

SUMMARY OF CONSTRUCTION PROGRAM AND COSTS

LVRECC’s distribution system was analyzed in order to identify the construction requirements needed to adequately serve the projected CWP load of 81.5 MW. Improvements were identified based on voltage drop, conductor loading, system reliability improvements, economic conductor analysis and operational experience. A narrative list of system improvements is located in Section IV.

A breakdown of proposed construction projects by RUS 740C codes is listed below in Table I-C-1.

**Table I-C-1
System Additions and Improvements Summary**

RUS Form 740C Category	Category Name	Estimated Cost
100	New Distribution Line	\$2,941,460
300	Line Conversion & Replacement	\$5,501,672
600	Misc. Equip. & Poles	\$10,893,871
700	Outdoor Lights, AMR H/W & S/W	\$466,899
	2012-2015 CWP TOTAL	\$19,803,901

100 – New Construction planned to serve 1,250 new services.

300 – 43.5 miles of conductor upgrading and replacement.

600 - Miscellaneous distribution equipment and pole changes. This includes aged conductor replacement, voltage regulators, switched capacitors, sectionalizing, automated meters, transformers, pole changes and increased service capacity upgrades.

700 – Other Distribution Items - Outdoor lighting, and software and hardware for AMI.

Licking Valley RECC 2012-2015 Construction Workplan
COST SUMMARY SPREADSHEET

NEW CONSTRUCTION -- RUS CODE 100

ITEM	RUS CODE	AVE. %/CONSUMER	# CONS.	2012	2013	2014	2015	TOTAL
New Overhead Construction	100	\$2,353	1,250	\$663,936	\$690,493	\$771,956	\$809,074	\$2,941,460
		TOTAL CODE 100:	1,250	\$663,936	\$690,493	\$771,956	\$809,074	\$2,941,460

LINE CONVERSION / REPLACEMENT - RUS CODE 300

SUB - SECTION	RUS CODE	Original Conductor	INST. COND/#-PH	\$/MILES	# OF MILES	2012	2013	2014	2015	TOTAL
Helecheva 80940 - 81015	301	3 ph 4A CWC	3 ph 1/0 ACSR	\$110,000	5.5	\$0	\$0	\$0	\$680,543	\$680,543
Helecheva 84130 - 84173	302	3 ph 4A CWC	3 ph 336 ACSR	\$145,000	2.8	\$0	\$0	\$439,130	\$0	\$439,130
Helecheva 80874 - 80895	303	3 ph 4A CWC	3 ph 1/0 ACSR	\$110,000	1.6	\$0	\$0	\$190,362	\$0	\$190,362
Carty Branch	304	Getaways		\$75,000	1.0	\$0	\$78,000	\$0	\$0	\$78,000
Carty Branch sub to 92767	305	3 ph 1/0 ACSR	3 ph DCT 336ACSR	\$195,000	0.4	\$78,000	\$0	\$0	\$0	\$78,000
Carty Branch 92766 - 93441	306	3 ph 1/0 ACSR	3 ph 336 ACSR	\$145,000	6.2	\$899,000	\$0	\$0	\$0	\$899,000
Hot Mix 71158 - 71178	307	3 ph #2 ACSR	3 ph 336 ACSR	\$145,000	1.7	\$246,500	\$0	\$0	\$0	\$246,500
Hot Mix 70895-70900, 70901 - 70909	308	3 ph #2 ACSR	3 ph 336 ACSR	\$145,000	1.2	\$174,000	\$0	\$0	\$0	\$174,000
Hot Mix 72728 - 72748	309	1 ph 6A CWC	3 ph #2 ACSR	\$80,000	0.5	\$40,000	\$0	\$0	\$0	\$40,000
Index 67269 - 68033	310	3 ph #2 ACSR	3 ph 336 ACSR	\$145,000	4.1	\$0	\$618,280	\$0	\$0	\$618,280
Index 68472 - 68543	311	3 ph 6A CWC	3 ph 1/0 ACSR	\$110,000	4.6	\$0	\$0	\$173,056	\$569,181	\$569,181
Oakdale 90055 - 90119	312	1 ph 6A CWC	2 ph #2 ACSR	\$50,000	3.2	\$0	\$0	\$173,056	\$0	\$173,056
Sublett 94037 - 94132	313	3ph & 1 ph 6A CWC	3 ph 1/0 & #2 ACSR	\$103,055	2.2	\$0	\$226,720	\$0	\$0	\$226,720
Sublett 92557 - 92619	314	3 ph 1/0 ACSR	3 ph 336 ACSR	\$145,000	4.1	\$0	\$618,280	\$0	\$0	\$618,280
Sublett 93907 - 93945	315	1 ph 6A CWC	3 ph 1/0 ACSR	\$110,000	1.9	\$0	\$217,360	\$0	\$0	\$217,360
Zachariah 55102 - 55117	316	3 ph 4A CWC	3 ph 1/0 ACSR	\$110,000	1.2	\$0	\$0	\$142,771	\$0	\$142,771
Zachariah 55211 - 55219	317	3 ph 6A CWC	3 ph #2 ACSR	\$80,000	0.7	\$0	\$0	\$60,570	\$0	\$60,570
Zachariah 55133 - 55141	318	3 ph 6A CWC	3 ph #2 ACSR	\$80,000	0.6	\$0	\$49,920	\$0	\$0	\$49,920
		TOTAL CODE 300:			43.5	\$1,437,500	\$1,808,560	\$1,005,888	\$1,249,724	\$5,501,672

