20
87-0		161.0	SUB 368 - DADEVILLE EAST	SUB 446 - CHESAPEAKE	25.12	25.12				25.12			25.12
87-0		161.0	SUB 73 - BOLIVAR BURNS	SUB 431 - BOLIVAR SOUTH	8.20	8.20				8.20			8.20
89-0		161.0	SUB 312 - POWERSITE	SUB 387 - HOLLISTER EAST	0.80	0.80				0.80			0.80
89-0		161.0	SUB 387 - HOLLISTER EAST	SUB 438 - RIVERSIDE	6.40	6.40				6.40			6.40
91-0		161.0	SUB 184 - NEOSHO SOUTH JCT.	SUB 435 - NOEL SOUTHWEST	23.10	23.10				23.10			23.10
91-0		161.0	SUB 392 - DECATUR SOUTH	SUB 435 - NOEL SOUTHWEST	17.40	17.40				17.40			17.40
92-0		69.0	SUB 292 - TIPTON FORD	SUB 393 - REINMILLER	4.00	4.00			4.00			4.00	
92-0		161.0	SUB 389 - JOPLIN SOUTHWEST	SUB 422 - JOPLIN 24TH & CONNECTICUT	7.16	7.16			7.16			7.16	

Empire District Electric Company

Transmission System -- Infrastructure Detailed Inspection

Line #	NERC	KV	From -- Expanded	To -- Expanded	Total Miles	EDE Miles	2008	2009	2010	2011	2012	2013	2014
92-0		161.0	SUB 391 - JOPLIN SOUTHEAST	SUB 422 - JOPLIN 24TH & CONNECTICUT	2.80	2.80			2.80			2.80	
92-0		161.0	NEOSHO	SUB 184 - NEOSHO SOUTH JCT.	1.70	1.70			1.70			1.70	
92-0		161.0	NEOSHO	SUB 292 - TIPTON FORD	10.60	10.60			10.60			10.60	
92-0		161.0	SUB 393 - REINMILLER	SUB 391 - JOPLIN SOUTHEAST	2.05	2.05			2.05			2.05	
95-0		161.0	SUB 110 - ORONOGO JCT.	SUB 145 - JOPLIN WEST 7TH	5.80	5.80				5.80			5.80
95-0		161.0	SUB 145 - JOPLIN WEST 7TH	SUB 439 - STATELINE	5.50	5.50				5.50			5.50
96-0		161.0	SUB 389 - JOPLIN SOUTHWEST	SUB 439 - STATELINE	7.00	7.00				7.00			7.00
KAMO		69.0	SUB 446 - CHESAPEAKE	KAMO MAINTAINED	6.06	0.00				0.00			
KAMO		69.0	SUB 446 - CHESAPEAKE	KAMO MAINTAINED	1.84	0.00				0.00			
Westar		161.0	LITCHFIELD 161 KV	MARMTNE5 161 KV	40.54	0.00				0.00			
					1409.44	1305.64	0.00	443.69	444.43	417.52	443.69	444.43	417.52

Section 1.2.2

Patrol Inspection Description

Transmission System Infrastructure Patrol

Aerial surveys – Aerial surveys are performed annually in conjunction with the vegetation mid-cycle patrol. This is a visual inspection of all transmission facilities from a helicopter, reviewing poles, cross-arms, attachments, conductor and insulators.

