RECEIVED

OCT 1 3 2008

PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

)

)

)

)

)

)

)

IN THE MATTER OF:

THE APPLICATION OF SALT RIVER ELECTRIC COOPERATIVE CORPORATION FOR A CERTIFICATE OF CONVENIENCE AND NECESSITY PURSUANT TO KRS 278.020(1) AND 807 KAR 5:001, SECTIONS 8 AND 9(2) AND RELATED SECTIONS, AUTHORIZING CERTAIN PROPOSED CONSTRUCTION

CASE NO. 2008-44

* * * * * *

In support of the Application, entitled above ("Application"), Salt River Electric Cooperative Corporation ("Salt River"), respectfully states:

I

The full name and post office address of the Applicant is as follows:

Salt River Electric Cooperative Corporation 111 West Brashear Avenue Bardstown, KY 40004

Applicant, Salt River, is an electric cooperative corporation duly organized and existing

under KRS Chapter 279 and the laws of the Commonwealth of Kentucky.

A certified copy of the Articles of Incorporation of Salt River was filed with this

Commission in Case No. 92-560.

Π

Salt River is engaged in the business of supplying retail electric service to approximately

46,000 consumers in the Kentucky Counties of Nelson, Bullitt, Washington, Spencer, Anderson,

Jefferson, Larue, Marion, Mercer and Shelby.

Salt River's property consists of approximately 3934 miles of electric distribution line

and other property necessary and incidental to the operation of its system in the foregoing counties. The original cost of the Applicant's property as of July 31, 2008, is as follows:

Total Utility Plant \$113,617,412.17

Ш

The construction herein described and proposed in the 2008-2011 Work plan is to enable the Applicant to serve approximately 4552 new consumers that otherwise might not be served, and to eliminate the overloading of facilities so as to better serve the present consumers within the Applicant's service area. This construction is required by public convenience and necessity. No franchises or permits are required from public authority for the proposed new construction described in this Application.

Salt River intends to borrow \$20,873,347 from Rural Utilities Services to finance the additions to the Salt River System.

The estimated cost of the above described construction is \$20,873,347 (listed on RUS Form 740c-page 2 of 5, Exhibit 1).

A full description of the proposed location or routes of the new construction is shown in the 2008-2011 Work Plan. The Applicant previously filed with the Commission three (3) copies of the 2008-211 work plan and three (3) maps showing the location of the new construction and extension. The Applicant's estimated cost of operation (less purchase power) after completion of the new facilities is \$16,857,088.(Explanation of the calculations is attached as Exhibit 2.) Salt River also files herewith a twelve (12) month statement of Operations and Balance Sheet as Exhibit 3.

The new construction and extensions are within the Applicant's service area. The other public utilities, corporations or persons having facilities in nearby areas are: Louisville Gas &

Electric, Louisville, Kentucky; Kentucky Utilities Company, Lexington, Kentucky; City of Bardstown, Bardstown, Kentucky; Bluegrass Energy Cooperative Corporation, Nicholasville, Kentucky; Inter-County Rural Electric Cooperative Corporation, Danville, Kentucky; Shelby County Rural Electric Cooperative Corporation, Shelbyville, Kentucky and Nolin Rural Electric Cooperative Corporation, Elizabethtown, Kentucky. The work will be done under contracts and/or force accounts.

IV

WHEREFORE, the Applicant, Salt River Electric Cooperative Corporation, prays that the Public Service Commission of Kentucky make its order authorizing a certificate of convenience and necessity as requested herein, and for such other relief as the Commission may deem appropriate as to which Salt River may appear entitled.

Dated at Bardstown, Kentucky, this $10^{\frac{1}{2}}$ day of October, 2008.

SALT RIVER ELECTRIC COOPERATIVE CORPORATION

Farin

J. LARRY HICKS, GENERAL MANAGER (502) 348-3931

FULTON, HUBBARD & HUBBARD

JØHN DOUGLAS HUBBARD REGINA RAPIER BECKMAN Attorneys for Applicant 117 East Stephen Foster Avenue Bardstown, KY 40004 (502) 348-6457

COMMONWEALTH OF KENTUCKY

COUNTY OF NELSON

J. Larry Hicks, after first being duly sworn, deposes and says: That he is the General Manager of Salt River Electric Cooperative Corporation, a cooperative rural electric corporation, duly reorganized and doing business under the Rural Electric Cooperative Corporation Act of the Commonwealth of Kentucky; that he is duly designated by the Applicant to sign this Application; that he has read the foregoing Application and knows the contents thereof; and that the same is true of his own knowledge, except as to such matters as are therein stated on information or belief, and as to those matters he believes it to be true.

This $10^{4/2}$ day of October, 2008.

J. LARRY HICKS, GENERAL MANAGER

Salt River Electric Cooperative Corporation

Subscribed and sworn to before me by J. Larry Hicks, this $\frac{10^{-44}}{10^{-44}}$ day of October, 2008.

Kathy Grown NOTARY PUBLIC, STATE AT LARGE

My Commission expires: 1/-12-20/0

EXHIBIT LIST

NUMBER	DESCRIPTION
1	FUS Form 740C.
2	Explanation of Cost of Operation.
3	Statement of Operations twelve months ending August 31, 2008.

Three copies of Salt River's 2008-2011 Work Plan and three copies of the maps showing the location of new construction and extension were previously filed with the Commission.

s/regina/salt river applications psc 2008-2011 Oct 08

Public reporting burden for this collection of information is estimated to average 17 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information. Including suggestions for reducing this burden. to Department of Agriculture, Clearance Officer. OIRM. Room 404-W. Washington. DC 20250; and to the Office of Management work Reduction Project (OMB #0572-0032), Washington, DC 20503, OMB FORM NO. 0572-0032, Expires 05/31/92. nd Budget, Pa

This data will be used by RUS to review your financial situation. Your response is req	uired (7 USC 901 et seq.) a	and is not confidential.	
	Form Approved		
USDA-RUS	OMB No. 0572-0032		
COST ESTIMATES AND LOAN BUDGET	BORROWER AND LO	AN DESIGNATION	
		KY 21 NELSON	
FOR ELECTRIC BORROWERS			
To: U.S. Dept. of Agriculture, RUS, Washington, D. C. 20250	COST ESTIMATES AS	OF: (Month, Year)	
INSTRUCTIONS See EOM-4 Guideline for the Implementation of 7 CFR 1711.1			
SECTION A COST ESTIMATES		LOAN PERIOD	3 YEARS
	. L	BORROWER'S	
1. DISTRIBUTION		COST ESTIMATES	RUS USE ONLY
100 a. New Line: (Excluding Tie-Lines)			
Construction Consumers	<u>Miles</u>		
101 Underground <u>3000</u>	116.30	\$3,953,511	
102 Overhead 675	49.38	2,299,942	
Total Consumer <u>3675</u> Total Miles	165.68		
Less Contributions		0	
Subtotal (New Line)	• • • • • • • •	\$6,253,453	
$r(1)$ Major David- unit (-its and $\frac{16}{100}$ - 1-100)			
a.(1) Major Development: (site specific code 100)		ውሳ	
103	<u> </u>	0	
104		0	
Subtotal (Major Development)		<u> </u>	
Subtotal All code 100		\$6,253,453	
		, , , , , , , , , , , , , , , , , , ,	······································
200 b. New Tie-Lines			
Line Designation	Miles		
201	0.00	\$0	
202	0.00	<u>,</u> 0	
203	0.00	0	
204	0.00	0	
205	0.00	0	
206	0.00	0	
Subtotal from page IA Miles	. 0.00	0	
Subtotat (Includes subtotals from pages 17) Willes	0.00	9 0	
200 a Conversion and Line Changes			
500 C. Conversion and Line Change:	Miles		
$\frac{1}{201} D C 2ACWC TO D C 236 A ACSP$	$\frac{10111es}{1.70}$	\$251 600	
$\frac{501}{202} = \frac{1000}{2} 1000$	2.48	200.880	·····
$\frac{302}{303} = \frac{3111ASE}{2ACWC} \frac{103111ASE}{303} \frac{303}{100} \frac{1000}{100} 1000$	1.40	113 400	
304 3 PHASE 1\0 CU TO 3 PHASE 336 4 ACSR	2 20	178 200	· · · · · · · · ·
305 3 PHASE 2ACWC TO 3 PHASE 336 4 ACSR	2.35	190 350	
306 3 PHASE 2ACWC TO 3 PHASE 336.4 ACSR	2.66	215.460	· · · · ·
307 D.C. 1/0 CU TO D.C 336.4 ACSR	4.29	634,920	
308 1 PHASE 6ACWC TO 3 PHASE 1/0 ACSR	1.65	133,650	
309 3 PHASE 2ACWC TO 3 PHASE 336.4 ACSR	3.57	289,170	
310 1 PHASE 6ACWC TO 1 PHASE 1/0 ACSR	1.49	120,690	
Subtotal from page 1A Miles	1.62	292,790	
Subtotal. (Includes subtotals from pages 1A) Miles	25.41	\$2,621,110	
400 d. New Substations, Switching Stations, Metering Points, etc.			
Station Designation <u>kVA</u>	<u>kV to kV</u>		
401		\$0	
402		0	
403	••••	0	
404	******	0	
405			
	•		L
Subtotal		\$0	
RUS FORM 740c (Computer generated form - modified)	(version 5, 6/97)	_L	PAGE 1 OF 4 PAGES

(Computer generated form - modified) (version 5, 6/97)

COST ESTIMATE AND LOAN BUDGET FOR ELECTRIC BORROWERS	BORROWER ANI	D LOAN DESIGNATION	KY 21 NELSON
SECTION A. COST ESTIMATES (Page 1 Continuation Sheet)		BORROWER'S COST ESTIMATES	RUS USE ONLY
200 h New Tie-Lines (Continued)	1997 - Tanan Sanatan (1997), 1997 - Tanan Sanatan (1997), 1997 - Tanan Sanatan (1997), 1997 - Tanan Sanatan (19		
Line Designation	Miles		
207	0.00	\$0	
208	0.00	0	
210	0.00	0	
211	0.00	0	
212	0.00	0	
213	0.00	0	
215	0.00	0	
216	0.00	0	
Subtotal (transfers to page 1)		\$0	
300 c. Conversion and Line Changes (Continued)	Miles		
311 1 PHASE 6ACWC TO 1 PHASE 1/0 ACSR	0.69	\$55,890	
330 0.23 miles T.C. 397 spacer cable - 0.70miles D.C spacer cable	e 0.93	\$ 236,900	
		······································	
			
		0	
		0	
		0	
		0	
		0	
		0	
		0	
		0	
	·····	0	
		0	
		0	
Subtotal (transfers to page 1)	1.62	\$292,790	
RUS Form 740c (Computer generated form - modified)	version 5, 6/97)		Page 1Bof 4

BORROWER AND LOAN	DESIGNATION	Exhibit 1, KY 21 NELSON	Page 3 of 5
SECTION A. COST ESTIMATES (cont.)		BORROWER'S COST ESTIMATES	RUS USE ONLY
500 e. Substation, Switching Station, Metering Point Changes			
Station Designation Description of Changes		¢0	
502			
502		0	
504		0	
505		0	
506		0	
507		0	
508		0	
509		0	
Subtotal		\$0	
600 f. Miscellaneous Distribution Equipment			
601 (1) Transformers and Meters			
Construction Transformers	Meters		
Underground 768 \$1,443,724 1 ph 34775	\$3,651,375	\$5,095,099	
Overhead 858 \$836,900 3 ph 228	\$342,000	1,178,900	
Subtotal code 601 (included in total of all 600 co	odes below)	\$6,273,999	
(02 (2) Sate of Service Wines to increase Canacity ##		530 153	
602 (2) Sets of Service whes to increase Capacity ##		383 610	
604 (4) Regulators		687.000	
605 (5) Capacitors		176,790	
606 (6) Ordinary Replacements 900 poles	······································	2,064,703	
(7)		0	
608 (8) Conductor Replacement		233,740	
(9)		0	
(10)		0	
(11)		0	
Subtotal ALL 600 codes		\$10,358,995	
700 g. Other Distribution Items		#0	
701 (1) Engineering Fees		30 744 780	
702 (2) Security Lights <u>##</u> 703 (3) Reimburgement of General Funds (see attached)		/44,/89	
703 (3) Kennoursement of General Funds (see attached)		895 000	
Subtotal	<u></u>	\$1,639,789	
		· · · · · · · · · · · · · · · · · · ·	
TOTAL DISTRIBUTION	• • • • • •	\$20,873,347	
800 2. Transmission			
a. New Line Line Designation Voltage Wire Size	Miles		
S01	1411102	\$0	
802		0	
803		0	
804		0	······
805		0	
806		0	
807	<u></u>	0	
808		0	
809		0	
810			· · · · · · · · · · · · · · · · · · ·
Total Miles	0.00		
	·····		
Subtotal		\$0	

COST ESTIMATE AND LOAN BUDGET FOR ELECTRIC BORROWERS	BORROWER AND LOAN DESIGNATIO	N KY 21 NELSON	
SECTION A. COST ESTIMATES (cont.)		BORROWER'S COST ESTIMATES	RUS USE ONLY
900 b. New Substation, Switching Station, etc. Station Designation kVA	<u>kV TO kV</u>		
901		\$0	
902		0	
903		0	
904		0	
906		0	
907		0	
908		0	
Subtotal		\$0	
1000 c. Line and Station Changes			
Line/Station Designation Descript	tion of Changes		
1001		\$0	
1002		0	
1003		0	
1005		0	**************************************
1006		0	
1007		0	
1008		0	
1009		0	
Subtotal		\$0	
1101 (1) R/W Procurement		\$0	
1102 (2) Engineering Fees		0	
1103 (3) Reimbursement of General Funds (see schedule)		0	
1104 (4)		<u> </u>	
		•••	
TOTAL TRANSMISSION	Ν	\$0	
1200 3 GENERATION (including Step-up Station at Plant)			
1201 a Fuel Nameplate Rating	kW	\$0	
1202 b.		0	
TOTAL GENERATION.		\$0	
			ana da secondo e e que con el deserviciones de contra
1300 4. HEADQUARTERS FACILITIES	2)	ቀሳ	
1301 a. New or additional Facilities (Attach ROS Form 740	g)	<u></u>	
			······
TOTAL HEADQUARTERS FAC	CILITIES	\$0	
RUS Form /40C (Computer generated form - modified	ed) (version 5, 6/97)	PAGE 3 OF 4 PAGES	5

COST F	STIMATE AND LOAN BUDGET FOR ELECTRIC BORROWERS	KY 21 NELSON	I, Page 5 of .
	SECTION A COST ESTIMATES (cont.)	BORROWER'S COST ESTIMATES	RUS USE ONLY
1400 1401	a Consumers Miles	\$0	
1402	b TOTAL ACOUISITIONS	<u> </u>	
1500	6. ALL OTHER		
1501	a	\$0	
1502	b	0	
1503	C	0	
1504	e.	0	
	TOTAL ALL OTHER	\$0	
n de general	SECTION B. SUMMARY OF AMOUNTS AND SOURCES OF FIN	JANCING	
	1. GRAND TOTAL - ALL COSTS	\$20,873,347	
	2. FUNDS AND MATERIALS AVAILABLE FOR FACILITIES		
	a. Loan Funds		
	b. Materials and Special Equipment		
	Purpose 2 \$0		
	Purpose 3 \$0		
	Purpose 4 \$0		
	Total General Funds Applied	201	
	3. NEW FINANCING REOUESTED FOR FACILITIES	\$20,873,000	
	4. RUS LOAN REQUESTED FOR FACILITIES	\$20,873,000	
	5. TOTAL SUPPLEMENTAL LOAN REQUESTED	\$0	
	National Rural Utilities Cooperative Finance Corporation		
	6. CAPITAL TERM CERTIFICATE PURCHASES (CFC Loan only) 0%	\$0	
	7. SUPPLEMENTAL LOAN REQUESTED FOR FACILITIES.	\$0	
	8. 100% SUPPLEMENTAL LOANS (SEE RUS Bulletin 20-40,Att. C)*	\$0	
	SECTION C. CERTIFICATION		
	We, the undersigned, certify that:		
	1. Upon completion of the electrical facilities contained herein and any others uncompleted financing is available, the system will be capable of adequately and dependably serving to loan period as contained in our current RUS approved Power Requirement Study and Co	d at this time but for he projected load fo nstruction Work Pla	which r the n.
	2. Negotiations have been or will be initiated with our power supplier, where necessary, to and/or additional capacity at existing ones to adequately supply the projected load upon is based.	obtain new delivery which this loan appl	points lication
	3. The data contained herein and all supporting documents have, to the best of my knowled and in accordance with RUS Bulletin 20-2.	lge, been prepared co	orrectly
	Date Signature of Borrower's	Manager	
	Date Signature of Borrower's	President	
	SALT RIVER ELECTRIC COOPERATIVE CORPORATION		
	Gorporate Traine of Borrower		
	RUS Form 740c (Computer generated form - modified) (version 5 6/07)	PAGE 4 OF 4 PAGES	-

Based on the financial forecast prepared in conjunction with its construction work plan, Salt River estimates the cost of operation at \$16,857,088 by subtracting the cost of power (\$62,537,526) from the total cost of electric service (\$79,394,614). This information is contained in Item 5 Page 2 of 27 at line lb-cost of power and line lj-total cost of electric service.

SALT RIVER ECC

12 MONTHS ENDED

AUGUST 31, 2008

-

	12 mo. ended 08/31/08
Operating Revenue and Patronage Capital	\$83,642,331.00
Cost of Purchased Power	\$65,480,890.00
Distribution Expense - Operation	\$2,096,133.00
Distribution Expense - Maintenance	\$2,674,797.00
Consumer Accounts Expense	\$1,908,412.00
Customer Service and Informational Expense	\$181,805.00
Sales Expense	\$225,239.00
Administrative & General Expense	\$2,470,558.00
Total Operation & Maintenance Expense	\$75,037,834.00
Depreciation and Amortization Expense	\$4,720,653.00
Tax Expense - Other	\$81,845.00
Interest on Long-Term Debt	\$2,849,596.00
Interest Expense - Other	\$85,648.00
Other Deductions	\$5,295.00
Total Cost of Electric Service	\$82,780,871.00
Patronage Capital & Operating Margins	\$861,460.00
Non Operating Margins - Interest	\$639,919.00
Income (Loss) from Equity Investments	(\$41,789.00)
Non Operating Margins - Other	(\$24,724.00)
Generation and Transmission Capital Credits	\$0.00
Other Capital Credits and Patronage Dividends	\$309,157.00
Patronage Capital or Margins	\$1,744,023.00



SALT RIVER ELECTRIC

111 West Brashear Avenue • Bardstown, Kentucky 40004

2008-2011

CONSTRUCTION WORK PLAN



A Touchstone Energy®Partner



111 West Brashear Avenue • Bardstown, Kentucky 40004 (502) 348-3931 • (502) 955-9732 • Fax (502) 348-1993

RECEIVED

OCT 1 3 2008 PUBLIC SERVICE COMMISSION

RESOLUTION

WHEREAS, a Construction Work Plan for 2008-2011 in the amount of \$20,873,347 has been prepared by the staff of Salt River Electric Cooperative Corporation.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors adopt the 2008-2011 Construction Work Plan as a course of action to be followed, or until amended with the approval of the Rural Utilities Service.