MISCELLANEOUS DISTRIBUTION EQUIPMENT - RUS CODE 600's

ITEM	RUS CODE	4 YR. AVE. COST	# ITEMS	2012	2013	2014	2015	TOTAL
New Transformers	601	\$1,359	593	\$165,620	\$182,844	\$206,694	\$250,788	\$805,946
New Meters	601	\$120	1,350	\$33,696	\$37,964	\$42,520	\$47,379	\$161,559
Retrofit AMI Meters	601	\$152	1,400	\$50,232	\$52,241	\$54,331	\$56,504	\$213,308
New Polyphase Meters	601	\$641	22	\$2,392	\$3,110	\$3,881	\$4,709	\$14,092
Retrofit Polyphase AMI Meters	601	\$847	10	\$2,412	\$2,508	\$1,739	\$1,809	\$8,468
Service Upgrades	602	\$2,525	176	\$104,655	\$108,841	\$113,195	\$117,723	\$444,414
Sectionalizing	603			\$250,000	\$250,000	\$250,000	\$250,000	\$1,000,000
Voltage Regulators	604			\$108,000	\$87,380	\$99,600	\$81,000	\$375,980
Capacitors	605			\$20,000	\$0	\$30,000	\$10,000	\$60,000
Pole Changes	606	\$3,318	1,440	\$1,125,072	\$1,170,075	\$1,216,878	\$1,265,553	\$4,777,578
Conductor Replacement (OH)	608		80 mi	\$700,000	\$728,000	\$757,120	\$787,405	\$2,972,525
Radio Upgrade	615			\$60,000	\$0	\$0	\$0	\$60,000
		TOTAL						
		MISC. CODE 600'S:		\$2,562,079	\$2,622,964	\$2,775,958	\$2,872,870	\$10,893,871

OTHER DIST. ITEMS - RUS CODE 700

ITEM	RUS CODE	4 YR. AVE. COST	# ITEMS	2012	2013	2014	2015	TOTAL
Outdoor Lighting	701	\$371	472	\$41,234	\$42,883	\$44,599	\$46,383	\$175,099
AMI Equipment	705			\$72,950	\$72,950	\$72,950	\$72,950	\$291,800
		TOTAL CODE 700:		\$114,184	\$115,833	\$117,549	\$119,333	\$466,899

2012-2015 Kentucky 56 - Morgan

CONSTRUCTION WORK PLAN TOTAL:

\$19,803,901