Section 1.2.3

Intrusive Pole Inspection Schedule

Empire District Electric Company

Transmission System -- Intrusive Wood Inspection/Detailed Steel Inspection Plan

Line #	From -- Expanded	To -- Expanded	Pole Type	EDE Miles	1980 - 1999	2000 - 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
345	SUB 383 - MONETT	BROOKLINE 345	Wood	22.15	0.00	0.00	0.00	0.00	0.00	0.00	22.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-0	SUB 282 - COLUMBUS TENNESSEE ST.	SUB 94 - COLUMBUS SOUTHEAST	Steel	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
01-0	SUB 94 - COLUMBUS SOUTHEAST	SUB 167 - RIVERTON	Steel	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.20
01-1	SUB 282 - COLUMBUS TENNESSEE ST.	SUB 282 - COLUMBUS TENNESSEE ST.	Wood	1.80	1.80	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.00	0.00	0.00	0.00	0.00
01-1	SUB SEKAN	SUB 425 - SHERMAN CITY	Wood	7.20	7.20	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00
01-2	SUB SEKAN	SUB SEKAN	Wood	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-2	SUB 282 - COLUMBUS TENNESSEE ST.	SUB SEKAN	Wood	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-3	SUB SEKAN	SUB 444 - SHERWIN CITY	Wood	2.46	0.00	0.00	0.00	0.00	0.00	0.00	2.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06-0	SUB 428 - FAIRLAND SOUTHWEST	SUB 363 - FAIRLAND WEST	Wood	1.70	1.70	0.00	0.00	0.00	0.00	0.00	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06-0	SUB 167 - RIVERTON	SUB 406 - RIVERTON SOUTH	Wood	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06-0	SUB 271 - BAXTER SPRINGS WEST	SUB 291 - BAXTER SPRINGS 12TH ST.	Wood	5.60	5.60	0.00	0.00	0.00	0.00	0.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06-0	SUB 271 - BAXTER SPRINGS WEST	SUB 404 - HOCKERVILLE	Wood	4.00	4.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06-0	SUB 291 - BAXTER SPRINGS 12TH ST.	SUB 406 - RIVERTON SOUTH	Wood	2.80	2.80	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06-0	SUB 377 - QUAPAW (EAGLE PICHER)	SUB 404 - HOCKERVILLE	Wood	2.40	2.40	0.00	0.00	0.00	0.00	0.00	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06-1	SUB 291 - BAXTER SPRINGS	SUB 291 - BAXTER SPRINGS 12TH ST.	Wood	2.94	2.94	0.00	0.00	0.00	0.00	0.00	2.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06-2	SUB 381 - COMMERCE NORTH	SUB 381 - COMMERCE NORTH	Wood	3.60	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06-2	SUB 381 - COMMERCE NORTH	SUB 363 - FAIRLAND WEST	Wood	20.40	0.00	0.00	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06-2	SUB 381 - COMMERCE NORTH	SUB 377 - QUAPAW (EAGLE PICHER)	Wood	0.40	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08-0	SUB 250 - ARCOLA NORTH	SUB 614 - GREENFIELD	Wood	13.20	13.20	0.00	0.00	0.00	0.00	0.00	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08-1	SUB 250 - ARCOLA NORTH	SUB 631 - STOCKTON CITY	Wood	11.60	11.60	0.00	0.00	0.00	0.00	0.00	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08-1	SUB 324 - STOCKTON NORTHWEST	SUB 631 - STOCKTON CITY	Wood	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08-2	SUB 308 - HUMANSVILLE WEST	SUB 283 - DUNNEGAN	Wood	6.86	6.86	0.00	0.00	0.00	0.00	0.00	0.00	6.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08-2	SUB 308 - HUMANSVILLE WEST	SUB 304 - CAPLINGER	Wood	13.73	13.73	0.00	0.00	0.00	0.00	0.00	0.00	13.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08-2	SUB 324 - STOCKTON NORTHWEST	SUB 304 - CAPLINGER	Wood	5.70	5.70	0.00	0.00	0.00	0.00	0.00	0.00	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08-3	SUB 308 - HUMANSVILLE WEST	SUB 318 - COLLINS SOUTH	Wood	7.46	7.46	0.00	0.00	0.00	0.00	0.00	0.00	7.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08-4	SUB 418 - AEC STOCKTON	SUB 631 - STOCKTON CITY	Wood	2.20	2.20	0.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20-0	SUB 217 - FAIRPLAY EAST	SUB 283 - DUNNEGAN	Wood	6.84	6.84	6.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.84	0.00	0.00	0.00	0.00	0.00