CERTIFICATION

I, SIDNEY OSBOURNE, Secretary of Salt River Electric Cooperative Corporation Board of Directors, do hereby certify that the above is a true and correct excerpt from the minutes of the meeting of the Board of Directors of Salt River Electric Cooperative Corporation held on October 2, 2008, at which meeting a quorum was present.

SIDNEY OSBOURNE, Secretary

SEAL



2008-2011

CONSTRUCTION WORK PLAN

FOR

SALT RIVER ELECTRIC COOPERATIVE CORPORATION

KENTUCKY 21 - NELSON BARDSTOWN, KENTUCKY

Prepared by:

SALT RIVER ENGINEERING DEPARTMENT Bardstown, Kentucky

March 2008

I hereby certify that this 2008-2011 Construction Work Plan was prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the State of Kentucky. Registration No. 2074

2008 3, By: SEAL Tim



SALT RIVER ELECTRIC

111 West Brashear Avenue • Bardstown, Kentucky 40004 (502) 348-3931 • (502) 955-9732 • Fax (502) 348-1993

MARCH 2008

ENVIRONMENTAL REPORT

KY 21

2008-2011 Construction Work Plan

The projects in this work plan consist of code 300 line conversions and conductor replacements only.

PRESIDENT & CEO

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

- A. Purpose, Results and General Basis of Study
- B. Service Area, Distribution System and Power Supply
- C. Summary of Construction Program and Costs

II. BASIS OF STUDY AND PROPOSED CONSTRUCTION

- A. Design Criteria
- B. Distribution Line and Equipment Costs
- C. Actual Conversion Costs
- D. Analysis of Current System Studies
 - 1. Analysis of 1997 LRP
 - 2. Analysis of 2005 O & M Survey
 - 3. Sectionalizing Study
- E. Historical and Projected System Data
 - Peak Substation Load Data (Jan 2008 and July 2007)
 - 2. 2006 PRS
 - 3. System Outages and Reliability
 - 4. Historical Data
 - 5. Distribution substation loading table
 - 6. Status of 2005-2008 Construction Work Plan Items

III. REQUIRED CONSTRUCTION ITEMS

- A. Distribution Lines-Additions and Changes
- B. Sectionalizing Equipment-Additions and Changes
- C. Line Regulators-Additions and Changes
- D. Capacitors-Additions and Changes
- E. Justification of 300 Series

IV. APPENDIX

.....

- A. Operations and Maintenance (O&M Survey)
- B. Maximum KW Demand
- C. Milsoft Computer Analysis
- D. System Map with Proposed Construction Items

PURPOSE OF REPORT

This report documents the 2007 engineering analysis and summarizes the proposed construction for Salt River Electric Cooperative Corporation's (Salt River) electric distribution system for the three-year planning period of 2008 thru 2011.

The report also provides engineering support, in the form of descriptions, costs, and justification of required new facilities, for a loan application to finance the proposed construction program.

RESULTS OF PROPOSED CONSTRUCTION

Upon completion of construction of the facilities proposed herein, the system will provide adequate and dependable service to <u>50552</u> total residential, farm, small commercial, and large industrial consumers. The residential/farm consumers will have an average of <u>1376</u> KWH per consumer per month. The <u>12</u> large power and special loads are provided for on an individual basis. It is estimated there will be 4000 idle services.

GENERAL BASIS OF STUDY

The 2011 projected number of consumers and total peak system load were from the cooperative's 2006 Power Requirements Study (PRS) as approved by RUS. This report was prepared by Salt River.

The construction recommended herein is in accordance with the LRP which was completed in 1997. This includes the proposed construction of one new substation (Deatsville) by East Kentucky Power Cooperative. Salt River's February 2005 Operations and Maintenance review, (Review Rating Summary; REA Form 300), was used to determine construction required to replace physically deteriorated equipment and material, upgrade portions of the system to conform with code or safety requirements, and/or improve reliability or quality of service.

New distribution, transmission and power supply construction requirements were considered simultaneously as a "one system" approach for the orderly and economical development of the total system. All of the proposed construction and recommendations herein, relative to power supply and delivery, were discussed with the cooperative's power supplier, East Kentucky Power Cooperative (EKPC).

A complete list of the lines and equipment and their estimated cost, (all based on recent historical date) required to serve an additional 3675 members. Salt River has also included a similar list and cost of necessary service upgrades to existing members is also included.

An analysis, using as a basis RUS guidelines and the design criteria herein, of thermal loading, voltages, physical conditions and reliability was performed on all of the substations, distribution lines and major equipment of the existing system. Milsoft Distribution Analysis was used to analyze the distribution circuits during the winter peak of January 2007. This peak of 242 MW occurred in January 2007 and another system peak occurred in January 2008 (261 MW) which was due to a large amount of industrial load added in the Cedar Grove Industrial Park. This issue can be handled with the Cedar Grove Industrial Park substation added in 2007. The projected peak of 291 KW for 2011 was modeled in the system. This model more accurately reflects actual field conditions. For each deficiency that was determined, alternate solutions were investigated and economically evaluated, so that the most cost effective construction, if required, could be proposed. This analysis was performed using data from 2006 PRS (normal weather projections).

DESCRIPTION OF SERVICE AREA

Salt River Electric Cooperative Corporation (Salt River) is located in Central Kentucky just south of Louisville, Ky. The location and proximity of it's service territory to Louisville make it's service area a haven for city workers wishing to reside away from the congestion of the Louisville/Jefferson County area. In addition the lower tax rates and highly regarded school systems of Bullitt, Nelson and Spencer Counties lure new customers.

The cooperative serves major portions of Nelson, Spencer, Bullitt, Washington and parts of Larue, Jefferson, Shelby, Mercer, Anderson and Marion Counties. The headquarters is located in Bardstown (Nelson County) with branch offices in Shepherdsville (Bullitt County), Springfield (Washington County) and Taylorsville (Spencer Washington and Spencer counties served by Salt River are rural with a high percentage of people relying on agricultural enterprises, manufacturing and government services for income. Agricultural products include tobacco, dairy, corn and swine. Tobacco and dairies are the prime sources of farm income. A number of commercial and industrial areas are within the service territory with a diversity of product lines. Moderate growth is projected for new commercial, small manufacturing and residential consumers throughout most of Salt River's system. Twelve 12) medium sized (between 1 to 10 MW Demand) industries are currently being served with good potential for future growth existing in Bullitt County and commercial parks surrounding the cities of Bardstown and Springfield.

KEY SYSTEM OPERATING DATA

The following data is from SALT RIVER'S Year end RUS Form 7

DECEMBER 2006:

Number of consumers (year end total)	44,979
MWH Purchased	998,251
MWH Sold	946,208
Maximum KW Demand	221,625
Total Utility Plant \$104,	237,387
Consumers/Mile	11.69

DECEMBER 2007:

Number of consumers (year end total)	45,836
MWH Purchased1	,087,728
MWH Sold1	,038,355
Maximum KW Demand	238,441
Total Utility Plant \$111	,010,838
Consumers/Mile	11.74

The cooperative has distribution circuits totaling 3903 miles. All circuits are operated at 7.2/12.47 Kilovolts (KV), grounded Wye. Installed overhead conductor sizes range from 8A to 795 spacer cable. With the majority of the three phase overhead line conductor being 1/0 Copper and single phase overhead lines being 6A cwc. All new three phase lines are built of 1/0 or 336.4 MCM ACSR depending upon the economic conductor selection guide of Salt River. All new single phase line are built of #2 and 1/0 ACSR conductor. All new underground primary construction is 220 mil 1/0 or 4/0 stranded aluminum conductor which is installed entirely within underground duct systems.

POWER SUPPLY

East Kentucky Power Cooperative (EKPC) provides all power and energy needs to Salt River, plus 15 other distribution cooperatives. A map of EKPC's service area is located in the back of this report. EKPC is an RUS financed G&T cooperative with offices in Winchester, KY.

EKPC constructs, owns, operates, and maintains all Twenty-nine of the distribution substations. EKPC also constructs and maintains the 69, 161 and 345 KV transmission lines which supply Salt River's distribution system. The northern district of the territory is served off of the 33 or 69 KV system of Louisville Gas and Electric which wheels power from EKP to Salt River. All power transactions are handled by EKP's Load Dispatch Department.

East Kentucky Power will construct a 10 MW substation (Deatsville) in Nelson County by December 2008. This substation will relieve loading on Cedar Grove and Joe Tichenor and West Bardstown substations.

ANALYSIS OF 1997 LONG RANGE PLAN

Salt River Electric Cooperative Corporation's 1997 Long-Range Plan (LRP) was prepared by Southern Engineering.

The LRP recommends that the distribution system will continue to operate predominately at 7.2/12.47 KV. In addition, the LRP addresses the replacement of deteriorated, or aged, distribution plant that will be included in future CWP's. The projects in the 2008-2011 CWP are consistent with the LRP.

ANALYSIS OF 2005 OPERATIONS AND MAINTENANCE SURVEY

In February 2005 an Operations and Maintenance Survey (O & M Survey) of the system was conducted.

Transmission lines and distribution substations are owned and maintained by East Kentucky Power Cooperative (EKP) and have been excluded from the rating process.

In general, the overhead and underground distribution facilities were found to be in satisfactory condition. There is an on-going program to replace old deteriorated conductor as part of the Long-Range Plan. Approximately 3.4 miles will be replaced in this work plan.

A program has been implemented to reduce outages, with a corporate goal of 3.5 hours/consumer. The use of vacuum OCR's will increase reliability and reduce maintenance costs. Autoboosters have been phased out because of unreliability. The use of fused cutouts and an improved sectionalizing scheme will also improve reliability. Right-of way is cleared on a 5 year cycle including spraying.

A SCADA system was installed in 2003. The use of this system allows Salt River Electric to respond to outages faster because of the real time data. Reliability is better with the alarms and data associated with SCADA. Fault current readings allow engineering and dispatch personnel to direct crews to the general locations of the outages with a high degree of accuracy.

SECTIONALIZING STUDIES

Salt River Electric performs annual or when the system changes sectionalizing studies to calculate the coordination data for system protection. The philosophy includes removing the fast trips from the substation ocrs and raising ground trip values as high as 200 amps where minimum trips will allow. This also allows the use of larger downline ocrs to handle the larger loads that Salt River Electric is experiencing. Better coordination between ocrs is achieved by this philosophy. The fault current analysis from this study is utilized by engineering to locate fault information provided by SCADA.

A list has been made of OCR's, fuses, switches and other devices required to adequately protect the entire system. Fused cutouts will be added to all three phase lines at taps and transformers where none exist to minimize outages, improve troubleshooting and minimize blinking lights.

In addition to the above new protection requirements, annually, one third of the system's OCR's are removed, inspected, maintained, (cleaned, tested and serviced), and re-installed.

Copies of the data, calculations and final results of the above circuit protection studies are utilized by Salt River's Engineering Department on a daily basis for coordination decisions. Also retained are Salt River's OCR maintenance and test reports.

Partner software is being utilized in the dispatch center and allows the engineering department to know how many customers are being served from any point in the system. With this information we can forsee problems with load before they arise or better analyze cold load problems as they occur. Public reporting burden for this collection of information is estimated to average 17 hours per response, including the time for reviewing instructions. searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM. Room 404-W. Washington, DC 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0572-0032), Washington, DC 20503. OMB FORM NO. 0572-0032, Expires 05/31/92.

This data will be used by RUS to review your financial situation. Your response is req	uired (7 USC 901 et seq.) a	and is not confidential.	
	Form Approved		
USDA-RUS	OMB No. 0572-0032		
COST ESTIMATES AND LOAN RIDGET	BOBBOWER AND TO	ANDESIGNATION	
COPT ED LIMATED AND FOUND DODOET	LOUROWER AND DU.	KY 21 NELSON	
FOR ELECTRIC BORROWERS			
To: U.S. Dept. of Agriculture, RUS, Washington, D. C. 20250	COST ESTIMATES AS	OF: (Month, Year)	
INSTRUCTIONS See EOM-4 Guideline for the Implementation of 7 CFR 1711.1			
			0 VEADO
SECTION A. COST ESTIMATES		LUAN PERIOD _	_₃ YEARS
	<u> </u>	BORROWED'S	
		COSTESTIMATES	RUS USE ONLY
100 a New Line (Excluding Tie-Lines)			
Construction Consumers	Miles		
101 Underground 3000	116 30	\$3 953 511	
$101 \text{Order brack} \qquad 5000$	49 38	2,299,942	
Total Consumer 3675 Total Miles	165.68		······································
Less Contributions		0	
Subtotal (New Line).		\$6,253,453	
a.(1) Major Development : (site specific code 100)			
103		\$0	
104		0	
105		0	
Subtotal (Major Development).		\$0	
Subtotal Au code 100		\$6,253,453	
200 b. New Tie-Lines	3 e''		
Line Designation	Miles		
201	0.00	\$0	
202	0.00	0	
203	0.00		
204	0.00	0	
205	0.00	0	
LUD Cultated from many 14	0.00	0	
Sublotal from page 1A	0.00	50	
Succour Incomed and course from pages 111, 19400		90	
300 c Conversion and Line Changes			
Line Designation	Miles		
301 D.C. 2ACWC TO D.C. 336 4 ACSR	1 70	\$2.51 600	
302 3 PHASE 2ACWC TO 3 PHASE 336 4 ACSR	2.48	200.880	
303 1 PHASE 6ACWC TO 3 PHASE 336.4 ACSR	1.40	113.400	
304 3 PHASE 1\0 CU TO 3 PHASE 336.4 ACSR	2.20	178.200	
305 3 PHASE 2ACWC TO 3 PHASE 336.4 ACSR	2.35	190,350	
306 3 PHASE 2ACWC TO 3 PHASE 336.4 ACSR	2.66	215,460	
307 D.C. 1/0 CU TO D.C 336.4 ACSR	4.29	634,920	
308 1 PHASE 6ACWC TO 3 PHASE 1/0 ACSR	1.65	133,650	
309 3 PHASE 2ACWC TO 3 PHASE 336.4 ACSR	3.57	289,170	
310 1 PHASE 6ACWC TO 1 PHASE 1/0 ACSR	1.49	120,690	
Subtotal from page 1A Miles	. 1.62	292,790	
Subtotal . (Includes subtotals from pages 1A) Milles	25.41	\$2,621,110	
400 d. New Substations, Switching Stations, Metering Points, etc.			
Station Designation <u>kVA</u>	<u>kV to kV</u>		
401		\$0	
402		0	
403		0	
404		0	
405		0	·····
406		0	
C.L. I		#n	
Subtotal		30	DAGE LOD LE CES
RUS FORM 740c (Computer generated form - modified)	(version 5, 6/97)		PAGE I OF 4 PAGES

	TIMATE AND LUAN BUDGET FOR ELECTRIC BORROWERS	BORROVER A	LOAN DESIGNATION	K I 21 NELSON
:	SECTION A. COST ESTIMATES (Page 1 Continuation	on Sheet)	BORROWER'S COST ESTIMATES	RUS USE ONLY
200 b	New Tie-Lines (Continued)			
	Line Designation	Miles		
207	·····	0.00	\$0	
208_		0.00	0	
$\begin{bmatrix} 209 \\ 210 \end{bmatrix}$		0.00	0	
$\begin{bmatrix} 210\\ 211 \end{bmatrix}$		0.00	0	
$\frac{211}{212}$		0.00	0	
213	· · · · · · · · · · · · · · · · · · ·	0.00	0	
214		0.00	0	
215		0.00	0	
216		0.00	0	
	Miles,	0.00	¢0.	
	Subiolal (transfers to page 1)		• D U	
300	c. Conversion and Line Changes (Continued)			
	Line Designation	Miles		
311 1	PHASE 6ACWC TO 1 PHASE 1/0 ACSR	0.69	\$55,890	
330 0	0.23 miles T.C. 397 spacer cable - 0.70miles D.C spacer	cable 0.93	\$ 236,900	
_				
-				
-				
-	· · · · · · · · · · · · · · · · · · ·			
-				
	······	<u></u>		
-				
_				
-				
-	· · · · · · · · · · · · · · · · · · ·			
-				
-				
_			0	<u></u>
-				
-		<u></u>	0	
-			0	
	······		0	
_			0	
-			0	
-		<u></u>	0	
-			0	
-			0	
-			0	
		······································	0	······································
-	***************************************			
1				
1	Subtotal (transfers to page 1).	1.62	\$292,790	

BORROWER AND LOAN DESIGNATION	KY 21 NELSON	
SECTION A. COST ESTIMATES (cont.)	BORROWER'S COST ESTIMATES	RUS USE ONLY
500 e. Substation, Switching Station, Metering Point Changes		
Station Designation Description of Changes		
)1	\$0	
202	0	
503	0	
504	0	
505	0	
506	0	
507	0	
508	0	
509	0	
Subtatal	\$0	
600 6 Minuther Distribution Environment	ΨŪ	
600 I Miscenaneous Distribution Equipment		
601 (1) Iransformers and Meters		
$\frac{11 \text{ ansion mets}}{11 \text{ ansion mets}} = \frac{11 \text{ ansion mets}}{1 \text{ ph}}$	\$5,095,099	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 178 000	i
$\frac{838}{\text{Subtatel code 601}} \frac{38}{\text{Subtatel code 601}} \frac{228}{\text{Subtatel code 601}} \frac{228}{\text{Subtatel code 601}}$	\$6 273 999	
Subtour code off (included in total of all ood codes below)	ψ0,275,555	·····
602 (2) Sets of Service Wires to increase Capacity ##	539,153	
603 (3) Sectionalizing Equipment	383,610	
604 (4) Regulators	687,000	
605 (5) Capacitors	176,790	
606 (6) Ordinary Replacements 900 poles	2,064,703	
(7)	0	
608 (8) Conductor Replacement	233,740	
(9)	0	
(10)	0	
(11)	0	
Subtotal ALL 600 codes	\$10,358,995	
700 g. Other Distribution Items		
701 (1) Engineering Fees	\$0	
702 (2) Security Lights ##	744,789	
703 (3) Reimbursement of General Funds (see attached)	0	
704 (4) TURTLE II UPGRADE	895,000	
Subtotal	\$1,639,789	
TOTAL DISTRIBUTION	\$20.873.347	
800 2 Transmission	an frantski kompanisti (da francos an da se sa prostava se se sa se sa se	
a. New Line		
Line Designation Voltage Wire Size Miles		
801	\$0	
802	0	
803	0	
804	0	
805	0	
806	0	
807	0	
808	0	
809	0	
810	0	-
<i>Total Miles</i> 0.00		
Subtotal	¢۵	

COST ESTIMATE AND LOAN BUDGET FOR ELECTRIC BORROWER	N KY 21 NELSON			
SECTION A. COST ESTIMATES (cont.)		BORROWER'S COST ESTIMATES	RUS USE ONLY	
900 b. New Substation, Switching Station, etc. Station Designation kVA	<u>kV TO kV</u>			
901		\$0		
902		0		
903		0		
905		0		
906		0		
907		0		
Subtotal		\$0		
1000 c. Line and Station Changes	Description of Changes			
1001	Description of Changes	\$0		
1002		0		
1003		0		
1004		0		
1006		0		
1007		0		
1008		0		
		0		
Subtotal		\$0	ng ng mangang ng manang ng mang	
1100 d. Other Transmission Items		\$0		
1101 (1) KW Hochenheit		0		
1103 (3) Reimbursement of General Funds (see sched	lule)	0		
1104 (4)		0		
Subtotal		20		
TOTAL TRANS	MISSION	\$0		
1200 2 CENEDATION (including Step up Station at Plan	+1			
1201 a Fuel Nameplate Rating	kW	\$0		
1202 b.		0		
TOTAL GENER	RATION	\$0		
	32			
1300 4. HEADQUARTERS FACILITIES 1301 a. New or additional Facilities (Attach RUS	Form 740g)	\$0		
1302 b.		0		
TOTAL HEADQUART	ERS FACILITIES	\$0		
RUS Form 740C (Computer generated)	form - modified) (version 5, 6/97)	PAGE 3 OF 4 PAGES		

