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# Kentucky Power Company 2014 Distribution Vegetation Management Plan

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### Overview

PUBLIC SERVICE COMMISSION

On September 27, 2012, Kentucky Power filed its 2013 Distribution Vegetation Management Plan with the Public Service Commission. In the 2013 plan, the Company projected undertaking distribution vegetation management work to re-clear 1,118 miles of distribution lines at an estimated O&M cost of \$17.2M. In the 2014 Plan which is attached to this overview, the Company projects to re-clear 1,046 miles of distribution lines at an estimated cost of \$17.2 million.

The table below compares the projected work and O&M budgets for the Company's 2013 and 2014 Distribution Vegetation Management Plans:

District	Planned Distribut to be Re-	ion Line	Total Distribution Vegetation Management O&M Budget			
Year→	2013	2014	2013	2014 *		
Hazard	458	438	\$ 5,866,498	\$ 5,163,668		
Pikeville	403	362	7,264,282	7,576,597		
Ashland	257	246	4,107,185	4,497,700		
Totals	1,118	1,046	\$17,237,965	\$17,237,965		

<sup>\*</sup>Please see EXHIBIT 4 for the Expenditure details,

Under the Unanimous Settlement Agreement approved by the Commission in Case No. 2009-00459, Kentucky Power agreed to maintain the test-year level of distribution vegetation management O&M expenditures. In addition, under the Unanimous Settlement Agreement, Kentucky Power is to receive and is required to spend an additional \$10 million annually for distribution vegetation management O&M expenditures.

A circuit-by-circuit description of the proposed distribution vegetation management work plan for 2014, along with the associated O&M expenditures, is

<sup>&</sup>lt;sup>1</sup> See Exhibit 2, page 1 of 2, col, "Miles Planned" of the 2013 plan. The 2,155 miles listed in table in the Overview section of the 2013 plan included both line miles re-cleared and line miles sprayed. Beginning with the 2014 plan, the Company proposes to report only the line miles re-cleared. Doing so will enable the Commission to gauge the Company's progress on its projected seven year initial re-clearing of the distribution lines.

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provided as **EXHIBIT 1** to this overview. **EXHIBIT 2** to the overview sets out by district the projected spraying expenditures during 2014. Finally, **EXHIBIT 3** to the overview provides on a district-by-district basis the projected total O&M expenditures during 2014.

As set out in more detail on **EXHIBITS 1-3** of this Plan, Kentucky Power projects that during 2014:

- Approximately 1,046 miles of distribution line will be re-cleared.
- Herbicide will be applied to 1,350 miles covering approximately 2,454 acres with an O&M budget of over \$1.2 million.
- An estimated \$17.2 million will be spent on O&M for distribution vegetation management, with \$16.8 million expected to be spent on planned maintenance, and \$0.4 million to be spent on unscheduled/reactive maintenance, as required.
- In addition to expenses for current forestry staff, re-clearing, and spraying
  of herbicides, additional activities of the plan include;
  - · reactive maintenance
  - contract foresters
  - stump grinding programs
  - tree replacement programs
  - a contractor safety, productivity and quality incentive program

Kentucky Power estimates it will take 7 years beginning July 1, 2010 to perform a complete re-clearing cycle of its distribution system and establish a 4-year cycle for its program. A complete inventory of all trees along distribution Rights-of-Way will not be made at this time. However, the Company will develop and maintain an inventory of "cycle-buster" trees as the program is moved to a 4-year cycle.

Kentucky Power will use reasonable and prudent efforts to adhere to and carry out this work plan. Unforeseen circumstances may cause some deviations from the plan. These include major storms or the newly discovered need to do vegetation management on a distribution circuit not in the 2014 plan, but which is experiencing reliability problems. The company will inform the Commission of any such material deviation from its Plan.

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# 2014 Kentucky Power Distribution Vegetation Management Plan

The 2014 Vegetation Management Plan will continue to focus on Full-Circuit Reclearing. Full-Circuit Reclearing is an integral part of our efforts to transition from a reactive-based maintenance program to a cycle-based maintenance approach that the Company began in July of 2010. Reclearing work will be prioritized and scheduled based on past tree-related reliability performance, field inspection of the right-of-way conditions, and the number of customers impacted. \$401,077 will be budgeted to address reliability issues that develop throughout the year. This Unscheduled/Reactive funding represents 2.3 percent of the total Vegetation Management O&M Budget.

Kentucky Power's service territory covers one of the most heavily forested areas of the country. The Company's spray program is a vital component of the Vegetation Management Plan. ULV (Ultra Low Volume), high-volume foliar, basal, cut-surface, and aerial application techniques will be utilized depending on the brush conditions. The goal is to treat 2,454 acres of brush in 2014.