20-0	SUB EXPLORER PLEASANT HOPE TAP	SUB EXPLORER PLEASANT HOPE	Wood	1.50	1.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00
20-0	SUB EXPLORER PLEASANT HOPE TAP	SUB 73 - BOLIVAR BURNS	Wood	6.90	6.90	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.90	0.00	0.00	0.00	0.00	0.00
20-0	SUB EXPLORER PLEASANT HOPE TAP	SUB 323 - BRIGHTON EAST	Wood	3.20	3.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00	0.00	0.00
20-0	SUB 209 - HERMITAGE	SUB 73 - BOLIVAR BURNS	Wood	24.79	24.79	24.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.79	0.00	0.00	0.00	0.00	0.00
20-0	SUB 80 - MARSHFIELD JCT.	SUB 170 - NICHOLS ST.	Wood	8.80	8.80	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.80	0.00	0.00	0.00	0.00	0.00
20-0	SUB 80 - MARSHFIELD JCT.	SUB 323 - BRIGHTON EAST	Wood	8.00	8.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
21-0	SUB 184 - NEOSHO SOUTH JCT.	SUB 314 - NEOSHO LINDE	Wood	1.20	1.20	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00	0.00
21-0	SUB 184 - NEOSHO SOUTH JCT.	SUB 322 - ANDERSON SOUTHWEST	Wood	15.20	15.20	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.20	0.00	0.00	0.00	0.00
21-0	SUB 326 - DECATUR NORTH	SUB 392 - DECATUR SOUTH	Wood	1.60	1.60	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.00	0.00	0.00	0.00
21-0	SUB 326 - DECATUR NORTH	SUB 700 - GRAVETTE	Wood	4.40	4.40	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.40	0.00	0.00	0.00	0.00
21-0	SUB 435 - NOEL SOUTHWEST	SUB 700 - GRAVETTE	Wood	10.40	10.40	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.40	0.00	0.00	0.00	0.00
21-0	SUB 443 - NOEL CITY	SUB 322 - ANDERSON SOUTHWEST	Wood	7.20	7.20	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.20	0.00	0.00	0.00	0.00
21-0	SUB 443 - NOEL CITY	SUB 435 - NOEL SOUTHWEST	Wood	2.40	2.40	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00	0.00	0.00	0.00
21-1	SUB 56 - NEOSHO WEST	SUB 314 - NEOSHO LINDE	Wood	2.80	2.80	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21-2	SUB 184 - NEOSHO SOUTH JCT.	SUB 296 - NEOSHO SOUTHEAST (ROCKETDYN	Wood	2.40	2.40	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00	0.00	0.00	0.00
21-3	SUB 414 - SOUTHWEST CITY	SUB 435 - NOEL SOUTHWEST	Wood	2.40	0.00	0.00	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25-0	SUB 59 - JOPLIN 26TH ST.	SUB 64 - JOPLIN 10TH ST.	Wood	1.60	0.00	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-0	SUB 121 - ASH GROVE H.T.	SUB 260 - LAWRENCEBURG SHELL	Wood	11.60	11.60	0.00	0.00	0.00	0.00	0.00	0.00	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-0	SUB 121 - ASH GROVE H.T.	SUB 445 - WILLARD	Wood	6.68	6.68	0.00	0.00	0.00	0.00	0.00	0.00	6.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-0	SUB 260 - LAWRENCEBURG SHELL	SUB 338 - HEATONVILLE CHEROKEE	Wood	6.80	6.80	0.00	0.00	0.00	0.00	0.00	0.00	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-0	SUB 262 - ALBATROSS	SUB 338 - HEATONVILLE CHEROKEE	Wood	4.80	4.80	0.00	0.00	0.00	0.00	0.00	0.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-0	SUB 262 - ALBATROSS	SUB 351 - MOUNT VERNON EAST	Wood	5.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-0	SUB 351 - MOUNT VERNON EAST	SUB 420 - MT. VERNON EAST	Wood	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-0	SUB 355 - AURORA WEST	SUB 420 - MT. VERNON EAST	Wood	10.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-0	SUB 80 - MARSHFIELD JCT.	SUB 445 - WILLARD	Wood	6.35	6.35	0.00	0.00	0.00	0.00	0.00	0.00	6.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-0	SUB 80 - MARSHFIELD JCT.	SUB 397 - FAIRGROVE SOUTH	Wood	8.80	8.80	0.00	0.00	0.00	0.00	0.00	0.00	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-0	SUB 124 - AURORA H.T.	SUB 355 - AURORA WEST	Wood	2.80	2.80	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-1	SUB 351 - MOUNT VERNON EAST	MT. VERNON CITY 348	Wood	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00