COST ESTIMATE AND LOAN BUDGET FOR ELECTRIC BORROWERS	BORROWER AND LOAN DESIGNATION	KY 21 NELSON	r									
SECTION A. COST ESTIMATES (cont.)		BORROWER'S COST ESTIMATES	RUS USE ONLY									
1400 5. ACQUISITIONS												
1401 a. Consumers	Miles	\$0										
02 0		0										
	TOTAL ACQUISITIONS	\$0										
1500 6. ALL OTHER												
1501 a.		\$0										
1502 b		0										
1503 c		0										
1504 d.		0										
1505 e		0										
	TOTAL ALL OTHER	\$0										
SECTION B. SUMMARY OF AMOUNTS AND SOURCES OF FINANCING												
1. GRAND TOTAL - ALL COSTS		\$20,873,347										
2. FUNDS AND MATERIALS AVAILABLE FOR FA	ACILITIES											
a. Loan Funds	\$0											
b Materials and Special Equipment												
c. General Funds	<u>50</u>											
Purpose 3	<u></u>											
Purpose 4	50 50											
Total General Funds Applied	\$0											
d. Total Available Funds and Materials		\$0										
3. NEW FINANCING REQUESTED FOR FACILITIE	ES	\$20,873,000										
4. RUS LOAN REQUESTED FOR FACILITIES	<u>100%</u>	\$20,873,000										
5. TOTAL, SUPPLEMENTAL LOAN REQUESTED		\$0										
National Rural Utilities Cooperative Finance Corpo	ration											
Name of Supplemental Lender												
6. CAPITAL TERM CERTIFICATE PURCHASES (CF	C Loan only) U%	\$0										
8 100% SUPPLEMENTAL LOAN REQUESTED FOR FACT	$\frac{0.000}{0.000}$	<u>\$0</u>										
*Identify in section A by budget purpose and separate subtotals.	Million 20040, Aut. Cj											
SE	CTION C. CERTIFICATION											
We the undersigned certify that	ale ta construction of the second											
ne, me undersigned, eer ny mai.												
1. Upon completion of the electrical facilities co	ntained herein and any others uncompleted a	at this time but for t	which									
financing is available, the system will be capal	ble of adequately and dependably serving the	e projected load for	• the									
loan period as contained in our current RUS a	pproved Power Requirement Study and Con.	struction Work Pla	n.									
2. Negotiations have been or will be initiated with	th our power supplier, where necessary, to o	btain new deliverv	points									
and/or additional capacity at existing ones to a is based.	adequately supply the projected load upon w	hich this loan appl	ication									
3. The data contained herein and all supporting and in accordance with RUS Bulletin 20-2.	documents have, to the best of my knowledge $\left(\begin{array}{c} & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array} \right)$	e, been prepared co	prrectly									
$\Omega_{ctober} = 2 - 2008$	ATTAI A											
Date	Signature of Borrower's M	(magar										
	Signature of Borrowers IM	t										
October 2, 2008	Elmmil Rong	mal										
Date	Signature of Borrower's Pr	resident										
	1											
SALT RIVER ELECT	RIC COOPERATIVE CORPORATION											
Corpo	orate Name of Borrower											
	GFR Initials											

Attachment to 740c KY 21 NELSON

STATEMENT

Statement certifying that at least 90% of the Loan funds are for facilities with a useful life of 33 years or longer as required by 7 CFR 1710.115.

To facilitate the determination of the final maturity for this RUS Loan, Salt River Electric

does hereby certify that:



At least 90% of the Loan funds requested as part of this loan application and included on the RUS Form 740c (Cost Estimates and Loan Budget for Electric Borrowers) are for facilities with an anticipated useful life of 33 years or longer.



Less than 90% of the Loan funds requested as part of this loan application and included on the RUS Form 740c (Cost Estimates and Loan Budget for Electric Borrowers) are for facilities with an anticipated useful life of 33 years or longer. A schedule has been attached to this statement listing the facilities with an anticipated useful life of less than 33 years, the anticipated useful life of those facilities and the associated cost estimates (see attached).

April 10, 2008 Date

Title: Larry Higks President and CEO Salt River Electric

SALT RIVER ELECTRIC DESIGN CRITERIA

FOR

2008-2011 CONSTRUCTION WORK PLAN

FEBRURARY 2008

Each of the following design criteria items was reviewed by Mike Norman, RUS General Field Representative in February 2008. Mike concurred with the following statements.

All construction proposed within this document is required to meet the following minimum standards for voltage, thermal loading conditions, safety and system reliability. Conditions could require corrective action to exceed minimum standards.

- 1. The maximum voltage drop on primary distribution lines not to exceed 8 volts, (125 volt base), after re-regulation.
- 2. Primary conductors are not to be loaded over 90% of their thermal rating. These conductors will be flagged at 80% in the voltage drop studies.
- 3. Equipment will have maximum loading not to exceed the following nameplate percentages:

	EQUIPMENT	WINTER	SUMMER
a.	Power Transformers	130%	100%
b.	Regulators	130%	100%
c.	Reclosers	100%	100%
d.	Line Fuses	80%	80%

- Conductors (and associated poles and hardware as required) will be built, rebuilt, and or relocated if they are found to be unsafe or fail to meet applicable NESC requirements.
- 5. Poles and/or crossarms to be replaced if found to be physically deteriorated by visual inspection and/or tests.
- 6. All new distribution lines to be designed and built according

to REA standard construction specifications and guidelines.

- 7. New lines and line conversions are to be built according to the standard primary voltage levels as recommended in the Long Range Plan.
- 8. New primary conductor sizes to be determined on a case by case basis using the Economic Conductor Sizing Computer Program and presently known constraints and variables. The final proposed conductor may be modified to conform with Salt River's Standard sizes and recommendations of the Long Range Plan.
- 9. All new primary construction to be overhead except where underground is required to comply with governmental or environmental regulations, local restrictions, or favorable economics.
- 10. Three phase normally open points between substation are to have gang operated air break switches (GOABS) installed over the work plan period.
- 11. All substations should have three phase reclosers installed in order to provide adequate protection schemes to improve reliability.
- 12. All underground circuits are to be designed and installed to allow for a loop feed configuration with faulted circuit indicators for system reliability.

It is recommended that proposed construction items required for voltage improvements whose forecast need is based solely on calculated voltage from computerized circuit analysis printouts, not be authorized for construction until such calculated voltages are measured in the field and extrapolated to peak loading period and then compared to calculated values to corroborate that actual voltages are below the above minimum design levels.

DISTRIBUTION LINE AND EQUIPMENT COST

2008-2011 CONSTRUCTION WORK PLAN

DISTRIBUTION LINE COST

ESTIMATED COST PER MILE

DESCRIPTION

\$62,000 \$53,000 \$81,000 \$110,000 \$110,000 \$90,000

I PHASE TO 3 PHASE 1/0 ACSR 1 PHASE TO 1 PHASE 1/0 ACSR 3 PHASE TO 3 PHASE 36.4 ACSR D. C. TO D.C. 397 SPACER CABLE 3 PHASE TO 795 SPACER CABLE 3 PHASE TO 397 SPACER CABLE

DISTRIBUTION EQUIPMENT (INSTALLED COST)

à

DESCRIPTION	TYPE "L" (VACUUM) MECHANICAL OCR CUTOUT	AIR BREAK SWITCH	3 PHASE 150 AMP REGULATOR BANK	3 PHASE 300 AMP REGULATOR BANK	1 PHASE 100 AMP REGULATOR	FIXED CAPACITOR	SWITCHED CAPACITOR
ESTIMATED COST	\$2,200 \$100	\$5,000	\$27,700	\$46,300	\$8,800	\$1,830	\$3,120

ACTUAL CONVERSION COST (HISTORICAL DATA)

4

WORK ORDER NUMBER	JOB DESCRIPTION	MILES	TOTAL COST	COST PER MILE	
954515	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	1.80	\$81,465	\$45,258	
930385	3 PHASE 1\0 CU TO D.C. 336.4 ACSR	1.00	\$53,044	\$53,044	
940833	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	2.50	\$90,513	\$36,205	
931133	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	5.20	\$126,355	\$24,299	
940834	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	2.30	\$77,525	\$33,707	
940312	NEW LINE 3 PHASE 336.4 ACSR	1.50	\$33,623	\$22,415	
950365	NEW LINE 3 PHASE 336.4 ACSR	0 60	\$30,146	\$50,243	
954709	3 PHASE 1\0 CU TO D C. 336.4 ACSR	2 20	\$115,000	\$52,273	
940039	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	2 70	\$92,539	\$34,274	
960484	3 PHASE 1\0 CU TO 336.4 ACSR	9.26	\$373,725	\$40,359	DARWIN THOMAS FEEDER
970042	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	1.29	\$64,710	\$50,163	
964223	1 PHASE 6ACWC TO 3 PHASE336.4 ACSR	0.92	\$51,665	\$56,158	
970207	3 PHASE 1\0 CU TO 336.4 ACSR	2.75	\$173,138	\$62,959	ALLEN PLACE NORTH
960142	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	1.35	\$62,954	\$46,633	
970005	3 PHASE 1\0 CU TO 336.4 ACSR	2.49	\$181,838	\$73,027	
960245	2 PHASE 4A CWC TO 336 4 ACSR	0.83	\$38,290	\$46,133	
960075	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	3.78	\$158,412	\$41,908	
970802	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	0.94	\$34,346	\$36,538	
980096	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	3.27	\$129,540	\$39,615	CLOYD LANE
980263	1 PHASE 6A CWC TO 1 PHASE 1\0 ACSR	0.69	\$10,297	\$14,923	
980045	1 PHASE 6A CWC TO 1 PHASE 1\0 ACSR	3.8	\$122,273	\$32,177	
970803	NEW LINE 3 PHASE 336.4 ACSR	1.07	\$51,600	\$48,224	STRINGER LANE
220143	3 PHASE 6ACWC TO 3 PHASE 336.4 ACSR	1.94	\$104,792	\$54,016	
210157	3 PHASE 2A CU TO 336.4 ACSR	3.6	\$265,544	\$73,762	
990065	NEW LINE 3 PHASE 1\0 ACSR	0.54	\$19,447	\$36,013	NALLEY & GIBSON
200144	NEW LINE 3 PHASE 336.4 ACSR	1.56	\$81,145	\$52,016	CEDAR GROVE IND PARK
990564	1 PHASE 6ACWC TO D C 397 SPACER(1.63 MI)	5.77	\$350,517	\$60,748	FREDRICKSBURG SUB CONVERSION
210630	1 PHASE 6ACWC TO 3 PHASE 336 4 ACSR(4.14 MI) NEW LINE D C 397 SPACER (.57 MI) NEW LINE 3 PHASE 336 4 ACSR (4.54 MI)	5.11	\$250,380	\$48,998	SPRINGFIELD IND PARK
201183	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	0.66	\$27,804	\$42,127	HUBBARDS LANE
200180	3 PHASE 1\0 CU TO 336.4 ACSR	2.11	\$53,951	\$25,569	HWY 62
990710	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	0.91	\$42,908	\$47 152	NEW HAVEN LAGOON
210637	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	2.32	\$71,289	\$30,728	CITY OF BARDSTOWN SEWER
210735	NEW LINE 3 PHASE 336.4 ACSR	0.64	\$31,313	\$48,927	WYETH AYERST
201336	NEW LINE 3 PHASE 336.4 ACSR	0.95	\$28,512	\$30,013	BROOKS IND SITE
210873 210699 200084	NEW LINE 1 PHASE 100 ACSR 1 PHASE 6A CWC TO 1 PHASE 10 ACSR NEW LINE 3 PHASE 336 4 ACSR	1.25 0.82	\$19,563 \$19,295 \$86,793	\$15,650 \$23,530 \$54,246	HICKMAN FARM DIVISION MAX ROUSE RD DALE LANE
210158 201049 210872	1 PHASE 6ACWC TO 3 PHASE 1/0 ACSR 3 PHASE 2A CU TO 336 4 ACSR	0.79	\$35,930 \$71,460	\$45,481 \$68,057 \$40,204	KEITH KNOB BROOKS NORTH MT WASH IND SITE
990477 985060	2 PHASE 6ACWC TO 3 PHASE 10 ACSR NEW LINE D.C 397 SPACER (1.79 MI) NEW LINE 3 PHASE 397 SPACER (65 MI)	2.74 2.44	\$62,050 \$280,582	\$22,646 \$114,993	31E THREE PHASE BEULAH BEAM DC
200161 210121	NEW LINE 3 PHASE 1\0 ACSR NEW LINE 795 SPACER CABLE(2 79 MI) 3 PHASE 2A CU TO 336.4 ACSR(0 85 MI)	1.61 3.64	\$83,047 \$325,540	\$51,582 \$89,434	CEDAR GROVE NORTH CEDAR GROVE INDUSTRIAL PARK
230079	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	0.98	\$39,527	\$40,334	WATERFORD RD
220704	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	0.86	\$57,223	\$66,538	HWY 660
220920	NEW LINE 397 SPACER CABLE(1.6 MI)	2.03	\$138,682	\$68,316	SCHULER INDUSTRIAL PARK
220618 220895	NEW LINE 3 PHASE 336 4 ACSR(0 43 MI) NEW LINE 3 PHASE 2 ACSR NEW LINE 3 PHASE 336 4 ACSR	0.59 0.94	\$22,009 \$50,516	\$37,303 \$53,740	KNOPPS DAIRY CEDAR GROVE INDUSTRIAL PARK
990770	1 PHASE 6A CWC TO 1 PHASE 1\0 ACSR	0.84	\$35,463	\$42,218	ICETOWN RD
200325	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	1.33	\$66,520	\$50,015	STRINGTOWN RD
220195	3 PHASE 2A CU TO 336.4 ACSR	1.92	\$147,757	\$76,957	GOSPEL HILL
210359 200144	3 PHASE 2A CU TO 336.4 ACSR(2.49 MI) 3 PHASE 2A CU TO 397 SPACER CABLE(1.52 MI) NEW LINE 3 PHASE 336.4 ACSR	4.01 0.78	\$254,375 \$81,145	\$63,435 \$104,032	BALLTOWN CEDAR GROVE INDUSTRIAL PARK
201156	NEW LINE 3 PHASE 336.4 ACSR	0.22	\$14,542	\$66,100	CEDAR GROVE INDUSTRIAL PARK
980830	1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	3.17	\$121,768	\$38,413	LOVE RIDGE
210696	1 PHASE 6A CWC TO 1 PHASE 1\0 ACSR	0.88	\$20,810	\$23,648	BLOOMFIELD SUB
201156	NEW LINE 3 PHASE 336 4 ACSR	0.22	\$14,542	\$66,100	CEDAR GROVE IND PARK
230330	1 PHASE 6A CWC TO 1 PHASE 1\0 SPACER CABLE	2.86	\$126,170	\$44,115	GRAYS RUN
230331	1 PHASE 6A CWC TO 1 PHASE 1\0 ACSR	1.74	\$80,463	\$46,243	LILLY PIKE
230147 230126 250551	3 PHASE 4A CU TO 336.4 ACSR 3 PHASE 2A CU TO 397 SPACER CABLE 3 PHASE 1\0 CU TO 336.4 ACSR	7.03 0.75 1.34	\$302,587	\$43,042	HWY 509 BROOKS SUB DC NAZARETH RD CONVERSION
250395 240396 240267 268092	3 PHASE 6A CU TO 336 4 ACSR 1 PHASE 6A CU TO 336 4 ACSR 3 PHASE 2A CU TO 336 4 ACSR NEW LINE 3 PHASE 397 SPACER	3.36 0.71			MAUD REBUILD VALEY VIEW SHEPHERDSVILLE TO 480 BLUEGRASS PKWY FEEDERS
260278 267355 250897	3 PHASE 2A CU TO 336.4 ACSR NEW LINE 3 PHASE 397 SPACER 1 PHASE 6A CWC TO 1 PHASE 10 SPACER CAPLE	3.52 0.69			BALLTOWN FDR 01 CGIP FEEDERS ZONETON RD
267851 251156 270712	2 PHASE 6ACWC TO 3 PHASE 36 4 ACSR 3 PHASE 1\0 CU TO 336.4 ACSR 1 PHASE 6ACWC TO 3 PHASE 1\0 ACSR	2.75 2.99 0.7			SHORT CREEK W BARDSTOWN FDR 01 MARKWELL LANE

01/01/2008 To 01/31/2008 <u>COOPPKDT</u>	00:01 AM 24:00 PM	E A S T K E N T U C K Y P O W E R SUBSTATION LOAD DATA REPORT SALT RIVER ECC									Date 2/13/2008 Page		
LOCATION BALLTOWN	07:15	— М	IAXIMUM <u>KW</u> 13,602	KW OCCURRENCE <u>KVAR</u> 2,285	<u>KVA</u> 13,793	<u>PF</u> 0 99	<u>MIN</u> <u>VOLTS</u> 7,354	<u>MAX</u> <u>VOLTS</u> 8,117	<u>AVG</u> <u>VOLTS</u> 7,795	<u>MAX</u> <u>KVAR</u> 2304 7	<u>MIN</u> <u>KVAR</u> 0.0	<u>LF</u> 0.55	<u>KWH</u> 5,595,002
BARDSTOWN SH 01/25/2008	IOP CTR. 07:00		10,051	1,472	10,158	0.99	7,450	8,148	7,845	1644 5	0.0	0.59	4,447,694
BEAM 01/25/2008	08:00		5,065	177	5,068	1.00	7,195	7,805	7,498	336 4	-1182.3	0.71	2,657,212
BEULAH BEAM 01/01/2008	20:30		7,072	691	7,106	1.00	7,566	8,001	7,793	728 3	-1309 5	0.49	2,599,737
BLOOMFIELD 01/25/2008	07:15		8,214	1,219	8,304	0.99	7,260	7,901	7,631	1218.8	-103 1	0.57	3,461,197
BLUE LICK 01/25/2008	08:00		8,373	409	8,383	1.00	7,562	7,886	7,713	638.5	-218 4	0.62	3,882,544
BLUEGRASS PAI 01/31/2008	RKWAY 09:00		3,871	1,116	4,028	0 96	7,300	7,935	7,655	1248.8	-442.3	0.62	1,777,561
BROOKS 01/24/2008	21:30		10,208	1,812	10,368	0 98	7,375	7,898	7,636	1859.9	-27 4	0.68	5,200,183
CEDAR GROVE 01/25/2008	06:45		13,398	2,128	13,566	0 99	7,059	7,713	7,450	2171.6	29 9	0.54	5,394,057
CEDAR GROVE . 01/28/2008	IND PARK 14:00		11,713	4,701	12,621	0.93	7,249	7,710	7,484	4980.1	00	0.83	7,197,300
DARWIN THOM 01/25/2008	AS 06:30		13,530	1,706	13,637	0.99	7,177	7,830	7,581	1706.1	-431 5	0.55	5,499,529