The 2014 Vegetation Management Plan also includes \$2,550,000 of forestry capital. This funding will be utilized to remove trees larger than 18 inches in diameter, widen rights-of-way, and for TGR (Tree Growth Regulator) application.

The 2014 Kentucky Power Distribution Management Plan projected expenditures for the three districts in its service territory are:

### 2014 KENTUCKY POWER DISTRIBUTION VEGETATION MANAGEMENT PLAN

	PLANNED	<b>またない。 (1) 1 (1) (1) (1) (1) (1) (1) (1) (1) (</b>	UNSCHEDULED		TOTAL. OSM	FORESTRY
AREA	MILES RECLEARING	SPRAY ACRES	REACTIVE OWN FUNDING	ORM Funding	FUNDING	FUNDING
HAZARD	438	864	\$150,000	\$5,013,668	\$5,163,668	\$1,234,783
PIKEVILLE	. 362	1,020	\$184,534	\$7,392,063	\$7,576,597	\$778,744
ASHLAND	246	570	\$66,543	\$4,431,157	\$4,497,700	\$536,473
TOTALS	1,046	2,454	\$401,077	\$16,836,888	\$17,237,965	\$ 2,550,000

RECLE	ARING PLAN	,								
	To District the Control of the Contr		CIRCUIT	CIRCUI	MILES	PROJECTED O&M COST		Forestry Capital associated with		
ISTRICT	STATION NAME	CIRCUIT NAME	NUMBER		PLANNED	per MILE	O&M	Reclearing	TOTAL COST	COMMENTS
PKV	Lovely	Wolf Creek	3202202	59.0	26.0	\$18,000	\$468,000	\$40,716	\$508,716	Finish Full Circuit Reclear - Carryover miles from 2013
PKV	Sprigg	Matewan	2150105	9,3	8.0	\$18,000	\$144,000	\$12,528	\$156,528	Full Circuit Reclear
PKV	Borderland	Nolan	3150501	24.0	24,0	\$18,000	\$432,000	\$37,584	\$469,584	Full Circuit Reclear
PKV	Dewey	Inez -	3411401	169.0	19,0	\$18,000	\$342,000	\$29,754	\$371,754	Partial Reclear
PKV	Belfry	Belfry	3200301	28.7	2.0	\$18,000	\$36,000	\$3,132	\$39,132	Partial Reclear - Pecco Hollow
ÞΚV	Sidney	Big Creek	3404301	29.0	11.0	\$18,000	\$189,000	\$16,443	\$205,443	Full Circuit Reclear - to be completed in 2015
PKV	Elkhom City	City	3400901	29.0	29.0	\$18,000	\$522,000	\$45,414	\$567,414	Full Circuit Reclear
PKV	Johns Creek	Meta	3411801	167.0	46.0	\$18,000	\$828,000	\$72,036	\$900,036	Partial Reclear - Lower J.C. / Lower Brushy
PKV	Pikeville	Main Street	3403002	6.0	6.0	\$18,000	\$108,000	\$9,396	\$117,396	Full Circuit Reclear
PKV	Falcon	Oil Springs	3401101	49.0	49,0	\$18,000	\$882,000	\$76,734	\$958,734	Full Circuit Reclear
PK¥	Beaver Creek	Ligon	3403201	0,08	50.0	\$18,000	\$900,000	\$78,300	\$978,300	Finish Full Circuit Reclear - Carryover miles from 2013
PKV	Betsy Layne	Mud Creek	3400301	77.0	70.0	\$18,000	\$1,260,000	\$109,620	\$1,369,620	Finish Full Circuit Reclear - Carryover miles from 2013
PKV	Beaver Creek	Price	3411802	22.0	22.0	\$18,000	\$396,000	\$34,452	\$430,452	Full Circuit Reclear
ASH	Busseyviile	Walbridge	3007906	94.0	60.0	\$15,500	\$930,000	\$74,400		Full Circuit Reciear - to be completed in 2015
ASH	Coalton	US 60 West	3003701	85.0	56.0	\$15,500	\$868,000	\$69,440	\$937,440	Full Circuit Reclear - to be completed in 2015
ASH	Cannonsburg	Cannonsburg	3008701	64.0	64.0	\$15,500	\$992,000	\$79,360	\$1,071,360	Full Circuit Reclear - to be completed in 2015
ASH	South Shore	Siloam	3002001	35.0	35,0	\$15,600	\$542,500	\$43,400	\$585,900	Full Circuit Reclear
ASH	South Shore	Distribution	3002002	9.0	9.0	\$15,500	\$139,500	\$11,160	\$150,660	Full Circuit Reclear
ASH	Siloam	Distribution	3004301	22.0	22.0	\$15,500	\$341,000	\$27,280	\$368,280	Full Circuit Reclear - to be completed in 2015
	Leslie	Wooton	3303902	160.0	115.0	\$10,000	\$1,150,000	\$310,500	\$1,460,500	Finish Full Circuit Reclear
HAZ	Jeff	Viper	3309001	47.4	40.0	\$9,700	\$388,000	\$104,760	\$492,760	Finish Full Circuit Reclear
HAZ	Daisy	Leatherwood	3301701	88.0	50.0	\$9,700	\$485,000	\$130,950	\$615,950	Finish Full Circuit Reclear
HAZ	Engle	Grapevine	3312202	95,9	95.9	\$9,600	\$920,640	\$230,160		Full Circuit Reclear
HAZ	Jackson	South Jackson	3308001	26.5	26.5	\$9,700	\$257,050	\$68,118	\$325,168	Full Circuit Reclear
HAZ	Jackson	Panbowi	3308002	30.3	30.3	\$9,700	\$293,910	\$73,478	\$367,388	Full Circuit Reclear
HAZ	Collier	Smoot Creek	3308603	81.0	60.0	\$9,700	\$582,000	\$145,500	\$727,500	Full Circuit Reclear - to be completed in 2015
HAZ	Vicco	Redfox	3309301	48.0	20.0	\$9,400 .	\$188,000	\$47,000	\$235,000	Full Circuit Reclear - to be completed in 2015
	RECLEARING TOTA	ALS Effect on promoting	of als	\$944000 PM	3/841045 WY	ENGREE HER HER PLAN	\$14.584.600	678\$1:981;615	#\$16,566,215	•