Empire District Electric Company

Transmission System -- Intrusive Wood Inspection/Detailed Steel Inspection Plan

Line #	From -- Expanded	To -- Expanded	Pole Type	EDE Miles	1980 - 1999	2000 - 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
26-2	SUB 364 - RESCUE EXPLORER	SUB 262 - ALBATROSS	Wood	7.20	7.20	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.20	0.00	0.00	0.00	0.00
26-4	SUB 121 - ASH GROVE H.T.	SUB 368 - DADEVILLE EAST	Wood	15.60	15.60	15.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.60	0.00	0.00	0.00	0.00
26-5	SUB 445 - WILLARD	SUB 369 - WILLARD	Wood	2.10	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.00	0.00	0.00	0.00
27-0	SUB 299 - CHETOPA CITY	SUB 271 - BAXTER SPRINGS WEST	Wood	14.90	14.90	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.90	0.00	0.00	0.00	0.00
27-0	SUB 300 - CHETOPA SOUTH	SUB 388 - CHETOPA TWIN VALLEY	Wood	0.30	0.30	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00
27-0	SUB 388 - CHETOPA TWIN VALLEY	SUB 186 - WELCH NORTH	Wood	11.18	11.18	11.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.18	0.00	0.00	0.00	0.00
27-0	SUB 66 - SCAMMON SOUTH	SUB 94 - COLUMBUS SOUTHEAST	Wood	10.30	10.30	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.30	0.00	0.00	0.00	0.00
27-1	SUB 94 - COLUMBUS SOUTHEAST	SUB 271 - BAXTER SPRINGS WEST	Wood	7.20	7.20	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.20
27-3	SUB 299 - CHETOPA CITY	SUB 299 - CHETOPA CITY	Wood	0.82	0.82	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
27-3	SUB 299 - CHETOPA CITY	SUB 300 - CHETOPA SOUTH	Wood	0.25	0.25	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
29-0	SUB 145 - JOPLIN WEST 7TH	SUB 278 - GALENA NORTHEAST	Steel	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00
29-0	SUB 167 - RIVERTON	SUB 278 - GALENA NORTHEAST	Steel	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.80	0.00	0.00	0.00
30-0	SUB 124 - AURORA H.T.	SUB 152 - MONETT H.T.	Wood	11.20	11.20	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.20	0.00	0.00	0.00
30-0	SUB 124 - AURORA H.T.	SUB 437 - MARIONVILLE NORTHWEST	Wood	8.40	8.40	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40	0.00	0.00	0.00
30-0	SUB 131 - DIAMOND JCT.	SUB 393 - REINMILLER	Wood	12.43	12.43	12.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.43	0.00	0.00	0.00
30-0	SUB 152 - MONETT H.T.	SUB 383 - MONETT	Wood	2.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00
30-0	SUB 170 - NICHOLS ST.	SUB 345 - REPUBLIC NORTHEAST	Wood	10.80	10.80	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80	0.00	0.00	0.00
30-0	SUB 205 - WENTWORTH WEST	SUB 362 - SARCOXIE SOUTHWEST	Wood	3.20	3.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00
30-0	SUB 205 - WENTWORTH WEST	SUB 383 - MONETT	Wood	13.20	13.20	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.20	0.00	0.00	0.00
30-0	SUB 221 - BILLINGS NORTHEAST	SUB 359 - REPUBLIC EAST	Wood	6.04	6.04	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.04	0.00	0.00	0.00
30-0	SUB 221 - BILLINGS NORTHEAST	SUB 437 - MARIONVILLE NORTHWEST	Wood	8.00	8.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00
30-0	SUB 345 - REPUBLIC NORTHEAST	SUB 359 - REPUBLIC EAST	Wood	5.20	5.20	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.20	0.00	0.00	0.00
30-0	SUB 347 - GRANBY JUNCTION	SUB 131 - DIAMOND JCT.	Wood	1.50	1.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00
30-0	SUB 393 - REINMILLER	SUB 447 - 32ND & STEPHENS	Wood	3.10	3.10	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.10	0.00	0.00	0.00
30-0	SUB 59 - JOPLIN 26TH ST.	SUB 258 - GATEWAY SOUTH	Wood	1.60	1.60	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.00	0.00	0.00