1

NOTE - DATA EXCLUDES MEMBER AND EKP OWN USE. BOTH OFF AND ON-PEAK DATA ARE INCLUDED. MAXIMUM KW PEAK MAY NOT MATCH BILL ING PEAK. MAXIMUM KW PEAK MAY OCCUR OUTSIDE TIME-OF-DAY, DURING A SWITCH, OR DUE TO SOME UNUSUAL VOLTAGE CONDITION

01/01/2008	00:01 AM		EAST KENTUCKY POWER												
То		SUBSTATION LOAD DATA REPORT									Ľ	Date 2/13/2008			
01/31/2008 COOPPKDT	24:00 PM	SALT RIVER ECC									цс	2			
LOCATION EAST BARDSTO 01/25/2008)WN 07:45		MAXIMUM K <u>KW</u> 14,662	W OCCURRENCE <u>KVAR</u> 3,001	<u>KVA</u> 14,966	<u>PF</u> 0.98	<u>MIN</u> VOLTS 7,514	<u>MAX</u> <u>VOLTS</u> 8,198	<u>AVG</u> VOLTS 7,915	<u>MAX</u> <u>KVAR</u> 3026.3	MIN KVAR 698.4	<u>LF</u> 0.55	<u>KWH</u> 6,044,865		
FREDRICKSBU 01/20/2008	RG 08:45		4,415	434	4,436	1 00	7,306	7,908	7,644	674.3	-64.8	0 60	1,976,833		
GOSPEL HILL 01/25/2008	06:45		6,605	52	6,606	1.00	7,886	8,253	8,068	52.4	-735 8	0 59	2,898,378		
JOE TICHENOR 01/25/2008	07:00		14,785	2,397	14,978	0.99	7,303	8,143	7,797	2438.5	00	0 50	5,478,092		
KNOB CREEK 01/25/2008	09:30		2,611	(46)	2,611	(1.00)	7,836	8,088	7,967	10.8	-291.8	0 58	1,128,103		
LEBANON JUN 01/15/2008	CTION #1 09:15		2,840	1,328	3,135	091	2,393	2,504	2,435	1413.4	6.1	0 71	1,509,660		
LEBANON JUN 01/25/2008	CTION #2 06:15		3,938	348	3,954	1.00	7,404	7,973	7,739	377.5	-27.4	0.58	1,706,217		
LIL-Y TULIP 01/17/2008	15:15		5,762	1,143	5,874	0.98	7,174	7,788	7,503	1221.6	-1491.0	0.74	3,157,131		
LITTLE MOUNT 01/C 208	07:00		5,481	973	5,566	0.98	7,286	7,814	7,604	1030 1	51.5	0 51	2,087,693		
2008	17:30		1,211	71	1,213	1.00	1,594	2,554	2,522	269 0	-158.2	0 82	742,010		
MT WASHINGT 01/25/2008	FON #1 07:30		6,503	356	6,513	1.00	7,464	7,933	7,685	392.4	-392.4	0 63	3,042,666		

NOTE - DATA EXCLUDES MEMBER AND EKP OWN USE. BOTH OFF AND ON-PEAK DATA ARE INCLUDED MAXIMUM KW PEAK MAY NOT MATCH BILLING PEAK MAXIMUM KW PEAK MAY OCCUR OUTSIDE TIME-OF-DAY, DURING A SWITCH, OR DUE TO SOME UNUSUAL

01/01/2008 00:01 AM	E	AST KEN	тиск	YPOWER				
То	SUB	STATION LOAD	. J	Date 2/13/2008				
017 `78 24:00 PM		SAL	r river e	cc		Page	,	3
LOCATION MT. WASHINGTON #2 01/25/2008 06:30	MAXIMUM KW OCCURRENC <u>KW KVAR</u> 9,084 1,151	CE <u>KVA PF</u> 9,156 099	MIN VOLTS 7,466	MAX AVG VOLTS VOLTS 7,958 7,707	MAX MIN KVAR KVAR 1159 8 -125 5	LF 0.60	<u>К₩Н</u> 4,053,753	
NORTH SPRINGFIELD 01/25/2008 07:15	10,823 2,197	11,044 0.98	7,169	7,853 7,587	2200.7 539 6	0.56	4,516,193	
PLEASANT GROVE 01/25/2008 06:45	8,312 589	8,333 1.00	7,138	7,728 7,481	588 6 -399 1	0.64	3,948,359	
SHEPHERDSVILLE #1 01/25/2008 06:30	4,154 496	4,183 0.99	7,496	8,109 7,777	506.9 79	0.62	1,913,612	
SHEPHERDSVILLE #2 01/25/2008 06:45	9,799 1,191	9,872 0.99	7,296	7,923 7,651	1223 2 9 0	0.58	4,224,810	
SOUTH SPRINGFIELD 01/25/2008 07:00	4,280 62	4,280 1.00	7,334	7,987 7,701	111.4 -398.2	0.61	1,931,602	
TAYLORSVILLE 01/25/2008 07:30	10,202 1,481	10,309 0.99	7,109	7,937 7,637	1528-1 2278	0.56	4,259,450	
WEST BARDSTOWN 01/30/2008 07:30	18,365 3,435	18,683 0 98	7,229	8,107 7,733	3435.4 0 0	0 47	6,431,092	
WEST MT WASHINGTON 01/02/2008 19:45	7,649 885	7,700 0.99	7,458	7,910 7,672	897.9 20.0	0.62	3,532,797	
WOOSLEY 01/25/2008 07:15	4,528 325	4,540 1.00	7,454	8,014 7,793	353.6 -342.0	0.51	1,719,275	

01/01/2008	00:01 AM	EAST KENTUCKY	UCKY POWER					
То		SUBSTATION LOAD DATA REPO	Date	2/13/2008				
01/31/2008 COOPPKDT	24:00 PM	SALT RIVER EC		Page	4			
Total KW:	-	261,105		Total KWH:		114,014,605.85		
		SALT RIVER ECC TOTAL SUBSTATION PEAK DEMAND 01/25/2008	07:15	249,623.00				
		CONTRIBUTION TO EKP SYSTEM PEAK DEMAND 01/25/2008	07:15	249,623.00				
		EKP SYSTEM PEAK DEMAND 01/25/2008	07:15	2,840,810.30				

TOTAL SUBSTATIONS = 32

NGTE - DATA EXCLUDES MEMBER AND EKP OWN USE. BOTH OFF AND ON-PEAK DATA ARE INCLUDED MAXIMUM KW PEAK MAY NOT MATCH BILLING PEAK. MAXIMUM KW PEAK MAY OCCUR OUTSIDE TIME-OF-DAY, DURING A SWITCH, OR DUE TO SOME UNUSUAL. VOLTAGE CONDITION. (-) DENOTES KVAR RECEIVED.
SALT RIVER ELECTRIC COOPERATIVE

SUMMARY OF OUTAGES

CAUSE	2003	2004	2005	2006	2007	5 YEAR AVERAGE
POWER SUPPLY	0.44	0.37	0.33	0.49	0.24	0.37
EXTREME STORM	4.38	10.49	00.0	0.71	0.72	3.26
PREARRANGED	0.06	0.13	0.06	0.06	0.03	0.07
ALL OTHERS	1.59	2.28	1.47	1.91	1.36	1.72
TOTAL	6.47	13.27	1.86	3.17	2.35	5.42

y
20
Å,
2
Z
ā
Ê
U

							····							
HISTORICAL DATA 2005												•	-	
	Notes:	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
NEW SERVICES	From Mileson Report	104	76	108	114	114	142	108	122	183	140	150	151	1512
WORK ORDERS - CONSTRUCTED ON 219	From 219 Report	110	94	124	136	137	136	120	138	192	141	155	136	1619
1. WOWN UNDERS - CONSTRUCTION ON ALL	Formula	25359	18105	44236	18734	28414	52420	33488	22886	20424	16416	38411	33572	352465
PRAMARY	From Mileane Report	13352	8917	24190	5520	15982	32205	17100	8161	2880	2690	20180	21085	172262
SECONDADY	From Mileona Report	0	0	0	0	0	0	0	0	0	0	0	0	0
SECURIDAR 1 GED LITTGG	Film Menue Record	12007	9188	20046	13214	12432	20215	16388	14725	17544	13726	18231	12487	180203
SERVICES	Forminia	231	193	357	138	207	385	279	166	106	116	248	247	218
 AVERAGE LENGIN (21) COST OF INDERGEOUND (210) 	From 219 Raport	\$53 B79.33	S31.444.B1	\$209.608.52	\$56.746.57	\$110,646.14	\$132,473.87	\$155,048.33	\$101,415.19	\$61,468.57	\$43,907.55	\$172,916.20	\$80,298.85	\$1,209,853.93
	Formitia	\$489.81	\$334.52	\$1.690.39	\$417.25	\$807.64	\$974.07	\$1,292.07	\$734.89	\$320.15	\$311.40	\$1,115.59	\$590.43	\$747.28
2. AVENUE CUSI (4/1)	From Milesce Record	27	29	22	32	30	28	20	26	36	24	23	32	329
1. NETALLED COST DER TRANSFORMER	Special Equipment	\$1.292.02	\$1.601.15	\$1,301.43	S1,523.78	\$1,399.91	\$1,823.20	\$1,359.76	\$1,575.91	\$2,143.64	\$1,200.06	\$1,082.63	\$1,286.06	\$1,465,80
R NFW MFTFRS	From Mileson Report	104	76	108	114	114	142	108	122	183	140	150	151	1512
9. INSTALLED COST PER METER	Special Equipment	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33
UVEBHEAD														
		50	00	76	75	23	30	52	25	37	33	30	25	359
NEW SERVICES	From Mileage Report	3	14	58	R0	64	22	68	67	17	65	63	53	579
10. WORK URDERS CONSTRUCTED ON 219		571C	2005	COD8	17733	13084	13628	15898	13276	16876	11614	15103	15122	177415
11. LINEAR FEET - JOIAL	FOILING SECTOR	01/0	00210 05755	4280	14105	10889	10548	13217	10626	12432	8813	11979	12545	138399
PRUMARY	From Mileage Hepon	6070	00107	0	0	0	0	0	0	0	0	0	0	0
SECONDAKY	From Mileaga Heport	2010	1517	3812	36.28	2195	3080	2681	2650	4444	2801	3124	2577	39016
SERVICES	From Mileage Haport	164	904	140	222	204	189	234	198	219	179	240	285	228
17. AVERAGE LENGIA (11/10)		CTE 205 82	6775 1AD AA	570 360 06	\$154 202 12	S115 339 45	\$127 190 55	S121.704.13	S134.162.78	\$116.771.72	\$103,589.35	\$107,595.11	\$117,937.8B	\$1,478,309.32
13. COST OF NEW CONSIGNICION (219)	From 219 Report	\$1 836 73	S3 171 10	\$1 368 29	\$1.927.53	\$1.802.18	\$1.766.54	\$1,789.77	\$2,002.43	\$1,516.52	\$1,593.68	\$1,707.86	\$2,225.24	\$1,897.70
14. AVENAUE COST REP SERVICE (12/12/	Erron Liteana Barrott	30	68	22	50	36	62	40	41	52	37	47	37	522
I.S. ANTALLED COST DEP TRANSFORMER	Shecial andmonth	\$576.34	\$600.25	\$667,98	\$650.62	\$643.39	\$601.14	\$587.12	\$598.86	\$780.58	\$627.59	\$636.89	\$621.20	\$632.66
17 NFW AFTERS	From Mileage Record	23	29	27	25	23	30	52	25	37	33	30	25	359
18. INSTALLED COST PER METER	Special equipment	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33	\$135.33
		54	qc	30	aç	65	27	30	24	26	23	46	44	381
19. SECURITY LIGHT TOTAL 20. INSTALLED COST PER LIGHT	From 219 Report	\$612.74	\$296.61	\$247.68	\$574.15	\$461.37	\$415.30	\$1,083.89	\$345.63	\$310.42	\$250.34	\$360.56	\$316.05	\$439.56
		c	ų	Q7	ç	×.	Å,	13	10	10	7	18	11	143
21. SYSTEM IMPROVEMENTS - TOTAL	Fren 218 Kaperi 601 & B O.	6791 BO	C1 D26 D6	\$7 370 0B	\$2 210 QA	S2 403 75	S2 335 57	S1 760 75	\$659.72	\$692.09	\$493.62	S719.51	\$4,048.19	\$1,627.59
22. AVERAGE COST OF STSTEM IMPROVEMEN	TIONAL CLAINING	501018	PE	10.00	10	25	25	2	29	80	6	11	17	178
23. FULE REFLACEMENTS 24. AVERAGE COST PER REPLACEMENT	From 219 Report	\$1,562.14	\$1,696.64	\$986.63	\$1,374.47	\$2,027.03	\$934.45	\$3,120.37	\$1,479.87	\$964.05	\$568.18	\$1,894.61	\$1,738.30	\$1,528.90
	E STATEMENT	G	010	222	265	247	250	230	241	305	236	282	244	2922
23. 101AL OF WORK URDERS (1110119121)	F UIIIUM CREEK	261	214											
26. TOTAL TRANSFORMERS PURCHASED - UG	Special equipment	67	33	63	21	28	16	10	13	12	10	7	4	284
27. INSTALLED TRANSFORMER COST - UG	Special equipment	\$86,565.15	\$52,837.85	\$81,990.35	\$31,999.45	\$39,197.60	\$29,171.20	\$13,597.60	\$20,486.78	\$25,723.72	\$12,000.60	S/, D/8.42	\$5,144.24	54UD, 292.9D
28. TOTAL TRANSFORMERS PURCHASED - OH	Special equipment	84	135	51	13	5	40	36	107	39	96	51	0	5115 515 TO
29. INSTALLED TRANSFORMER COST - OH	Special equipment	\$48,412.76	\$81,033.65	\$34,066.89	\$8,458.07	\$3,216.95	\$24,045.60	\$21,136.20	\$64,078.40	\$30,442.80	\$60,248.20	\$32,481.20	\$6,212.00	\$413,832.72
30. TOTAL METERS PURCHASED	Special equipment	0	0	0	30	0	0	0	0	0	0	0	0 \$0.00	00 510 510 EQ
31. INSTALLED METER COST	Special equipment	\$0.00	\$0.00	\$0.00	\$9,446.60	\$965.00	\$0.00	\$0.00	\$0.00	50.00	50.UU	\$0.00	\$0.00 700 640 00	010,411,0U
32. OTHER SPECIAL EQUIPMENT PURCHASED	Special equipment	\$5,354.58	\$28,454.72	\$0.00	\$0.00	\$2,257.19	\$13,610.47	\$7,116.40	\$3,238.81	\$0.00	S/,243.76	67.6/1,96	\$24,619,43¢	11.170,1016
							_							

α	0
c	2
Ċ	
ē	ū
	2
	-
s	z
۲	
<	t
٤	1
-	
2	T.
7	5
¢	J
-	
D	Ľ
c	1
х	-
۲	-
ù	n
6	
-	-

~ ~

UNDERGROUND	Notes:	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
NEW SERVICES	From Mileage Report	102	161	118	51	105	119	81	136	88	114	87	114	1276
 WORK ORDERS - CONSTRUCTED ON 219 	From 219 Report	113	124	131	70	142	147	101	155	111	116	96	127	1433
2. LINEAR FEET: TOTAL	Formula	19742	59519	49011	39625	52891	32008	19539	40367	13032	19344	11525	27001	383604
PRIMARY	From Mileage Report	6570	37235	29024	27239	32894	16393	8517	25586	3447	6867	1798	13166	208736
SECONDARY	From Mileage Report	0	0	0	0	0	0	0	0	0	0	0	0	0
SERVICES	From Milesge Report	13172	22284	19987	12386	19997	15615	11022	14781	9585	12477	9727	13835	174868
 AVERAGE LENGTH (2/1) 	Fomula	175	480	374	566	372	218	193	260	117	167	120	213	268
 COST OF UNDERGROUND (219) 	From 219 Report	\$73,309.00	\$254,604.01	\$181,215.79	\$246,542.02	\$370,659.01	\$198,582.36	\$133,853.53	\$259,649.50	\$82,704.67	\$122,785.42	\$60,647.30	\$155,102.61	\$2,139,655.22
5. AVERAGE COST (4/1)	Formula	\$648.75	\$2,053,26	\$1,383.33	\$3,522.03	\$2,610.27	\$1,350.90	\$1,325.28	\$1,675.16	\$745.09	\$1,058.50	\$631.74	\$1,221.28	\$1,493.13
6. NEW TRANSFORMERS	From Mileage Report	19	27	30	13	33	31	28	26	23	19	20	18	287
7. INSTALLED COST PER TRANSFORMER	Special Equipment	\$2,946.35	\$1,293.28	\$1,118.31	\$1,134.06	\$1,505.27	\$1,838.39	\$1,327.02	\$1,393.63	\$1,301.50	\$2,568.99	\$1,355.75	\$1,062.46	\$1,570.42
8. NEW METERS	From Mileage Report	102	161	118	51	105	119	81	136	88	114	87	114	1276
 INSTALLED COST PER METER 	Special Equipment	\$135.33	\$135.33	\$135.33	\$135.33	\$87.24	\$84.30	\$84.30	\$84.30	\$84.30	\$84.30	\$86.07	\$86.07	\$101.85
OVERHEAD														
NEW SERVICES	From Mileage Report	23	23	40	7	29	43	29	35	11	18	29	31	318
10 WORK ORDERS CONSTRUCTED ON 219	From 219 Report	56	40	68	38	55	60	49	66	28	36	46	56	598
11. LINEAR FEET - TOTAL	Formula	11895	11932	17674	6583	16149	12577	11048	14049	7103	2081	9167	12162	132420
PRIMARY	From Miltage Report	8177	9672	13862	5501	14072	8579	9156	11078	6923	-706	5999	10075	102388
SECONDARY	From Mileage Report	0	0	0	0	0	0	0	0	o	0	0	0	0
SERVICES	From Milcage Report	3718	2260	3812	1082	2077	3998	1892	2971	180	2787	3168	2087	30032
12. AVERAGE LENGTH (11/10)	Formula	212	298	260	173	294	210	225	213	254	58	199	217	221
13. COST OF NEW CONSTRUCTION (219)	From 219 Report	\$150,020.44	\$111,472.38	\$162,975.14	\$79,601.98	\$122,941.66	\$177,254.78	\$122,074.22	\$151,690.28	\$90,658.79	\$56,732.70	\$154,264.00	\$147,201.72	\$1,526,888.09
 AVERAGE COST NEW SERVICE (13/10) 	Formula	\$2,678.94	\$2,786.81	\$2,396.69	\$2,094.79	\$2,235.30	\$2,954.25	\$2,491.31	\$2,298.34	\$3,237.81	\$1,575.91	\$3,353.57	\$2,628.60	\$2,553.32
15. NEW TRANSFOMERS	From Mileage Report	38	31	46	21	33	38	34	42	21	24	24	33	385
16. INSTALLED COST PER TRANSFORMER	Special equipment	\$628.31	\$635.59	\$618.20	\$668.92	\$668.92	\$631.31	\$635.44	\$672.66	\$686.89	\$655.91	\$686.49	\$634.01	\$651.89
17. NEW METERS	From Méeage Report	23	23	40	7	29	43	29	35	11	18	29	31	318
18. INSTALLED COST PER METER	Special equipment	\$135.33	\$135.33	\$135.33	\$135.33	\$87.24	\$84.30	\$84.30	S84.30	\$84.30	\$84.30	\$86.07	\$86.07	\$101.85
19. SECURITY LIGHT TOTAL	From Mileage Report	36	21	67	11	39	51	10	40	38	41	26	21	401
20. INSTALLED COST PER LIGHT	From 219 Report	\$410.47	\$417.20	\$472.27	\$371.61	\$217.42	\$315.68	\$379.84	\$490.93	\$552.17	\$671.97	\$455.84	\$523.49	\$439.91
21. SYSTEM IMPROVEMENTS - TOTAL	from 218 Ascess 642 A 8.C.	10	7	14	4	14	7	ω	12	8	4	7	5	100
22. AVERAGE COST OF SYSTEM IMPROVEMENT	From 219 Report	\$1,029.10	\$1,988.50	\$696.05	\$1,736.41	\$826.53	\$1,055.22	\$1,062.09	\$583.89	\$1,125.52	\$1,387.48	\$835.96	\$444,86	\$1,064.30
23. POLE REPLACEMENTS	From 218 Amount 6068 & G.	-	21	37	19	16	25	9	48	14	17	16	21	241
24. AVERAGE COST PER REPLACEMENT	From 219 Report	\$807,62	\$2,519.60	\$1,460.02	\$2,647.74	\$2,037.81	\$1,350.23	\$1,946.22	\$1,540.82	\$1,530.19	\$1,512.93	\$2,006.11	\$2,056.85	\$1,784.68
25. TOTAL OF WORK ORDERS (1+10+19+21)	Formula	215	192	280	123	250	265	168	273	185	197	175	209	2532
26. TOTAL TRANSFORMERS PURCHASED - UG	Special equipment	7	49	59	17	56	33	2	56	41	5	75	13	418
27. INSTALLED TRANSFORMER COST - UG	Special equipment	\$20,624.42	\$63,370.94	\$65,980.54	\$19,279.02	\$84,295.36	\$60,666.98	\$9,289.15	\$78,043.24	\$53,361.39	\$12,844.95	\$101,681.25	\$19,124.27	\$588,561.51
28. TOTAL TRANSFORMERS PURCHASED - OH	Special equipment	92	119	34	145	0	95	15	49	10	27	13	29	628
29. INSTALLED TRANSFORMER COST - OH	Special equipment	\$57,804.40	\$75,635.80	\$21,018.80	\$96,993.00	\$0.00	\$59,974.00	\$9,531,65	\$32,960.39	\$6,868.85	\$17,709.67	\$8,924.43	\$20,922.19	\$408,343.18
TOTAL METERS PURCHASED	Special equipment	0	0	0	0	784	768	0	0	0	0	768	0	2320
31. INSTALLED METER COST	Special equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$68,394.54	\$64,739.33	\$4,492.25	\$84.30	\$84.30	\$84.30	\$66,098.69	\$84.30	\$204,062.01
32. OTHER SPECIAL EQUIPMENT PURCHASED	Special equipment	\$0.00	(\$1,690.70)	\$632.47	\$0.00	\$0.00	\$0.00	\$5,535.70	\$3,879.57	\$2,025.00	\$0.00	\$33,058.96	\$0.00	\$43,441.00