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# KY POWER FORESTRY PLAN Terminology

### Feeder Breaker Zone

Synonymous with Station Zone. Segment of line extending from the circuit station breaker to the first operating device. This zone includes unfused taps, but does not include fused taps.

### Full Circuit Reclear

Entire circuit from the station breaker to the end of the circuit.

## Recloser Zone

Line segment extending from a specific recloser to the next operating device. This zone includes unfused taps, but does not include fused taps.

## Partial Reclear

A portion of the circuit is planned for reclearing.

#### BID JOB

Planned reclearing work released as an open, lump-sum bid for competing contractors.

## Finish Full Circuit Reclear

Reclearing scheduled to complete Full Circuit Reclear that began in the previous year.

# 2<sup>nd</sup> Recloser Zone

Line segment beginning at the second operating device beyond the station circuit breaker extending to the next operating device. This zone includes unfused taps, but does not include fused taps.

## Quality-of-Service Work

Tree trimming or removal work scheduled for a line segment to address reliability issues. This work does not conform to reclearing specifications (e.g.-Hotspotting).

## Cycle Buster Tree

A tree that has to be revisited before the circuit is due for its next cycle trim.

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DISTRIBUTION VI	GETATION	MANAGEMENT SPA	RAYPLAN			
KYPCO 2014						
DISTRICT	ACRES	O&M BUDGET	SPRAY MILES			
PKV	1020	\$451,000	560			
HAZ	864	\$414,703	475			
ASH	570	\$351,500	315			
Totals	2454	\$1,217,203	1350			

Kentucky Power Company								
2014								
Distribution Vegetation Management O&M Forestry Plan-Summary								
·		,						
<u>ACTIVITY</u>	Total O&M	<u>Pikeville</u>	<u>Hazard</u>	<u>Ashland</u>				
RECLEARING	\$14,584,600	\$6,507,000	\$4,264,600	\$3,813,000				
TOTAL SPRAY	\$1,217,203	\$451,000	\$414,703	\$351,500				
AERIAL SAW	\$0	\$0	. \$0	\$0				
CONTRACT FORESTERS	\$255,000	\$95,625	\$95,625	\$63,750				
STUMP GRINDING PROGRAM	\$1,000	\$0	\$0	\$1,000				
TREE REPLACEMENT PROGRAM	\$6,000	\$0	\$5,000	\$1,000				
KPI INCENTIVE PROGRAM - Contractor Field Personnel	\$543,085	\$261,771	\$157,073	\$124,241				
INTERNAL-Existing KY Forestry Staff	\$230,000	\$76,667	\$76,667	\$76,666				
Sub Total	\$16,836,888	\$7,392,063	\$5,013,668	\$4,431,157				
Unscheduled/Reactive Maintenance	\$401,077	\$184,534	\$150,000	\$66,543				
Total O&M	\$17,237,965	\$7,576,597	\$5,163,668	\$4,497,700				
		***************************************						
September 30, 2009 O&M Test Year Level	\$7,237,965							
Settlement O&M Incremental Level	\$10,000,000	-						
Total Annual O&M Distribution Vegetation	\$17,237,965							
Forestry Capital	\$2,550,000		,	177,				
Total KYPCO Forestry Budget	\$19,787,965							
,	Reclearing Miles							
Pikeville	362							
Hazard	438							
Ashland	246							
Totals	1,046							

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Exhibit 3