30-1	SUB 109 - ATLAS JCT.	SUB 315 - SOLAR (ATLAS POWDER CO.)	Wood	2.80	2.80	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-1	SUB 315 - SOLAR TAP (ATLAS POWDER CO.)	SUB 393 - REINMILLER	Wood	4.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-3	SUB 347 - GRANBY JUNCTION	SUB 242 - DIAMOND SHELL	Wood	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-4	SUB 347 - GRANBY JUNCTION	SUB 347 - GRANBY	Wood	4.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-5	SUB 131 - DIAMOND JCT.	SUB 362 - SARCOXIE SOUTHWEST	Wood	8.80	8.80	0.00	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-5	SUB 362 - SARCOXIE	SUB 362 - SARCOXIE SOUTHWEST	Wood	4.33	4.33	0.00	4.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-6	SUB 376 - MONETT CITY SOUTH J2	SUB 383 - MONETT	Wood	9.20	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.20	0.00	0.00	0.00	0.00	0.00	0.00
30-7	SUB 311 - MONETT CITY	SUB 311 - MONETT CITY	Wood	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
30-7	SUB 352 - MONETT CITY NORTH	SUB 352 - MONETT CITY NORTH	Wood	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
30-7	SUB 352 - MONETT CITY NORTH	SUB 311 - MONETT CITY	Wood	1.20	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00	0.00	0.00	0.00
30-7	SUB 352 - MONETT CITY NORTH	SUB 383 - MONETT	Wood	2.80	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00
30-7	SUB 376 - MONETT CITY SOUTH J2	SUB 376 - MONETT CITY SOUTH	Wood	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
30-7	SUB 376 - MONETT CITY SOUTH J2	SUB 416 - MONETT CITY EAST	Wood	1.20	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00	0.00	0.00	0.00
30-7	SUB 416 - MONETT CITY EAST	SUB 390 - PURDY SOUTH	Wood	8.80	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.80	0.00	0.00	0.00	0.00	0.00	0.00
30-8	SUB 416 - MONETT CITY EAST	SUB 416 - MONETT CITY EAST	Wood	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
30-9	SUB 258 - GATEWAY SOUTH	SUB 447 - 32ND & STEPHENS	Wood	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31-0	SUB 59 - JOPLIN 26TH ST.	SUB 167 - RIVERTON	Wood	6.40	0.00	0.00	0.00	0.00	0.00	0.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32-0	SUB 100 - JOPLIN 2ND ST.	SUB 284 - JOPLIN EAST 5TH ST.	Wood	0.40	0.40	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32-0	SUB 108 - CARTHAGE NORTHWEST	SUB 109 - ATLAS JCT.	Wood	12.00	12.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32-0	SUB 109 - ATLAS JCT.	SUB 360 - JOPLIN NORTHEAST	Wood	3.19	3.19	0.00	3.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32-0	SUB 360 - JOPLIN NORTHEAST	SUB 372 - JOPLIN 2ND & DIVISION	Wood	2.80	2.80	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32-0	SUB 64 - JOPLIN 10TH ST.	SUB 145 - JOPLIN WEST 7TH	Wood	2.40	2.40	0.00	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32-0	SUB 64 - JOPLIN 10TH ST.	SUB 284 - JOPLIN EAST 5TH ST.	Wood	0.80	0.80	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32-1	SUB 100 - JOPLIN 2ND ST.	SUB 372 - JOPLIN 2ND & DIVISION	Wood	0.40	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32-2	SUB 109 - ATLAS JCT.	SUB 315 - SOLAR TAP (ATLAS POWDER CO.)	Wood	0.40	0.40	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32-2	SUB 315 - SOLAR (ATLAS POWDER CO.)	SUB 315 - SOLAR TAP (ATLAS POWDER CO.)	Wood	2.23	2.23	2.23	2.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 108 - CARTHAGE NORTHWEST	SUB 110 - ORONOGO JCT.	Wood	11.20	11.20	11.20	0.00	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 108 - CARTHAGE NORTHWEST	SUB 403 - JASPER WEST TAP	Wood	8.80	8.80	8.80	0.00	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 110 - ORONOGO JCT.	SUB 341 - JOPLIN NORTHWEST	Wood	5.20	5.20	5.20	0.00	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 145 - JOPLIN WEST 7TH	SUB 341 - JOPLIN NORTHWEST	Wood	3.20	3.20	3.20	0.00	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Empire District Electric Company