6
A 20
DAT
ICAL
TOR

HISTORICAL DATA 2007										•				
UNDERGROUND	Notes:	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
NEW SERVICES	From Mileage Report	53	61	87	70	61	84	66	116	88	76	97	96	955
1. WORK ORDERS - CONSTRUCTED ON 219	From 219 Report	48	71	127	84	75	97	74	141	87	79	98	91	1072
2. LINEAR FEET: TOTAL	Formula	5934	14217	39189	12586	14148	13053	10558	40504	12193	18570	12925	10820	204697
PRIMARY	From Mileage Report	566	4353	23717	3648	7054	3267	2784	23072	4422	7105	1543	825	82356
SECONDARY	NA													
SERVICES	From Mileage Report	5368	9864	15472	8938	7094	9786	7774	17432	7771	11465	11382	9995	122341
3. AVERAGE LENGTH (2/1)	Fomula	124	200	309	150	189	135	143	287	140	235	132	119	191
 COST OF UNDERGROUND (219) 	From 219 Report	\$34,848.30	\$101,308.11	\$300,804.09	\$74,087,69	\$74,661.61	\$65,079.09	\$53,427.74	\$254,192.50	\$55,900.06	\$109,052.99	\$75,198.98	\$119,709.13	\$1,318,270.29
5. AVERAGE COST (4/1)	Formula	\$726.01	\$1,426.87	\$2,368.54	\$882.00	\$995.49	\$670,92	\$722.00	\$1,802.78	\$642.53	\$1,380.42	\$767.34	\$1,315.48	\$1.229.73
6. NEW TRANSFORMERS	From Mileage Report	7	26	50	21	16	16	17	28	19	17	16	23	256
7. INSTALLED COST PER TRANSFORMER	Formula	\$1,438.36	\$2,370.90	\$1,840.79	\$1,281.43	\$6,468.46	\$1,330.88	\$2,427.92	\$2,627.18	\$1.578.77	\$2,607.11	\$3,877.88	\$2,002.51	\$1.754.17
8. NEW METERS	Formula 11	53	61	87	70	61	84	99	116	88	76	67	96	955
 INSTALLED COST PER METER 	Special Equipment	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$107.05	\$107.16	\$89.58
OVERHEAD														
NEW SERVICES	Erron Udeana Renord	13	15	18	14	18	18	at.	55	44	52	15	20	100
10 WORK ORDERS CONSTRUCTED ON 219	From 219 Renord	17	33	53	25	40	40	34	63	33	40	21	45	440
11 1 INEAD FEET - TOTAT	Formila	2745	5472	3054	5207	0000	3777	Parc	17496	100	aaur	12	17540	10030
		54.14 54.14	2120	0000	10-50	1001	21.61	1017	01001	0,00	000	4/70	64071	theon
FRUMARY	FIGTT MARGE HEROT			7607	202		3243		10942 1111111111111111111	9422	2694	2003 201111111111111111	10810	1301
SECUNDARY	YN Y													
SEKVICES	From Milcage Report	1290	1351	1002	9/01	133B	484	1AA	494	1253	1384	-3/A	1/39	13284
12. AVERAGE LENGTH (11/10)	Formula	161	166	75	212	219	93	80	277	323	102	343	279	194
13. COST OF NEW CONSTRUCTION (219)	From 219 Report	\$67,301.31	\$89,768.49	\$129,437.06	\$45,217,56	\$96,320.17	\$81,034.70	\$51,900.61	\$175,754.56	\$128,369.17	\$131,297.90	\$79,978.31	\$179,025.81	\$1,255,405.65
14. AVERAGE COST NEW SERVICE (13/10)	Fomula	\$3,958.90	\$2,720.26	\$2,442.21	\$1,808,70	\$2,293.34	\$2,025.87	\$1,674.21	\$2,789.75	\$3,889.97	\$3,282.45	\$2,962.16	\$3,978.35	\$2,796.00
15. NEW TRANSFOMERS	From Mileage Report	15	26	34	10	33	25	14	36	19	34	18	22	286
16. INSTALLED COST PER TRANSFORMER	Formula	\$806.90	\$940.17	\$1,034.39	\$955.11	\$724.78	\$810.52	\$868.96	\$1,053.88	\$917.91	\$947.20	\$896.77	\$1,076.65	\$910.20
17. NEW METERS	Fomula	13	15	18	14	16	18	18	33	18	23	15	20	221
18. INSTALLED COST PER METER	Special equipment	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$86.07	\$107.05	\$107.16	\$89.58
19. SECURITY LIGHT TOTAL	From Mileage Report	10	06	50	21	31	19	14	40	20	64	25	48	432
20. INSTALLED COST PER LIGHT	From 219 Report	\$890.03	\$546.71	\$605.86	\$554.23	\$442.43	\$552.18	\$609.58	\$583.49	\$402.71	\$653.10	\$367.03	\$688.84	\$574.68
21. SYSTEM IMPROVEMENTS - TOTAL	From 216 August 852 4 8.0.	+	2	10	2	9	17	4	13	σ	8	8	9	91
22. AVERAGE COST OF SYSTEM IMPROVEMEN	I From 219 Report	\$1,279.68	\$1,142.79	\$7,181.16	\$1,052.00	\$2,056.76	\$842.37	\$1,077.08	\$1,023.73	\$1,115.67	\$591.26	\$644.51	\$4,681,48	\$1,890.71
23. POLE REPLACEMENTS	From 218 Report 6064 8.0.	ß	71	25	4	35	57	49	20	28	71	23	67	458
24. AVERAGE COST PER REPLACEMENT	From 219 Report	\$3,868.73	\$2,055.40	\$1,828.54	\$2,646.11	\$1,300.38	\$1,515.30	\$1,796.44	\$2,135.76	\$2,849.08	\$1,502.51	\$1,748.69	\$2,441.89	\$2,140.74
25. TOTAL OF WORK ORDERS (1+10+19+21)	Formula	76	201	240	132	154	173	123	257	149	191	158	190	2044
26. TOTAL TRANSFORMERS PURCHASED - UG	Special equipment	28	6	9	28		81	2	13	2	18	9	23	252
27. INSTALLED TRANSFORMER COST - UG	Special equipment	\$83,424.82	521,338.11	811,044.74	\$33,88U.12	\$19,405.37	\$107,800.99	\$4,855.84	534,153.40	57,893.84	\$46,928.05	\$23,267.27	\$46,057.68	\$442,050.23
28. TOTAL TRANSFORMERS PURCHASED - OH	Special equipment	20	81	26	4	6	58	57	29	58	68	53	22	529
29. INSTALLED TRANSFORMER COST - OH	Special equipment	\$56,482.70	\$76,153.91	\$26,894,19	\$3,820.44	\$2,174.33	\$47,010.38	\$49,530.87	\$30,562.60	\$53,238.82	\$64,409.84	\$47,528.73	\$23,686.35	\$481,493.16
30 TOTAL METERS PURCHASED	Speciel equipment	0	8	0	0	0	6	0	0	12	0	6912	6912	13853
31. INSTALLED METER COST	Special equipment	\$0.00	\$3,028.75	\$0.00	\$0.0D	\$0.00	\$3,677.35	\$0.00	\$0.00	\$4,959,53	\$0.00	\$739,929.60	\$740,661.00	\$1,492,256.23
32. OTHER SPECIAL EQUIPMENT PURCHASED	Special equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,319.39	\$0.00	\$1,640.37	\$26,444.88	\$7,202.69	\$0.00	\$1,770.21	\$40,377.54

HISTORICAL DATA 2005-2007

\$3,953,511 675 1347 260703 220851 39852 \$4,282,810 \$2,299,942 \$836,900 675 1296 282 6141 756 \$121,133 3000 247068 367023 194 \$70,875 \$744,789 \$539,153 006 \$2,064,703 \$1,444,479 41559 \$4,476,769 614091 768 \$1,443,724 \$315,000 \$1,326,151 1587 5 \$3,954,811 TOTAL \$1,427,603 \$3,525 \$575 \$1,978 \$1,009 225 \$105.00 \$2,373 13853 1000 204697 \$1,363 \$1,945 225 449 86901 73617 13284 286 432 300 2047 252 \$442,050 529 \$481,493 \$1,492,256 \$40,378 82356 122341 1000 \$105.00 194 2 191 \$1,318,270 ESTIMATED 36 MONTH WORK PLAN PERIOD 2010 \$575 \$1,492,256 \$40,378 \$1,879 73617 \$3,406 286 \$975 225 \$105.00 \$1,911 529 \$481,493 13853 82356 122341 \$1,317 256 1000 225 449 86901 13284 194 \$1,427,603 432 300 \$2,293 2047 252 \$442,050 1000 204697 \$1,318,270 \$105.00 6 2009 \$105.00 942 225 \$1,816 286 \$575 \$2,216 73617 \$1,427,603 432 300 \$40,378 1000 449 86901 13284 194 \$1,847 252 \$442,050 529 \$481,493 \$1,492,256 1000 82356 122341 256 \$105.00 225 3291 94 2047 13853 191 \$1,318,270 1273 204697 2008 \$89.58 \$2,140.74 \$1,492,256.23 \$1,318,270.29 \$1,754.17 \$89.58 13284 \$1,427,603.17 \$3,179.52 \$910.20 0 \$574.68 0 \$94.00 \$442,050.23 \$481,493.16 13853 \$40,377.54 \$1,229.73 286 432 \$1,784.07 2047 252 529 256 955 449 86901 73617 194 221 300 225 ACTUAL 2007 1072 204697 82356 122341 191 \$108.92 \$1,491.99 \$434,556.35 \$568,909.95 \$61,629.88 \$112 \$1,818.10 \$478,968.23 1477600 \$731.58 \$484.72 2500 555926 1597 1248 132245 214 2,543.51 299 405 8 318 608 1375 225 299 609 27444 398 292 313589 1157 104801 154451 159137 291 \$568,910 \$61,630 \$434,556 \$112 \$1,492 \$1,818 2500 \$478,968 1248 398 \$732 299 \$109 \$485 292 318 608 5401 1375 313589 \$1,157 \$1,597 \$109 299 609 132245 27444 214 \$1,477,600 \$2.544 405 80 159137 555,926 104801 154451 291 2005-2007 AVERAGE , 1214 3743 1826 314404 82332 1193 \$2,195 898 \$1,454 \$4,476 954 1824 16203 463354 872 898 396736 \$7,631 337 \$5,454 7501 4124 940766 477412 \$3,470 \$4,790 \$327 643 \$4,432,801 \$327 877 \$1,436,905 \$1,303,669 \$1,706,730 \$184,890 676 \$4,667,779 2005-2007 TOTAL AVERAGE COST OF SYSTEM IMPROVEMENTS TOTAL TRANSFORMERS PURCHASED - UG TOTAL TRANSFORMERS PURCHASED - OH OTHER SPECIAL EQUIPMENT PURCHASED TOTAL OF WORK ORDERS (1+10+19+21) **INSTALLED TRANSFORMER COST - UG** INSTALLED TRANSFORMER COST - OH INSTALLED COST PER TRANSFORMER INSTALLED COST PER TRANSFORMER AVERAGE COST NEW SERVICE (13/10) COST OF NEW CONSTRUCTION (219) AVERAGE COST PER REPLACEMENT SERVICE UPGRADES(SERIES 602) NEW SERVICES - CONSTRUCTED LINEAR FEET: TOTAL NEW SERVICES CONSTRUCTED LINEAR FEET - TOTAL COST OF UNDERGROUND (219) INSTALLED COST PER METER TOTAL METERS PURCHASED INSTALLED COST PER METER INSTALLED COST PER LIGHT AVERAGE LENGTH (11/10) INSTALLED METER COST SECURITY LIGHT TOTAL POLE REPLACEMENTS AVERAGE LENGTH (2/1) NEW TRANSFORMERS NEW TRANSFOMERS AVERAGE COST (4/1) UNDERGROUND SECONDARY SECONDARY NEW METERS SERVICES NEW METERS SERVICES PRIMARY PRIMARY OVERHEAD 12. 15. 16. 18. 19. 20. 21. 23. 24. 25. -- *c*i യ് ന് ണ് ഫ് · 0.

PROJECTED



.

SUBSTATION LOADING TABLE PROJECTED

																				r		_	T	Г	Т	Т	Т	T	T	Т	T		_		
Q	PERCENT	CAPACITY	85	80	17	56	65	67	31	67	84	64	85	92	35	53	118	83	45	60	30	41	- CL	70	27	00	02	0/	65	81	48	115	82		~
PROJECTE	WINTER	2012	15642	11559	5825	8133	9446	9629	4452	11739	15408	13470	15560	16861	5077	7596	17003	3003	3766	0024	6303	SLVL	10447	1044/	12440	6666	4777	11269	4922	11732	8796	21120	5207		292253
_	ERCENT	APACITY	79	86	70	67	74	70	65	97	76	111	80	85	31	66	20	40	00	60	6	17	08	73	74	95	32	82	61	63	85	96	69		
ROTED	TIMMER	2011 C	11682	10530	LCOV	1704	3202	10064	10001	17877	11321	18892	13498	02501	VUET	1004	0400	12104	2333	310/	3876	4555	10121	10546	9169	13732	4285	11897	4177	9108	12599	14751	3526	2420	269516
ē	S LINDO	PACITY		t		/.9	49	10	80	17	200	22	- PE	4/	80	15	46	「「「「「「「」」」	72	39	52	26	35	63	69	58	29	68	56	12	CV	24		71	
		VINIEK F	2000	13602	10001	5065	7072	8214	8373	3871	10208	13398	51/11	13530	14662	4415	6605	14785	2611	2840	3938	5481	6503	9084	10823	8312	4154	0100	0004	4200	10202	/649	C0E81	4278	254133
		ERCENT	APACITY	68	74	69	58	64	61	57	85	66		69	74	27	57	73	17	51	68	23	59	64	45	63	280	07	7/	53	66	74	84	60	
		SUMMER P	2007 C	10158	9164	4197	8372	6309	8751	5590	11197	9844	16428	11737	10930	3534	5642	10525	2029	CULC	3370	1905	1000	0010	1/16	C/6/	11941	07/5	10345	3632	7920	10956	12392	3066	234362
	ЛТ	VINTER	RATING	18.340	14 428	7.533	14.428	14.428	14.428	14.428	17,550	18,340	20,960	18.340	18.340	14.428	14 478	14 478	3 675	0,040	20271	090 00	20,900	18,340	14,428	15,792	14,428	14,428	14,428	7,581	14,428	18,340	18,340	6.327	
	MAX. LID	SUMMER	RATING	14 840	17 220	2012	800,0	0.815	807 11	0.815	13 230	14 840	16 960	16 960	14 840	12 220	210,010	C18,4	14,420	000'7	5,300	4,922	16,960	14,840	14,428	12,320	14,428	13,230	14,428	6,826	14.428	14 840	14 840	\$ 120	22462
)				SUBSTATION	BALLTOWN	BARDSTOWN SHOP. CIK.	BEAM	BEULAH BEAM	BLOOMFIELD	BLUE LICK	BLUEGRASS PAKKWAY	BROOKS	CEDAR GRUVE	CEDAR GROVE INDUSTRIAL	DARWIN THOMAS	EAST BARDSTOWN	FREDRICKSBURG	GOSPEL HILL	JOE TICHENOR	KNOB CREEK	LEBANON JUNCTION #1	LEBANON JUNCTION #2	LITTLE MOUNT	MT. WASHINGTON # 1	MT WASHINGTON # 2	NORTH SPRINGFIELD	PI FASANT GROVE	errebuennsvill I.F.#1		SHEPHERUS VILLETZ		TAYLOKS VILLE	W MI. WASHINGTON	WEST BAKDSTOWN	WOOSLEY