Transmission System -- Intrusive Wood Inspection/Detailed Steel Inspection Plan

Line #	From -- Expanded	To -- Expanded	Pole Type	EDE Miles	1980 - 1999	2000 - 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
33-0	SUB 217 - FAIRPLAY EAST	SUB 368 - DADEVILLE EAST	Wood	13.60	13.60	13.60	0.00	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 217 - FAIRPLAY EAST	SUB 602 - BOLIVAR PLANT	Wood	8.00	8.00	8.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 249 - BOSTON EAST	SUB 251 - GOLDEN CITY NORTH	Wood	8.80	8.80	8.80	0.00	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 249 - BOSTON EAST	SUB 403 - JASPER WEST TAP	Wood	8.70	8.70	8.70	0.00	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 251 - GOLDEN CITY NORTH	SUB 400 - LOCKWOOD	Wood	7.60	7.60	7.60	0.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 367 - BOLIVAR SOUTHEAST	SUB 602 - BOLIVAR PLANT	Wood	1.60	1.60	1.60	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 400 - LOCKWOOD	SUB 614 - GREENFIELD	Wood	7.60	7.60	7.60	0.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 403 - JASPER WEST	SUB 403 - JASPER WEST TAP	Wood	2.80	2.80	2.80	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB 73 - BOLIVAR BURNS	SUB 367 - BOLIVAR SOUTHEAST	Wood	5.60	5.60	5.60	0.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB CU PUMP STATION TAP	SUB 368 - DADEVILLE EAST	Wood	5.00	5.00	5.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-0	SUB CU PUMP STATION TAP	SUB 614 - GREENFIELD	Wood	19.50	19.50	19.50	0.00	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33-3	SUB CU PUMP STATION TAP	SUB CU PUMP STATION	Wood	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00
34-0	SUB 109 - ATLAS JCT.	SUB 280 - OAKLAND EAST	Wood	3.20	3.20	0.00	0.00	0.00	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34-0	SUB 110 - ORONOGO JCT.	SUB 280 - OAKLAND EAST	Wood	1.60	1.60	0.00	0.00	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34-0	SUB 109 - ATLAS JCT.	SUB 432 - JOPLIN OAKLAND NORTH	Wood	4.90	4.90	0.00	0.00	0.00	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34-1	SUB 105 - WEBB CITY - TOM STREET	SUB 280 - OAKLAND EAST	Wood	2.02	2.02	0.00	0.00	0.00	2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35-0	SUB EXPLORER SPRING CITY TAP	SUB EXPLORER SPRING CITY	Wood	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
35-0	SUB EXPLORER SPRING CITY TAP	SUB 389 - JOPLIN SOUTHWEST	Wood	2.95	2.95	2.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.95	0.00	0.00
35-0	SUB 389 - JOPLIN SOUTHWEST	SUB 430 - JOPLIN 32ND & OLIVER	Wood	3.20	3.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.00	0.00
35-0	SUB 59 - JOPLIN 26TH ST.	SUB 430 - JOPLIN 32ND & OLIVER	Wood	1.60	1.60	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.00	0.00
35-1	SUB EXPLORER SPRING CITY TAP	SUB 375 - SENECA	Wood	5.00	5.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00
35-1	SUB 375 - SENECA	SUB 375 - SENECA	Wood	5.10	5.10	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.10	0.00	0.00
35-1	SUB 56 - NEOSHO WEST	SUB 375 - SENECA	Wood	11.20	11.20	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.20	0.00	0.00
36-0	SUB 167 - RIVERTON	SUB 339 - GULF JAYHAWK	Wood	2.16	2.16	2.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.16	0.00	0.00
38-0	SUB 243 - BUFFALO SHELL	SUB 333 - FAIRGROVE CHEROKEE	Wood	10.30	10.30	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.30	0.00	0.00
38-0	SUB 333 - FAIRGROVE CHEROKEE	SUB 397 - FAIRGROVE SOUTH	Wood	24.00	24.00	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.00	0.00	0.00
38-0	SUB 243 - BUFFALO SHELL	SUB 243 - BUFFALO SHELL	Wood	0.21	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00
38-0	SUB 370 - STRAFFORD	SUB 397 - FAIRGROVE SOUTH	Wood	5.60	5.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.60	0.00	0.00
38-0	SUB KAMO-STRAFFORD	SUB 370 - STRAFFORD	Wood	3.70	3.70	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.70	0.00	0.00
38-0	SUB KAMO-STRAFFORD	SUB 415 - BLACKHAWK JCT.	Wood	16.90	16.90	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.90	0.00	0.00
38-2	SUB 243 - BUFFALO SHELL	SUB 342 - BUFFALO SOUTH	Wood	4.51	4.51	4.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.51	0.00	0.00
38-2	SUB 73 - BOLIVAR BURNS	SUB 342 - BUFFALO SOUTH	Wood	10.00	10.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00
38-3	SUB 409 - BUFFALO SOUTH	SUB 342 - BUFFALO SOUTH	Wood	5.24	0.00	0.00	0.00	0.00	5.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39-0	SUB 114 - NIXA NORTH	SUB 170 - NICHOLS ST.	Wood	13.60	13.60	0.00	0.00	0.00	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39-0	SUB 114 - NIXA NORTH	SUB 415 - BLACKHAWK JCT.	Wood	4.80	4.80	0.00	0.00	0.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39-0	SUB 312 - POWERSITE	SUB 410 - FORSYTH NORTH	Wood	3.20	3.20	0.00	0.00	0.00	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39-0	SUB 330 - OZARK NORTHWEST	SUB 415 - BLACKHAWK JCT.	Wood	2.40	2.40	0.00	0.00	0.00	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39-0	SUB 330 - OZARK NORTHWEST	SUB 434 - OZARK SOUTHEAST	Wood	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39-0	SUB 410 - FORSYTH NORTH	SUB 434 - OZARK SOUTHEAST	Wood	26.00	26.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39-1	SUB 415 - BLACKHAWK JCT.	KAMO	Wood	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
40-0	SUB 292 - TIPTON FORD	SUB 332 - NEOSHO CHEROKEE	Wood	4.40	4.40	0.00	0.00	0.00	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40-0	SUB 296 - NEOSHO SOUTHEAST (ROCKETDY)	SUB 398 - NEOSHO NORTHEAST	Wood	6.40	6.40	0.00	0.00	0.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40-0	SUB 332 - NEOSHO CHEROKEE	SUB 398 - NEOSHO NORTHEAST	Wood	6.40	0.00	0.00	0.00	0.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79-0	SUB 124 - AURORA H.T.	SUB 383 - MONETT	Wood	11.50	0.00	11.50	0.00	0.00	0.00	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79-0	SUB 389 - JOPLIN SOUTHWEST	SUB 439 - STATELINE	Wood	6.60	6.60	0.00	0.00	0.00	0.00	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79-0	SUB 292 - TIPTON FORD	SUB 383 - MONETT	Wood	29.10	0.00	29.10	0.00	0.00	0.00	29.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79-0	SUB 292 - TIPTON FORD	SUB 389 - JOPLIN SOUTHWEST	Wood	7.20	7.20	0.00	0.00	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79-0	SUB 452 - RIVERTON	SUB 439 - STATELINE	Wood	9.00	9.00	0.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-0	SUB 124 - AURORA H.T.	SUB 295 - REEDS SPRING	Wood	11.50	11.50	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.50
80-0	SUB 295 - REEDS SPRING	SUB 424 - AEC REEDS SPRING	Wood	1.50	1.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50
80-0	SUB 312 - POWERSITE	SUB 331 - BRANSON NORTH	Wood	7.90	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.90	0.00	0.00	0.00	0.00	0.00	0.00
80-0	SUB 331 - BRANSON NORTH	SUB 412 - BRANSON NORTHWEST	Wood	1.10	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00	0.00	0.00
80-0	SUB 412 - BRANSON NORTHWEST	SUB 424 - AEC REEDS SPRING	Wood	7.60	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00
80-1	SUB 413 - BRANSON SOUTHWEST	SUB 438 - RIVERSIDE	Wood	3.80	0.00	0.00	0.00	0.00	0.00	0.00	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-1	SUB 412 - BRANSON NORTHWEST	SUB 433 - GREтна	Wood	2.60	0.00	0.00	0.00	0.00	0.00	0.00	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Empire District Electric Company