TOTALS

**** FLAGGED AT 90% (projected)

****DEATSVILLE TO ELIMINATE LOADING PROBLEMS ON JOE TICHENOR AND WEST BARDSTOWN IN 2008 ****CEDAR GROVE INDUSTRIAL PARK TO BE DOUBLED IN SIZE IN 2009 ****BROOKS TO BE DOUBLED IN SIZE IN 2009 ****EAST BARDSTOWN LOAD TO BE SHIFTED TO BLUEGRASS PARKWAY IN 2009

IMIT	WINTER	RATING	18,340	14,428	7,533	14,428	14,428	14,428	14,428	17,550	18,340	20,960	19,439	18,340	14,428	14,428	14,428	3,625	7,250	7,575	20,960	18,340	14,428	15,792	14,428	14,428	14,428	7,581	14,428	18,340	18,340	6,327
MAX. I	SUMMER	RATING	14,840	12,320	6,095	14,428	9,815	14,428	9,815	13,230	14,840	16,960	16,960	14,840	13,230	9,815	14,428	2,650	5,300	4,922	16,960	14,840	14,428	12,320	14,428	13,230	14,428	6,826	14,428	14,840	14,840	5,120
	WINTER	RATING	20,990	17,550	11,650	20,990	17,550	20,990	20,990	17,550	20,990			20,990	17,550	16,320	20,990	5,830	8,960	8,960	1	20,990	20,990	17,550	20,990	17,550	20,990	11,650	20,990	20,990	20,990	8,960
USE	SUMMER	RATING	15,810	13,230	10,130	15,810	13,230	15,810	15,810	13,230	15,810	1		15,810	13,230	12,300	15,810	5,430	8,060	8,060		15,810	15,810	13,230	15,810	13,230	15,810	10,130	15,810	15,810	15,810	8,060
HS F	VOLTAGE	КV	69	69	69	69	69	69	69	69	69	161	161	69	69	34.5	69	34.5	69	69	161	69	69	69	69	69	69	69	69	69	69	69
	AMP	RATING	125	100	65	125	100	125	125	100	125			125	100	200	125	65	50	50		125	125	100	125	100	125	65	125	125	125	50
HANGER	S&W	RATING	19,439	14,428	14,428	14,428	14,428	14.428	14.428	19.439	25,206	25.206	19.439	19,439	14,428	14,428	14.428	7,581	14,428	7,581	25,206	19,439	14,428	25,206	14,428	14,428	14,428	7,581	14,428	19,439	19,439	14,428
REG TAP C	AMP	RATING	006	668	668	668	668	668	668	006	1167	1167	006	006	668	668	668	351	668	351	1167	006	668	1167	668	668	668	351	668	006	006	668
ING	WINTER	RATING	34,451	23,403	15.105	23,403	15,105	23 403	15105	23 403	34.451	34 451	23 403	34.451	23.403	15,105	23 403	7 575	23.403	7.575	34.451	23,403	23.403	30,255	23,403	23,403	23,403	15,105	23.403	23.403	34,451	15,105
UNIN MUND	SUMMER	RATING	26,362	17,908	9.815	17.908	9.815	17 908	0.815	17 908	26362	26 267	17 908	26362	17 908	9 815	17 908	C 4 977	17.908	4.922	26 362	17.908	17,908	19.660	17.908	17.908	17 908	9.815	17 908	17 908	26.362	9,815
REGU	BASE.	RATING	686	466	333	466	113	466	333	466	686	686	466	686	466	555	466	167	466	167	686	466	466	667	466	466	466	333	466	466	686	333
	WINTER	RATING	18.340	15.792	7 533	18 340	15 707	10 340	15 707	18 340	18.140	00000	20.040	18 340	OFC.01	15,707	18 2.10	5675	7.250	7 896	20 960	18 340	18 340	15 792	18.340	18.340	18 340	8 436	07831	18 340	18,340	6,327
NSEODMED	STIMMED	BATING	14.840	12 320	6 005	14 840	002 01	01011	12,220	07071	010141	12,020	16,060	14 840	14,010	17 270	070'71	7 650	2 300	900-12	16 060	14,840	14 840	12 320	14 840	14 840	14 840	6 876	14 840	14 840	14 840	5,120
Val	DACT	DATING	14 000	11 200	5 750	14 000	11 200	11,400	14,000	11,200	14,000	14,000	10,000	14 000	14,000	11 200	11,400	14,000	2,000	2,000	0001	14,000	14 000	11 200	14 000	14 000	14 000	6 440	14 000	14 000	14 000	4,830
L		CTIDER 1 TYON	BALTTOWN	DADRETOWAL SHOP CTR	TTTO TOTIC VINO ISONIUG		BEULAH BEAW	BLUUMFIELD	BLUE LICK	BLUEGRASS PAKKWAY	BKUUKS	CEDAK GRUVE	CEDAR GRUVE INDUSTRIAL	DAKWIN IHUMAS	EAST BAKUSTOWN	FREUKICNSBUNG	GOSPEL HILL	JUE IICHENUK	LINUB UREEN		LEBANON JUNCTION #2	NT WASHINGTON #1	ALT WASTINGTON #2	NICD TH SEENING FIFT D	DI FASANT GROVE			SALET HENUS VILLE #2	TAVA ODCITI T	IN ME WASHER	W. MI. WASHINGTON	WOOSLEY

		•7

STATUS OF 2005-2008 CONSTRUCTION WORK PLAN

SERIES

301	COMPLETED	
302	CARRYOVER	
303	CARRYOVER	
304	CARRYOVER	
305	DELETED	
306	IN PROGRESS OF BEING	GOMPLETED
307	COMPLETED	
308	COMPLETED	
309	COMPLETED	
310	CARRYOVER	
311	DELETED	we are still waiting for hwy 31e road relocation which is in the process of being completed
312	CARRYOVER	
313	COMPLETED	
314	DELETED	
315	COMPLETED	
316	DELETED	
317	COMPLETED	
318	DELETED	
319	CARRYOVER	
320	DELETED	
321	COMPLETED	

300 SERIES SALT RIVER ELECTRIC SYSTEM PLANNING REPORT 2008-2011 CONSTRUCTION WORK PLAN DISTRIBUTION COST SUMMARY

SUBSTATION	FEEDER NUMBER	RUS CODE	NEW CONDUCTOR SIZE	COST PER MILE	NO. OF MILES	EXTENDED COST
калл.томи Balltown Substation to Ky 46	F2 & F4	301	D.C. 2ACWC TO D.C. 336.4 ACSR	\$148,000	1.70	\$251,600
ARDSTOWN SHOPPING CENTER *** Bardstown Shopping Center to Botland Pottershop	F2 F2	302 303	3 PHASE 2ACWC TO 3 PHASE 336.4 ACSR 1 PHASE 6ACWC TO 3 PHASE 336.4 ACSR	\$81,000 \$81,000	2.48 1.40	\$200,880 \$113,400
sloomfield *** Chaplin Road	F4	304	3 PHASE 1/0 CU TO 3 PHASE 336.4 ACSR	\$81,000	2.20	\$178,200
CEDAR GROVE Cedar Grove Substation to Clarks Lane	F3	305	3 PHASE 2ACWC TO 3 PHASE 336.4 ACSR	\$81,000	2.35	\$190,350
октн springrield North Springfield to Thompsonville	F1	306	3 PHASE 2ACWC TO 3 PHASE 336.4 ACSR	\$81,000	2.66	\$215,460
אנטאנטאנאנאנאנאנאנאנאנאנאנאנאנאנאנאנאנא	F4 & F5	307	D.C. 1\0 CU TO D.C. 3336.4 ACSR	\$148,000	4.29	\$634,920
ракити тноилая *** Plum Ridge Road Dale Lane	F4 F3	308 309	1 PHASE 6ACWC TO 3 PHASE 1/0 ACSR 3 PHASE 2ACWC TO 3 PHASE 336.4 ACSR	\$81,000 \$81,000	1.65 3.57	\$133,650 \$289,170
киов скевк Pendleton Hill Road	F	310	1 PHASE 6ACWC TO 3 PHASE 1/0 ACSR	\$81,000	1.49	\$120,690
DEATSVILLE South St Gregory Road	Ë.	311	1 PHASE 2ACSR TO 3 PHASE 1\0 ACSR	\$81,000	0.69	\$55,890

300series

TOTAL \$2,384,210

2008-2011 CONSTRUCTION WORK PLAN CONDUCTOR REPLACEMENT SERIES 608

EXTENDED COST	\$86,800 \$146,940	\$233,740
COST PER MILE	\$62,000 \$62,000	TOTAL
CONDUCTOR CHANGE	6A cwc to 1/0 ACSR 6A cwc to 1/0 ACSR	
DISTANCE	1.4	3.8
COUNTY	Bullitt Bullitt	TOTAL MILES
JOB NAME	Horsefly Hollow Road Mt Elmira Road	

20008-2011 CONSTRUCTION WORK PLAN SECTIONALIZING EQUIPMENT (SERIES 603)

 \rightarrow

NEW OCR (VACUUM)	60	\$2,200	\$132,000
UPGRADE EXISTING OCR	75	\$340	\$25,500
CUTOUTS	560	\$100	\$56,000
OCR MAINTENANCE	347	\$130	\$45,110
AIR BREAK SWITCHES (GAOB)	25	\$5,000	\$125,000

TOTAL

\$383,610

DISTRIBUTION LINE VOLTAGE REGULATORS

CFR CODE: 604

ESTIMATED COST: \$687,000

BALLTOWN	F1	1 PHASE 100 AMP REGULATOR	\$8,800
	F4	1 PHASE 100 AMP REGULATOR	\$8,800
	F4	1 PHASE 100 AMP REGULATOR	\$8,800
BARDSTOWN SHOPPING CENTER	F1	3 PHASE 150 AMP REGULATOR BANK	\$27,700
	F2	1 PHASE 100 AMP REGULATOR	\$8,800
BLOOOMFIELD	F1	3 PHASE 300 AMP REGULATOR BANK	\$46,300
	F4	3 PHASE 150 AMP REGULATOR BANK	\$27,700
EAST BARDSTOWN	F1	3 PHASE 300 AMP REGULATOR BANK	\$46,300
	F1	3 PHASE 300 AMP REGULATOR BANK	\$46,300
	F2	1 PHASE 100 AMP REGULATOR	\$8,800
	F2	1 PHASE 100 AMP REGULATOR	\$8,800
CEDAR GROVE	F2	1 PHASE 100 AMP REGULATOR	\$8,800
MT WASHINGTON	F6	3 PHASE 300 AMP REGULATOR BANK	\$46,300
NORTH SPRINGFIELD	F1	3 PHASE 300 AMP REGULATOR BANK	\$46,300
÷	F5	3 PHASE 300 AMP REGULATOR BANK	\$26,600
SHEPHERDSVILLE #1	F3	3 PHASE 150 AMP REGULATOR BANK	\$27,700
SHEPHERDSVILLE #2	F6	3 PHASE 150 AMP REGULATOR BANK	\$27,700
SOUTH SPRINGFIELD	F2	1 PHASE 100 AMP REGULATOR	\$8,800
TAYLORSVILLE	F2	3 PHASE 300 AMP REGULATOR BANK	\$46,300
	F4	1 PHASE 100 AMP REGULATOR	\$8,800
WEST BARDSTOWN	F4	3 PHASE 150 AMP REGULATOR BANK	\$27,700
JOE TICHENOR	F3	3 PHASE 150 AMP REGULATOR BANK	\$27,700
	F3	1 PHASE 100 AMP REGULATOR	\$8,800
	F4	3 PHASE 150 AMP REGULATOR BANK	\$27,700
DARWIN THOMAS	F2	1 PHASE 100 AMP REGULATOR	\$8,800
	F3	3 PHASE 150 AMP REGULATOR BANK	\$27,700
FREDRICKSBURG	F1	1 PHASE 100 AMP REGULATOR	\$8,800
	F3	3 PHASE 150 AMP REGULATOR BANK	\$27,700
LITTLE MOUNT	F4	3 PHASE 150 AMP REGULATOR BANK	\$27,700

TOTAL \$687,000

2008-2011 CONSTRUCTION WORK PLAN CAPACITORS (SERIES 605)

-

TCHED CAPACITORS 42	25 \$1,830 47 \$3 120	\$45,750 \$131,040

2008-2011 CONSTRUCTION WORK PLAN AMR HUNT TECHNOLOGY TURTLE II UPGRADE

THREE PHASE METERS	228	\$1,500	\$342,000
RESIDENTIAL METERS	31,100	\$105	\$3,265,500
SUBTATION EQUIPMENT	20	\$44,750	\$895,000

SA	ETRIVERIEGGISUBSTATIONS	2007 KW	2011 KW
		ACTUAL 02-07	PROPOSED
01	BALLTOWN	12614	13875
02	BARDSTOWN SHOPPING CT	9840	10824
03	BEAMS	4954	5449
04	BLOOMFIELD	7665	8432
05	BLUE LICK	8423	9265
06	BROOKS	9809	10790
07	EAST BARDSTOWN	14210	15631
80	GOSPEL HILL	6217	6839
09	LEBANON JCT #1	2736	3010
10	OWENS ILLINOIS	5869	6456
11	CEDAR GROVE	12943	14237
12	MT. WASHINGTON #1	6129	6742
12	MT, WASHINGTON #2	8680	9548
13	NORTH SPRINGFIELD	10174	11191
14	PLEASANT GROVE	9150	10065
15	SHEPHERDSVILLE #1	11941	13135
15	SHEPHERDSVILLE #2	3726	4099
16	S. SPRINGFIELD	4094	4503
17	TAYLORSVILLE	9785	10764
18	WEST BARDSTOWN	14575	16033
19	WOOSLEY	3911	4302
20	W. MT. WASHINGTON	10946	12041
21	BELULAH BEAM	8732	9605
22	JOE TICHENOR	13730	15103
23	DARWIN THOMAS	12364	13600
24	KNOB CREEK	2457	2703
25	LEBANON JCT. #2	3586	3945
26	FREDERICKBURG	4324	4756
27	LITTLE MOUNT	5357	5893
28	BLUEGRASS PARKWAY	5590	6149
29	CEDAR GROVE INDUSTRIAL PARK	16428	18071
30	DEATSVILLE	0	5210

TOTAL

260959

YEAR: 2009

PROJECT NAME: Balltown Substation to Ky 46

CFR CODE: 301

ESTIMATED COST: \$251,600

*** Carryover Item 302 2005-2008 CWP

DESCRIPTION OF PROPOSED CONSTRUCTION:

A 1.7 mile conversion from DC 2acwc to DC 336.4 acsr along HWY 31E in central Nelson County. This project is on Balltown Substation fdr 02 and 04.

REASON FOR PROPOSED CONSTRUCTION This project will correct voltage problems on circuits 02 and 04 that dip to 114 volts.

RESULTS OF PROPOSED CONSTRUCTION:

With the construction of this project all design criteria items will be met.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

Alternative number 2 includes the use of regulators to solve voltage problems. This plan is not as reliable as the conversion work. Economic analysis suggests that the conversion project is the best plan for the future.

COMPARISON OF TOTAL ACCUMULATED COST and kWH LOSSES OF PLAN 1 vs PLAN 2

(All costs are the the accumulated present worth of the inflated cost)

TOTAL COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	36,900	81,900
2009	75,100	218,000
2010	117,500	358,700
2011	201,600	516,100
2012	285,100	678,100
2013	368,200	844,700
2018	782,400	1,756,700
2023	1,207,500	2,825,300
2028	1,661,500	4,090,100
2033	2,163,400	5,599,400
2038	2,749,600	7,416,700

For first 6 years, favor: PLAN 1 by 56.4%





TOTAL CAPITALIZED COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	0	0
2009	0	0
2010	2,880	0
2011	46,150	11,920
2012	87,450	23,300
2013	126,860	34,150
2018	298,500	81,400
2023	434,300	118,800
2028	541,800	148,400
2033	626,900	171,800
2038	709,700	194,600

For first 6 years, favor: PLAN 2 by 73.1%



At 30 years, favor PLAN 2 by 72.6%



TOTAL COST OF LOSSES (\$)

YEAR	PLAN 1	PLAN 2
2008	36,930	81,850
2009	75,100	217,950
2010	114,580	358,680
2011	155,400	504,220
2012	197,630	654,770
2013	241,326	810,536
2018	483,900	1,675,300
2023	773,200	2,706,500
2028	1,119,700	3,941,700
2033	1,536,500	5,427,600
2038	2,039,900	7,222,100

For first 6 years, favor: PLAN 1 by 70.2%



At 30 years, favor PLAN 1 by 71.8%



TOTAL ACCUMULATED LOSSES (MWH)

		the second s
YEAR	PLAN 1	PLAN 2
2008	590	2,120
2009	1,220	4,360
2010	1,890	6,740
2011	2,600	9,270
2012	3,350	11,950
2013	4,150	14,790
2018	8,930	31,830
2023	15,350	54,730
2028	23,980	85,500
2033	35,580	126,860
2038	51,170	182,440



At 30 years, favor PLAN 1 by 72.0%



3.25% Given annual inflation rate

4.79% Given annual present worth rate



 PLAN 1
 PLAN 1
 BALLTOWN FDR 04 & 02 WITH LINE CONVERSION

 PLAN 2
 PLAN 2
 BALLTOWN FDR 04 & 02 WITH REGULATORS

2013	2012	2011	2010	2009	2008	YEAR		16.84% 5.22 0.039 795.00 3.0 51.37 0.304	0.10 5.14	2008 3.25 4.79	PLAN:	ANNUAL
		3 PHASE 150 AMP REGULATOR 3 PHASE 300 AMP REGULATOR				DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMAND YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	"IXED CHARGE RATE (Sum of Above) DEMAND COST (\$/kW/MONTH) ENERGY COST (\$/kWH) CIRCUIT or AREA PEAK MONTHLY AVE CIRCUIT or AREA ANNUAL GROWTH R/ ANNUAL LOAD FACTOR (%) (~ 40 to 90° CALCULATED LOSS FACTOR	TAX RATE (%) DEPERECIATION RATE (%) DEPERERATIONS & MAINTENANCE RATI	9RESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) 3LENDED INTEREST RATE (%) (& Pre	PLAN 2 BALLTOWN FDR 04 & 02 WITH F SALT RIVER ELECTRIC	& ACCUMULATED TOTALS of the
		27,700 46,300				PRESENT ESTIMATED COST (\$) CONSTRUCTIONMAINTENANCE	LOSSES (Optional)	RAGE DEMAND LOSSES (KW) NTE (%)	Ξ (%)	sent Worth Factor)	REGULATORS ENGINEER:	PRESENT WORTH of the I
921.6	894.8	868.7	843.4	818.9	0.0	PEAK kW (avg./mo.)		YEAR 2013 2018 2023 2028 2033 2038			GARY PILE 11/15/07	NFLATED
2,843,896 14,794,146	2,680,644 11,950,250	2,526,765 9,269,606	2,381,718 6,742,841	2,244,998 4,361,123	2,116,126 2,116,126	Annual kWH Accum. kWH	TOTAL COST OF A	MWH LOSSES 14,790 31,830 54,730 85,500 126,860 182,440	PLAN			COSTS of C
10,855 34,151	11,375 23,296	11,920 11,920	0 0	0 0	0 0	ANNUAL for Year (Top); FIXED CHARGES MAIN	ADDED MAINTENANCI	PRESENT WC FIXED CHARGES MAIN 34,200 81,400 118,800 148,400 171,800 194,600	1 SUMMARY (Accum			CARRYING CHARGE
00	0 0	00	0 0	0 0	0 0	ACCUMUL	\$74,000	TENANCE	ulated Tota			S, MAINT
155,764 810,536	150,551 654,771	145,542 504,220	140,727 358,678	136,099 217,951	81,852 81,852	ATED through	-2008 [LATED COST LOSSES 810,500 1,675,300 2,706,500 3,941,700 5,427,600 7,222,100	ls, Rounded			ENANCE
166,620 844,686	161,927 678,067	157,462 516,140	140,727 358,678	136,099 217,951	81,852 81,852	Year (Bottom) OW TOTALS	DOLLARS	(\$) TOTALS 844,700 1,756,700 2,825,300 4,090,100 5,599,400 7,416,700	Off)			and LOSSES

10:09 A

.5

Page 1

	2018		2017		2016			2015		2014	YEAR	
											or ADDITIONAL MAINTENANCE	DESCRIPTION of NEW CONSTRUCTION
											CONSTRUCTIONMAINTENANCE	PRESENT ESTIMATED COST (\$)
	1068.4		1037.3		1007.1			977.7	r	949.3	PEAK KWA	CALCULA
31,832,345	3,821,958	28,010,387	3,602,562	24,407,825	3,395,760		21 012 084	3,200,830	17,811,235	3,017,089	NNUAL KWH	TED LOSSES
81,423	8,591	72,832	9,003	63,830	9,434	07,000	54 306	988'6	44,510	10,359	FIXED CHARGESMAINTE	YEARLY TOTAL PRESEN
0	0	0	0	0	0	4	2	0	0	0	NANCE	IT WORTH
1,675,315	185,205	1,490,110	178,834	1,311,276	172,714	1,100,004	1 138 563	166,836	971,725	161,190	LOSSES	1 OF INFLA
1,756,738	193,796	1,562,942	187,836	1,375,105	182,148	1,104,001	1 102 057	176,722	1,016,235	171,549	ROW TOTALS	TED COST (\$)

	CALCULAT	TED LOSSES	ANNUAL PRES	ENT WORTH OF	INFLATED	COST (\$)
YEAR	PEAK KWA	NNUAL KWH	FIXED CHARGES M	IAINTENANCE	LOSSES R	OW TOTALS
2019	1100.5	4,054,715	8,198	0	191,839	200,038
2020	1133.5	4,301,647	7,824	0	198,748	206,572
2021	1167.5	4,563,618	7,466	0	205,943	213,409
2022	1202.5	4,841,542	7,125	0	213,438	220,562
2023	1238.6	5,136,392	6,799	0	221,244	228,043
2024	1275.7	5,449,198	6,488	0	229,377	235,865
2025	1314.0	5,781,054	6,192	0	237,850	244,042
2026	1353.4	6,133,121	5,909	0	246,678	252,587
2027	1394.0	6,506,628	5,639	0	255,878	261,516
2028	1435.9	6,902,881	5,381	0	265,465	270,845
2029	1478.9	7,323,267	5,135	0	275,456	280,591
2030	1523.3	7,769,254	4,900	0	285,870	290,770
2031	1569.0	8,242,401	4,676	0	296,725	301,401
2032	1616.1	8,744,364	4,462	0	308,040	312,503
2033	1664.6	9,276,895	4,258	0	319,837	324,095
2034	1714.5	9,841,858	4,064	0	332,136	336,199
2035	1765.9	10,441,227	3,878	0	344,959	348,837
2036	1818.9	11,077,098	3,701	0	358,331	362,032
2037	1873.5	11,751,694	3,532	0	372,275	375,807
2038	1929.7	12,467,372	3,370	0	386,817	390,187

10:09 A'

Page 2

⋗
Ż
Z
2
$\overline{\mathbf{A}}$
F
~
Xo
≻
Ö
ö
Ë.
F
5
<u> </u>
Р.
Ξ.
υ
-
Ó.
ㅋ
$\mathbf{\Sigma}$
F
ò
0
ч.
ct.
2
Ø
σ
ΣŪ.
m
ŝ
m
7
5
_
S
õ
¥
~
7
0
-
5
ē
_
Z
NF
NFL
NFLA.
NFLATI
NFLATEL
NFLATED
NFLATED C
NFLATED CC
NFLATED COS
NFLATED COST
NFLATED COSTS
NFLATED COSTS
NFLATED COSTS of
NFLATED COSTS of (
NFLATED COSTS of C,
NFLATED COSTS of CA
NFLATED COSTS of CAR
NFLATED COSTS of CARR
NFLATED COSTS of CARRY
NFLATED COSTS of CARRYIN
NFLATED COSTS of CARRYINC
NFLATED COSTS of CARRYING
NFLATED COSTS of CARRYING C
NFLATED COSTS of CARRYING CH
NFLATED COSTS of CARRYING CHA
NFLATED COSTS of CARRYING CHAF
NFLATED COSTS of CARRYING CHARC
NFLATED COSTS of CARRYING CHARGE
NFLATED COSTS of CARRYING CHARGES
NFLATED COSTS of CARRYING CHARGES,
NFLATED COSTS of CARRYING CHARGES, N
NFLATED COSTS of CARRYING CHARGES, M/
NFLATED COSTS of CARRYING CHARGES, MAI
NFLATED COSTS of CARRYING CHARGES, MAIN
NFLATED COSTS of CARRYING CHARGES, MAINT
NFLATED COSTS of CARRYING CHARGES, MAINTE
NFLATED COSTS of CARRYING CHARGES, MAINTEN
NFLATED COSTS of CARRYING CHARGES, MAINTENA
NFLATED COSTS of CARRYING CHARGES, MAINTENAN
NFLATED COSTS of CARRYING CHARGES, MAINTENANC
NFLATED COSTS of CARRYING CHARGES, MAINTENANCE
NFLATED COSTS of CARRYING CHARGES, MAINTENANCE a
NFLATED COSTS of CARRYING CHARGES, MAINTENANCE an
NFLATED COSTS of CARRYING CHARGES, MAINTENANCE and
NFLATED COSTS of CARRYING CHARGES, MAINTENANCE and I
NFLATED COSTS of CARRYING CHARGES, MAINTENANCE and LU
NFLATED COSTS of CARRYING CHARGES, MAINTENANCE and LO
NFLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOS
NFLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOSS
NFLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOSSE.

2013	2012	2011	2010	2009	2008	YEAR		0.039 223.0 3.0 51.37 0.304	16.84% 5.22	0.10 6.81 5.14	2008 3.25 4.79	PLAN: COMPANY:
		1.7 MILE DC 2ACWC TO 397 SPACER C	1 PHASE 150 AMP REGULATOR 1 PHASE 150 AMP REGULATOR			DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMAND I YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	ENERGY COST (\$/kWH) CIRCUIT or AREA MONTHLY AVERAGE CIRCUIT or AREA ANNUAL GROWTH RA ANNUAL LOAD FACTOR (%) (~ 40 to 90% CALCULATED LOSS FACTOR	DEMAND COST (\$/kW/MONTH)	TAX RATE (%) DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RATE	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Pree	PLAN 1 BALLTOWN FDR 04 & 02 WITH L SALT RIVER ELECTRIC
		251,600	8,800 8,800			PRESENT ESTIMATED COST (\$ CONSTRUCTIONMAINTENANCE	LOSSES (Optional)	PEAK DEMAND LOSSES (KW) .TE (%) 6)		≘ (%)	sent Worth Factor)	INE CONVERSIC ENGINEER: DATE:
258.5	251.0	243.7	236.6	229.7	223.0	(avg./mo.)		2018 2023 2028 2033 2038	<u>YEAR</u> 2013			GARY PIL 11/15/07
797,722 4,149,804	751,929 3,352,083	708,765 2,600,1 5 3	668,079 1,891,388	629,729 1,223,309	593,580 593,580	Annual kWH Accum. kWH	TOTAL COST OF A	8,930 15,350 23,980 35,580 51,170	MWH <u>LOSSES</u> 4,150	PL		
39,409 126,857	41,297 87,448	43,275 46,152	2,877 2,877	00	00	YEARLY TOTAL PRE ANNUAL for Year (Top FIXED CHARGES MAIL	LEW CONSTRUCTION	298,500 434,300 541,800 626,900 709,700	FIXED CHARGES MAI 126,900	AN 1 SUMMARY (Accu		
0 0	0 0	0 0	0 0	0 0	00); ACCUMU NTENANCE	\$269,200 0	00000	NTENANCE	mulated Tota		
43,692 241,326	42,230 197,634	40,825 155,404	39,474 114,579	38,176 75,105	36,928 36,928	LATED through	-2008 -2008	483,900 773,200 1,119,700 1,536,500 2,039,900	LOSSES 241,300	ls, Rounded C		
83,101 368,184	83,527 285,083	84,100 201,556	42,352 117,456	38,176 75,105	36,928 36,928	P Year (Bottom) NOW TOTALS	DOLLARS	1,207,500 1,661,500 2,163,400 2,749,600	1 (\$) 368,200)ff)		

10:09 A'

2018	2017	2016	2015	2014	YEAR
					DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE
					CONSTRUCTIONMAINTENANCE
299.7	291.0	282.5	274.3	266.3	CALCULA PEAK KWA
1,072,071 8,929,073	1,010,530 7,857,002	952,521 6,846,472	897,843 5,893,950	846,303 4,996,107	NNUAL KWH
31,188 298,472	32,682 267,283	34,248 234,601	35,888 200,353	37,607 164,465	YEARLY TOTAL PRE
00	0 0	0 0	0 0	0 0	SENT WORT
51,951 483,900	50,163 431,949	48,447 381,786	46,798 333,339	45,214 286,541	H OF INFLA
83,139 782,372	82,846 699,233	82,695 616,387	82,687 533,692	82,822 451,005	TED COST (\$) ROW TOTALS

	108,503	0	12,235	3,497,137	541.3	2038
-	104,424	0	12,821	3,296,387	525.5	2037
	100,513	0	13,435	3,107,161	510.2	2036
	96,762	0	14,079	2,928,797	495.3	2035
	93,165	0	14,753	2,760,672	480.9	2034
	89,715	0	15,460	2,602,198	466.9	2033
	86,406	0	16,200	2,452,821	453.3	2032
	83,232	0	16,976	2,312,020	440.1	2031
	80,187	0	17,789	2,179,300	427.3	2030
	77,266	0	18,641	2,054,199	414.8	2029
	74,464	0	19,534	1,936,280	402.8	2028
	71,774	0	20,470	1,825,130	391.0	2027
	69,194	0	21,450	1,720,360	379.6	2026
	66,718	0	22,478	1,621,604	368.6	2025
	64,341	0	23,555	1,528,517	357.8	2024
	62,060	0	24,683	1,440,774	347,4	2023
	59,870	0	25,865	1,358,068	337.3	2022
	57,768	0	27,104	1,280,109	327.5	2021
	55,749	0	28,402	1,206,626	317.9	2020
	53,812	0	29,763	1,137,360	308.7	2019
ROW	LOSSES	MAINTENANCE	FIXED CHARGES	ANNUAL KWH	PEAK kW	YEAR
DCOS	INFLATE	SENT WORTH OF	ANNUAL PRE	TED LOSSES	CALCULA	

10:09 A'

 $\frac{1}{2}$

Page 2

YEAR: 2009

PROJECT NAME: Bardstown Shopping Center Substation to Botland

CFR CODE: 302

ESTIMATED COST: \$200,880

*** Carryover Item 303 2005-2008 CWP

DESCRIPTION OF PROPOSED CONSTRUCTION:

This project will consist of a 2.48 mile conversion of three phase 2acwc to three phase 336.4 ACSR from Bardstown to Botland along US 150 in central Nelson County.

REASON FOR PROPOSED CONSTRUCTION:

This job will correct voltage problems on circuit 02 and provide better reliability to a faster than normal growing area.

RESULTS OF PROPOSED CONSTRUCTION: This project will provide for Design Criteria #1 to be met.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

The alternative would be to install one set of regulators on this feeder.Due to the growth in this area and the backfeeding capabilities for important loads on this circuit along with the load being forecast for this three year period it was determined that this alternative would be a temporary solution at best.

COMPARISON OF TOTAL ACCUMULATED COST and kWH LOSSES OF PLAN 1 vs PLAN 2

(All costs are the the accumulated present worth of the inflated cost)

TOTAL COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	44,200	41,000
2009	127,900	113,700
2010	211,300	188,500
2011	294,700	265,600
2012	378,200	345,000
2013	462,000	426,800
2018	889,400	876,300
2023	1,344,100	1,405,700
2028	1,844,800	2,034,500
2033	2,411,700	2,786,600
2038	3,080,500	3,693,000

For first 6 years, favor: PLAN 2 by 7.6%





TOTAL CAPITALIZED COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	0	0
2009	37,930	4,600
2010	74,120	8,980
2011	108,660	13,170
2012	141,620	17,160
2013	173,070	20,970
2018	310,000	37,600
2023	418,400	50,700
2028	504,200	61,100
2033	572,100	69,300
2038	638,200	77,300

For first 6 years, favor: PLAN 2 by 87.9%



At 30 years, favor PLAN 2 by 87.9%



TOTAL COST OF LOSSES (\$)

7

YEAR	PLAN 1	PLAN 2
2008	44,210	40,980
2009	89,920	109,110
2010	137,190	179,560
2011	186,070	252,430
2012	236,630	327,800
2013	288,942	405,778
2018	579,400	838,700
2023	925,700	1,355,000
2028	1,340,600	1,973,400
2033	1,839,600	2,717,300
2038	2,442,300	3,615,700

For first 6 years, favor: PLAN 1 by 28.8%



At 30 years, favor PLAN 1 by 32.5%



TOTAL ACCUMULATED LOSSES (MWH)

YEAR	PLAN 1	PLAN 2
2008	710	1,060
2009	1,460	2,180
2010	2,260	3,380
2011	3,110	4,640
2012	4,010	5,980
2013	4,970	7,410
2018	10,690	15,940
2023	18,380	27,400
2028	28,720	42,810
2033	42,610	63,510
2038	61,280	91,330



At 30 years, favor PLAN 1 by 32.9%



3.25% Given annual inflation rate

4.79% Given annual present worth rate

PLAN 1 PLAN 1 BARDSTOWN SHOPPING CTR WITH LINE CONVERSION PLAN 2 PLAN 2 BARDSTOWN SHOPPING CTR FDR 02 WITH REGULATORS

1	ANNU
	AL & A
	\CCUM
	ULATE
	D TOT
	ALS of
	the PR
	ESENT
	- WORT
	rH of th
	ATED C
	OSTS
	of CAR
	RYING
	CHARO
	BES, M
	AINTEN
	ANCE
	and LO
	SSES

2013	2012	2011	2010	2009	2008	YEAR		5.22 0.039 398.00 3.0 51.37 0.304	0.10 6.81 5.14 16.84%	2008 3.25 4.79	PLAN: COMPANY:
				3 PHASE 150 AMP REGULATOR		DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMAND YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	DEMAND COST (\$/kW/MONTH) ENERGY COST (\$/kWH) CIRCUIT or AREA PEAK MONTHLY AVE CIRCUIT or AREA ANNUAL GROWTH R. ANNUAL LOAD FACTOR (%) (~ 40 to 90 CALCULATED LOSS FACTOR	FIXED CHARGE RATE (%) OPERERATIONS & MAINTENANCE RAT FIXED CHARGE RATE (Sum of Above)	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Pre	PLAN 2 BARDSTOWN SHOPPING CTR SALT RIVER ELECTRIC
				27,700		PRESENT ESTIMATED COST (\$) CONSTRUCTIONMAINTENANCE	LOSSES (Optional)	RAGE DEMAND LOSSES (KW) ATE (%) %)	Ē (%)	sent Worth Factor)	FDR 02 WITH RE ENGINEER: DATE:
461.4	448.0	434.9	422.2	409.9	0.0	PEAK kW (avg./mo.)		2013 2018 2023 2028 2033 2038	YEAR		GARY PILE 11/13/07
1,423,736 7,406,377	1,342,008 5,982,641	1,264,971 4,640,633	1,192,357 3,375,661	1,123,911 2,183,304	1,059,394 1,059,394	Annual kWH Accum. kWH	TOTAL COST OF A	7,410 15,940 27,400 42,810 63,510 91,330	PLAN MWH LOSSES		
3,812 20,974	3,994 17,162	4,186 13,168	4,386 8,982	4,596 4,596	0 0	YEARLY IOTAL PRES	DDED MAINTENANCI	21,000 37,600 61,100 69,300 77,300	1 SUMMARY (Accur PRESENT W FIXED CHARGES MAI		
0 0	00	00	00	00	0 0	TENANCE	\$27,700 0	00000	nulated Tota		
77,980 405,778	75,370 327,797	72,862 252,427	70,452 179,565	68,135 109,113	40,977 40,977	ATED through	-2008	405,800 838,700 1,355,000 1,973,400 2,717,300 3,615,700	ils, Rounded LATED COST		
81,792 426,751	79,365 344,959	77,048 265,595	74,838 188,547	72,731 113,709	40,977 40,977	Year (Bottom) OW TOTALS	DOLLARS	426,800 1,405,700 2,034,500 2,786,600 3,693,000	1 Off) . (\$) TOTALS		

11:39 A

2018	2017	2016	2015	2014	YEAR
					DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE
					PRESENT ESTIMATED COST (\$)
534.9	519.3	504.2	489.5	475.2	CALCULA PEAK KWA
1,913,383 15,936,193	1,803,547 14,022,810	1,700,016 12,219,263	1,602,428 10,519,247	1,510,442 8,916,819	NNUAL KWH
3,017 37,572	3,161 34,556	3,312 31,395	3,471 28,082	3,637 24,611	YEARLY TOTAL
0 0	0 0	0 0	0 0	0 0	PRESENT WORTH
92,719 838,711	89,529 745,992	86,466 656,463	83,523 569,997	80,696 486,474	H OF INFLA
95,736 876,283	92,690 780,548	89,778 687,857	86,994 598,079	84,334 511,085	TED COST (\$) ROW TOTALS

	CALCULAT	ED LOSSES	ANNUAL PRESENT	WORTH OF	INFLATED CO	(\$)
YEAR	PEAK KW A	NNUAL KWH	FIXED CHARGES MAIN	ENANCE	LOSSES RO	WIDIALS
2019	550,9	2,029,908	2,879	0	96,040	98,919
2020	567.5	2,153,529	2,747	0	99,499	102,246
2021	584.5	2,284,679	2,622	0	103,101	105,723
2022	602.0	2,423,816	2,502	0	106,853	109,355
2023	620.1	2,571,426	2,387	0	110,761	113,149
2024	638.7	2,728,026	2,278	0	114,833	117,111
2025	657.8	2,894,163	2,174	0	119,075	121,249
2026	677.6	3,070,418	2,075	0	123,494	125,569
2027	697.9	3,257,406	1,980	0	128,100	130,080
2028	718.8	3,455,782	1,889	0	132,899	134,789
2029	740.4	3,666,239	1,803	0	137,901	139,704
2030	762.6	3,889,513	1,721	0	143,115	144,835
2031	785.5	4,126,385	1,642	0	148,549	150,191
2032	809.1	4,377,681	1,567	0	154,214	155,781
2033	833.3	4,644,282	1,495	0	160,120	161,615
2034	858.3	4,927,119	1,427	0	166,277	167,704
2035	884.1	5,227,181	1,362	0	172,697	174,058
2036	910.6	5,545,516	1,299	0	179,391	180,690
2037	937.9	5,883,238	1,240	0	186,372	187,612
2038	966.1	6,241,527	1,183	0	193,652	194,835

;--- ;:-)

11:39 A

⋗
Z
Ζ
Ξ
4
Con
2
R
X.
¥.
ž
2
F
⋗
그
н
Ч.
2
Ч.
⋗
5
сл С
<u>q</u>
±
he
-
ž
ĩ
S
Ш
Z
S
0
Z
1
-
<u>o</u>
÷.
2
<u> </u>
Z
Ъ
-
Ш
0
0
Ö
ŝ
2
ž
Ч,
C
Þ
꼬
지
\leq
ž
G
0
I
≥
2
Ω.