Transmission System -- Intrusive Wood Inspection/Detailed Steel Inspection Plan

Line #	From -- Expanded	To -- Expanded	Pole Type	EDE Miles	1980 - 1999	2000 - 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
80-1	SUB 413 - BRANSON SOUTHWEST	SUB 433 - GREटना	Wood	2.60	0.00	0.00	0.00	0.00	0.00	0.00	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
81-0	SUB 94 - COLUMBUS SOUTHEAST	SUB 452 - RIVERTON	Steel	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.70
81-0	NEOSHO 161 KV	SUB 94 - COLUMBUS SOUTHEAST	Steel	18.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.09	0.00
82-0	SUB 110 - ORONOGO JCT.	SUB 452 - RIVERTON	Wood	13.40	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.40	0.00	0.00	0.00	0.00	0.00	0.00
83-0	CARTHAGE	SUB 109 - ATLAS JCT.	Wood	8.20	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.20	0.00	0.00	0.00	0.00	0.00	0.00
83-0	SUB 110 - ORONOGO JCT.	SUB 432 - JOPLIN OAKLAND NORTH	Wood	1.80	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00
84-0	LITCHFIELD 161 KV	SUB 349 - ASBURY	Wood	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.48	0.00	0.00	0.00	0.00	0.00	0.00
84-0	CARTHAGE	SUB 395 - CARTHAGE SOUTHWEST	Wood	4.10	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.10	0.00	0.00	0.00	0.00	0.00	0.00
84-0	SUB 349 - ASBURY	SUB 421 - PURCELL SOUTHWEST	Wood	11.70	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.70	0.00	0.00	0.00	0.00	0.00	0.00
84-0	SUB 395 - CARTHAGE SOUTHWEST	SUB 421 - PURCELL SOUTHWEST	Wood	7.70	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.70	0.00	0.00	0.00	0.00	0.00	0.00
85-0	SUB 110 - ORONOGO JCT.	SUB 417 - JOPLIN FIR RD.	Wood	3.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00	0.00	0.00	0.00
85-0	SUB 349 - ASBURY	SUB 366 - CARL JUNCTION	Wood	13.10	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.10	0.00	0.00	0.00	0.00	0.00	0.00
85-0	SUB 366 - CARL JUNCTION	SUB 417 - JOPLIN FIR RD.	Wood	2.40	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00	0.00	0.00	0.00	0.00	0.00
86-0	SUB 452 - RIVERTON	SUB 404 - HOCKERVILLE	Wood	8.10	8.10	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.10	0.00	0.00	0.00	0.00	0.00
87-0	SUB 124 - AURORA H.T.	SUB 446 - CHESAPEAKE	Wood	13.50	13.50	13.50	0.00	0.00	0.00	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87-0	SUB 368 - DADEVILLE EAST	SUB 431 - BOLIVAR SOUTH	Wood	17.20	17.20	0.00	0.00	0.00	0.00	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87-0	SUB 368 - DADEVILLE EAST	SUB 446 - CHESAPEAKE	Wood	25.12	25.12	25.12	0.00	0.00	0.00	25.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87-0	SUB 73 - BOLIVAR BURNS	SUB 431 - BOLIVAR SOUTH	Wood	8.20	8.20	0.00	0.00	0.00	0.00	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88-0	SUB 382 - LARUSSEL	SUB 383 - MONETT	Wood	18.00	0.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.00	0.00
89-0	TABLE ROCK	SUB 438 - RIVERSIDE	Wood	3.10	3.10	0.00	0.00	0.00	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89-0	SUB 312 - POWERSITE	SUB 387 - HOLLISTER EAST	Wood	0.80	0.80	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89-0	SUB 387 - HOLLISTER EAST	SUB 438 - RIVERSIDE	Wood	6.40	0.00	0.00	0.00	0.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91-0	SUB 392 - DECATUR SOUTH	FLINT CREEK POWER PLANT	Wood	5.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00
91-0	SUB 184 - NEOSHO SOUTH JCT.	SUB 435 - NOEL SOUTHWEST	Wood	23.10	0.00	23.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.10	0.00
91-0	SUB 392 - DECATUR SOUTH	SUB 435 - NOEL SOUTHWEST	Wood	17.40	0.00	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.40	0.00
91-1	GROVE	SUB 435 - NOEL SOUTHWEST	Wood	14.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.41	0.00	0.00	0.00	0.00	0.00
92-0	SUB 292 - TIPTON FORD	SUB 393 - REINMILLER	Wood	4.00	4.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00
92-0	SUB 389 - JOPLIN SOUTHWEST	SUB 422 - JOPLIN 24TH & CONNECTICUT	Wood	7.16	7.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.16	0.00	0.00	0.00	0.00	0.00
92-0	SUB 391 - JOPLIN SOUTHEAST	SUB 422 - JOPLIN 24TH & CONNECTICUT	Steel	2.80	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80
92-0	NEOSHO	SUB 184 - NEOSHO SOUTH JCT.	Wood	1.70	1.70	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.70
92-0	NEOSHO	SUB 292 - TIPTON FORD	Wood	10.60	10.60	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.60
92-0	SUB 393 - REINMILLER	SUB 391 - JOPLIN SOUTHEAST	Wood	2.05	2.05	2.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.05
93-0	SUB 368 - DADEVILLE EAST	MORGAN AEC 440 SUB	Wood	0.70	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
95-0	SUB 110 - ORONOGO JCT.	SUB 145 - JOPLIN WEST 7TH	Wood	5.80	0.00	0.00	0.00	0.00	0.00	0.00	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95-0	SUB 145 - JOPLIN WEST 7TH	SUB 439 - STATELINE	Wood	5.50	0.00	0.00	0.00	0.00	0.00	0.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
96-0	SUB 389 - JOPLIN SOUTHWEST	SUB 439 - STATELINE	Wood	7.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENTERGY	SUB 312 - POWERSITE	ENTERGY	Wood	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
KAMO	SUB 446 - CHESAPEAKE	KAMO MAINTAINED	Wood	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KAMO	SUB 446 - CHESAPEAKE	KAMO MAINTAINED	Wood	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PSO-GRDA	VINITA JUNCTION 138KV	SUB 404 - HOCKERVILLE	Wood	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Westar	LITCHFIELD 161 KV	MARMTNE5 161 KV	Wood	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				1305.64	1020.28	679.38	68.35	117.20	96.46	127.42	104.35	112.58	113.48	98.70	107.38	103.47	108.63	93.29	54.33

Section 1.3

Annual Compliance Report

Section 1.3.1

Annual Compliance Report

Empire District Electric Company

Infrastructure Inspection Report

7/1/2009

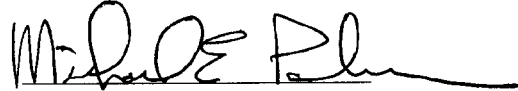
Circuit #	Equipment Type	Scheduled	Inspected	Rating		Percentage		Corrective Action Needed	Corrective Action Completed	Correction Action not Complete	Corrective Action Completed	Corrective Action Percentage	*Notes
				Pass	Fail	Pass	Fail						
1263	Poles	2200	2100	1975	125	94.0%	6.0%	125	120	5	96.0%	4.0%	Low lying area, poles under water & needs to dry to finish inspection and corrective action
1263	Capitors	200	200	197	3	98.5%	1.5%	3	3	0	100.0%	0.0%	
1263	Regulators	50	50	48	2	96.0%	4.0%	2	2	0	100.0%	0.0%	
1263	Reclosers	8	8	7	1	87.5%	12.5%	1	1	0	100.0%	0.0%	
1263	Transformers	250	250	225	25	90.0%	10.0%	25	25	0	100.0%	0.0%	

* This is a sample annual report that may change depending on the contractor used to perform detailed inspections

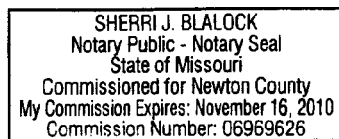
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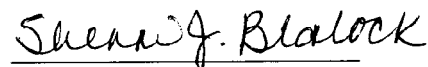
State of Missouri)
)ss
County of Jasper)

I, Michael E. Palmer, having been duly sworn upon my oath, state that I am the Vice President of Commercial Operation of The Empire District Electric Company (Empire), that I am duly authorized to make this affidavit on behalf of Empire, and that the matters and things stated in the foregoing are true and correct to the best of my information, knowledge and belief.



Subscribed and sworn before me this 30th day of June, 2008.




Notary Public