Ζ
MA
MAIN
MAINTI
MAINTER
MAINTEN/
MAINTENAN
MAINTENANC
MAINTENANCE
MAINTENANCE a
MAINTENANCE and
MAINTENANCE and
MAINTENANCE and LC
MAINTENANCE and LOS
MAINTENANCE and LOSS
MAINTENANCE and LOSSE
MAINTENANCE and LOSSES

2013	2012	2011	2010	2009	2008	YEAR		2008 3.25 4.79 0.10 6.81 5.14 16.84% 5.22 0.039 267.0 3.0 51.37	PLAN: COMPANY:
				1 PHASE 150 AMP REGULATOR 3 PHASE 2ACWC TO 336.4 ASCR		DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMANE YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Pr TAX RATE (%) DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RAT FIXED CHARGE RATE (Sum of Above) FIXED CHARGE RATE (Sum of Above) DEMAND COST (\$/kWIMONTH) ENERGY COST (\$/kWIMONTHLY CIRCUIT or AREA MONTHLY AVERAGE CIRCUIT or AREA ANNUAL GROWTH R ANNUAL LOAD FACTOR (%) (~ 40 to 90 CALCULATED LOSS FACTOR	PLAN 1 BARDSTOWN SHOPPING CTR SALT RIVER ELECTRIC
				27,700		CONSTRUCTIONMAINTENANC	D LOSSES (Optional)	esent Worth Factor) TE (%) E PEAK DEMAND LOSSES (KW) ATE (%) D%)	WITH LINE CONV ENGINEER:
309.5	300.5	291.8	283.3	275.0	267.0	PEAK kW (avg./mo.)		YEAR 2013 2023 2028 2028 2028 2033	GARY PILI 11/13/07
955,120 4,968,600	900,292 4,013,480	848,611 3,113,188	799,898 2,264,577	753,980 1,464,679	710,699 710,699	Annual KWH Accum. KWH	TOTAL COST OF A	PLA MWH LOSSES 4,970 10,690 18,380 18,380 28,720 42,610 61,280]]]
31,454 173,074	32,960 141,620	34,539 108,660	36,194 74,121	37,927 37,927	0 0	YEARLY IOTAL PRE ANNUAL for Year (Top FIXED CHARGES MA	EW CONSTRUCTION DDED MAINTENANCI	N 1 SUMMARY (Accu PRESENT V FIXED CHARGES MA 173,100 310,000 418,400 504,200 572,100 638,200	
0 0	00	0 0	00	0 0	0 0); ACCUMUL NTENANCE	\$228,580 0	Intervention	
52,313 288,942	50,563 236,629	48,880 186,067	47,263 137,187	45,709 89,924	44,215 44,215	ATED through	-2008	s, Rounded 0, LATED COST LOSSES 288,900 579,400 925,700 1,340,600 1,340,600 2,442,300	
83,767 462,016	83,523 378,249	83,419 294,726	83,457 211,307	83,636 127,851	44,215 44,215	Year (Bottom) ROW TOTALS	DOLLARS	<i>ff</i>) (\$) TOTALS 462,000 889,400 1,344,100 1,844,800 2,411,700 3,080,500	

11:37 A

···· ••• ••• •••

	2018		2017		2016		2015		2014	YEAR	
										or ADDITIONAL MAINTENANCE	DESCRIPTION of NEW CONSTRUCTION
										CONSTRUCTIONMAINTENANCE	PRESENT ESTIMATED COST (\$)
	358.8		348.4	r	338.2	r	328.4		318.8	PEAK KWA	CALCULA
10,690,863	1,283,601	9,407,262	1,209,917	8,197,345	1,140,463	7,056,882	1,074,996	5,981,886	1,013,286	NNUAL KWH	TED LOSSES
310,046	24,893	285,153	26,085	259,068	27,335	231,733	28,644	203,090	30,016	FIXED CHARGES MA	YEARLY TOTAL PR
0	0	0	0	0	0	0	, 0	0	0	AINTENANCE	ESENT WORT
579,378	62,201	517,177	60,061	457,116	58,006	399,110	56,032	343,078	54,135	LOSSES	H OF INFLA
889,424	87,094	802,330	86,146	716,184	85,341	630,843	84,676	546,167	84,151	ROW TOTALS	TED COST (\$)

YEAR	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
CALCULAT PEAK KWA	369.6	380.7	392.1	403.9	416.0	428.5	441.3	454.5	468.2	482.2	496.7	511.6	526.9	542.8	559.0	575.8	593.1	610.9	629.2	648.1
NNUAL KWH	1,361,772	1,444,704	1,532,687	1,626,027	1,725,052	1,830,108	1,941,562	2,059,803	2,185,245	2,318,326	2,459,512	2,609,297	2,768,203	2,936,786	3,115,637	3,305,379	3,506,676	3,720,233	3,946,795	4,187,155
ANNUAL PRESENT V	23,755	22,669	21,633	20,644	19,700	18,800	17,940	17,120	16,338	15,591	14,878	14,198	13,549	12,930	12,339	11,775	11,237	10,723	10,233	9,765
ENANCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSSES RO	64,429	66,749	69,166	71,683	74,305	77,036	79,882	82,847	85,936	89,156	92,512	600'96	99,655	103,455	107,417	111,547	115,854	120,345	125,028	129,912
OST (\$) W TOTALS	88,184	89,418	90,799	92,327	94,005	95,836	97,822	99,967	102,274	104,747	107,390	110,207	113,204	116,385	119,756	123,322	127,091	131,068	135,261	139,677

11:37 A

-) 1

Page 2

YEAR: 2009

PROJECT NAME: Pottershop Road

CFR CODE: 303

ESTIMATED COST: \$228,490

DESCRIPTION OF PROPOSED CONSTRUCTION:

A 1.4 mile conversion of single phase 6ACWC to three phase 1/0 ACSR along Pottershop Road in central Nelson County.

REASON FOR PROPOSED CONSTRUCTION:

Design criteria not met include 1, 2 and 5. This line has 162 existing customers and new subdivisions are in the works for this area which is approximately 0.5 mile from the city limits of the city of Bardstown.

RESULTS OF PROPOSED CONSTRUCTION: All design criteria will be met with this project.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

No alternatives were investigated because of the ampacity levels.

YEAR: 2010

÷

PROJECT NAME: Chaplin Road conversion

CFR CODE: 304

ESTIMATED COST: \$178,200

*** Carryover Item 304 2005-2008 CWP

DESCRIPTION OF PROPOSED CONSTRUCTION:

This project involves the conversion of 2.2 miles of 1/0 cu to 336.4 acsr along Sheilds Bend road in northeastern Nelson County. This project is on Bloomfield Substation fdr 04.

REASON FOR PROPOSED CONSTRUCTION: This project will correct voltage problems on circuit 04.

RESULTS OF PROPOSED CONSTRUCTION: The construction of these projects all design criteria will be met.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

Alternative 2 included the use of regulators to improve voltage levels on this circuit. There are existing regulator banks on this circuit and the addition of two sets on the same circuit is not an ideal situation. Plan 1 utilizing conversion work proved to be the best alternative.

COMPARISON OF TOTAL ACCUMULATED COST and kWH LOSSES OF PLAN 1 vs PLAN 2

(All costs are the the accumulated present worth of the inflated cost)

TOTAL COSTS (\$)

the second		
YEAR	PLAN 1	PLAN 2
2008	37,600	41,000
2009	110,600	114,100
2010	183,400	189,300
2011	256,100	266,600
2012	328,700	346,300
2013	401,600	428,400
2018	771,900	879,300
2023	1,163,900	1,409,800
2028	1,593,900	2,039,400
2033	2,079,400	2,792,200
2038	2,651,300	3,699,200

For first 6 years, favor: PLAN 1 by 6.3%



At 30 years, favor PLAN 1 by 28.3%



TOTAL CAPITALIZED COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	0	0
2009	34,160	4,960
2010	66,770	9,700
2011	97,880	14,210
2012	127,570	18,520
2013	155,900	22,640
2018	279,300	40,600
2023	376,900	54,800
2028	454,200	66,000
2033	515,400	74,900
2038	574,900	83,500

For first 6 years, favor: PLAN 2 by 85.5%



At 30 years, favor PLAN 2 by 85.5%



TOTAL COST OF LOSSES (\$)

YEAR	PLAN 1	PLAN 2
2008	37,590	40,980
2009	76,450	109,110
2010	116,630	179,560
2011	158,190	252,430
2012	201,180	327,800
2013	245,655	405,778
2018	492,600	838,700
2023	787,000	1,355,000
2028	1,139,700	1,973,400
2033	1,564,000	2,717,300
2038	2,076,400	3,615,700

For first 6 years, favor: PLAN 1 by 39.5%



At 30 years, favor PLAN 1 by 42.6%



TOTAL ACCUMULATED LOSSES (MWH)

YEAR	PLAN 1	PLAN 2
2008	600	1,060
2009	1,250	2,180
2010	1,930	3,380
2011	2,650	4,640
2012	3,410	5,980
2013	4,220	7,410
2018	9,090	15,940
2023	15,630	27,400
2028	24,420	42,810
2033	36,230	63,510
2038	52,100	91,330



At 30 years, favor PLAN 1 by 43.0%



3.25% Given annual inflation rate

4.79% Given annual present worth rate

PLAN 1 PLAN 1 BLOOMFIELD FDR 04 WITH LINE CONVERSION PLAN 2 PLAN 2 BLOOMFIELD FDR 04 WITH REGULATORS

Ъ
5
4
2
ž
2
Ca
Xo
Š
õ
0
C
Ζ
Ĉ
Ē
≥
Щ
0
1
Q
1
2
5
~
S.
et.
Ž
D
Q
ע
μ.
ŝ
Щ
5
7
S
õ
ž
4
Ξ
0
¥
#
ĕ
-
Z
Ш
K.
5
m
Ö
ž
X
ñ
2
6
ž
Ч
Ô
Ň
5
Ĩ
~
Ì
É
U)
0
I
\triangleright
R
G
m
S
N
2
Z
_
Ш
Ś
2
Ž
Ω
п
2
anc
and
and L(
and LOS
and LOSS
and LOSSE

2013	2012	2011	2010	2009	2008	YEAR		5.22 0.039 227.0 3.0 51.37 0.304	0.10 6.81 5.14 16.84%	2008 3.25 4.79	PLAN: COMPANY:
				1 PHASE 150 AMP REGULATOR 3 PHASE 1/0 CU TO 336.4 ASCR		DESCRIPTION oF NEW CONSTRUCTION	DECREASE IN CIRCUIT PEAK DEMAND YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	DEMAND COST (\$/KW/MONTH) ENERGY COST (\$/KWH) CIRCUIT or AREA MONTHLY AVERAGE CIRCUIT or AREA ANNUAL GROWTH R ANNUAL LOAD FACTOR (%) (~ 40 to 90 CALCULATED LOSS FACTOR	FIXED CHARGE RATE (Sum of Above)	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Pro	SALT RIVER ELECTRIC
				27,700 178,200		PRESENT ESTIMATED COST (\$) CONSTRUCTIONMAINTENANCE	LOSSES (Optional)	: PEAK DEMAND LOSSES (KW) ATE (%) %)	те (%)	sent Worth Factor)	IE CONVERSION ENGINEER: DATE:
263.2	255.5	248.0	240.8	233.8	227.0	CALCUL/ PEAK kW (avg./mo.)		2013 2023 2028 2028 2033 2038	לת ת ס		11/13/07
812,031 4,224,240	765,417 3,412,210	721,479 2,646,793	680,063 1,925,314	641,024 1,245,251	604,227 604,227	ATED LOSSES Annual kWH Accum. kWH	TOTAL COST OF N TOTAL COST OF A	4,220 9,090 15,630 24,420 52,100	I DSSES		
28,333 155,901	29,690 127,568	31,112 97,878	32,602 66,766	34,164 34,164	0 0	YEARLY TOTAL PRI ANNUAL for Year (To FIXED CHARGES MA	VEW CONSTRUCTION	155,900 279,300 376,900 454,200 515,400 574,900	AN 1 SUMMARY (Acc PRESENT		
0 0	00	0 0	0 0	00	00	p); ACCUMUL	\$205,900 0	0 0 0 0 0 0	umulated Total WORTH OF INF		
44,476 245,655	42,988 201,179	41,557 158,192	40,182 116,634	38,861 76,452	37,591 37,591	ATED through	-2008 -2008	245,700 492,600 1,139,700 1,564,000 2,076,400	S, Rounded O		
72,809 401,556	72,678 328,747	72,669 256,070	72,785 183,401	73,025 110,616	37,591 37,591	TED COSTS (\$) Year (Bottom) YOW TOTALS	DOLLARS	401,600 771,900 1,163,900 1,593,900 2,079,400 2,651,300	(\$) TOTAL S		

1:16 PM

																						2018	2017	2016		2015		7100	YEAR
																													DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE
2038	2037	2036	2035	2034	2033	2032	2031	2030	2029	2028	2027	2026	2025	2024	2023	2022	2021	2020	2019	YEAK									CONSTRUCTIONMAINTENANCE
551.0	534.9	519,4	504.2	489.5	475.3	461.4	448.0	435.0	422.3	410.0	398.0	386.5	375.2	364.3	353.7	343.4	333.4	323.6	314.2	PEAN KW	CALCULA	305.1	296.2	287.6	 	279.2	21.0	074 N	CALCULA
3,559,866	3.355.515	3,162,895	2,981,332	2,810,191	2,648,875	2,496,818	2,353,491	2,218,391	2,091,046	1,971,011	1,857,867	1,751,218	1,650,691	1,555,935	1,466,618	1,382,428	1,303,071	1,228,269	1,157,761	ANNUAL KVVH	TED LOSSES	1,091,301 9,089,236	1,028,656 7,997,934	969,607 6,969,278	1.10'666'0	913,948	5,085,724	201 120	NNUAL KWH
8,796	9.217	9,659	10,122	10,607	11,115	11,647	12,205	12,789	13,402	14,044	14,717	15,422	16,160	16,934	17,746	18,596	19,486	20,420	21,398	FIXED CHARGES MAIN I	ANNUAL PRESENT W	22,423 279,283	23,497 256,860	24,622 233,363	208,741	25,802	182,939	950 26	YEARLY TOTAL PRESEN
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	INANCE	VORTH OF	0 0	0 0	0 0	c	0	0 0	>	NT WORTH
110,450	106.297	102,316	98,498	94,836	91,324	87,956	84,725	81,626	78,652	75,799	73,062	70,435	67,914	65,495	63,173	60,944	58,804	56,749	54,777	LUSSES R	INFLATED (52,882 492,580	51,063 439,697	49,316 388,634	339,318	47,638	40,020 291,680	12 002	LOSSES RO
119,246	115.515	111,975	108,620	105,443	102,439	99,603	96,930	94,415	92,054	89,843	87,779	85,857	84,075	82,430	80,919	79,539	78,290	77,169	76,175	OW TOTALS	COST (\$)	75,305 771,862	74,560 696,557	73,938 621,997	548,059	73,439	474,619	73 063	ED COST (\$) DW TOTALS

<u>ц</u>

1:16 PN

Page 2

⊳
ź
Ī
Ē
≥
1
Č0
⋗
Q
<u>0</u>
\subseteq
N
\subseteq
5
4
mi
D
Q
J
2
Ś
0
¥
5
e
υ
Ū
m
S
Щ
5
2
Ś
<u>o</u>
ਸ਼
구
-
с,
¢
ы Б
=
\leq
≽
Ξ
Щ
U
õ
ö
ŝ
3
~
¥
C
≻
R
지
≤
Ž
G
O
Í
Þ
Z
G
Ē
ŝ
Ζ
⋗
Ē
Ξ
m
Z
2
6
R
6 1
Ĩ
Ô.
Γ.
5
Sol
LOSSE
LOSSES

2013	2012	2011	2010	2009	2008	YEAR		5.22 0.039 398.00 3.0 51.37 0.304	0.10 6.81 5.14 16.84%	2008 3.25 4.79	PLAN: COMPANY:
				3 PHASE 150 AMP REGULATOR MOVE REGULATOR BANK		DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMAND YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	DEMAND COST (\$/kW/MONTH) ENERGY COST (\$/kWH) CIRCUIT OF AREA PEAK MONTHLY AVE CIRCUIT OF AREA ANNUAL GROWTH R ANNUAL LOAD FACTOR (%) (~ 40 to 90 CALCULATED LOSS FACTOR	IAX KAIE (%) DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RAT FIXED CHARGE RATE (Sum of Above)	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Pre	PLAN 2 BLOOMFIELD FDR 04 WITH RE SALT RIVER ELECTRIC
				27,700 2,200		PRESENT ESTIMATED COST (\$) CONSTRUCTIONMAINTENANCE	LOSSES (Optional)	ERAGE DEMAND LOSSES (KW) ATE (%) %)	те (%)	esent Worth Factor)	EGULATORS ENGINEER: DATE:
461.4	448.0	434.9	422.2	409.9	0.0	CALCUL/ PEAK kW (avg./mo.)		2013 2018 2023 2028 2033 2038	YEAR		GARY PIL 11/13/07
1,423,736 7,406,377	1,342,008 5,982,641	1,264,971 4,640,633	1,192,357 3,375,661	1,123,911 2,183,304	1,059,394 1,059,394	Annual kWH Accum. kWH	TOTAL COST OF A	7,410 15,940 27,400 42,810 63,510 91,330	PLAN MWH		Π
4,114 22,639	4,311 18,525	4,518 14,214	4,734 9,696	4,961 4,961	0 0	YEARLY TOTAL PRES	IEW CONSTRUCTION	22,600 40,600 54,800 66,000 74,900 83,500	1 SUMMARY (Accui		
0 0	0 0	0 0	0 0	00	0 0	ACCUMUL	\$29,900 0	000000	mulated Tot		
77,980 405,778	75,370 327,797	72,862 252,427	70,452 179,565	68,135 109,113	40,977 40,977	ATED through	-2008 -2008	405,800 838,700 1,355,000 1,973,400 2,717,300 3,615,700	als, Roundec LATED COST		
82,094 428,417	79,682 346,322	77,380 266,641	75,186 189,260	73,096 114,074	40,977 40,977	1 Year (Bottom) ROW TOTALS	DOLLARS DOLLARS	428,400 879,300 2,039,400 2,792,200 3,699,200	d Off)		

1:16 PM

د.

	2018		2017		2016		2015		2014	YEAR	
										OF ADDITIONAL MAINTENANCE	DESCRIPTION of NEW CONSTRUCTION
										CONSTRUCTIONMAINTENANCE	PRESENT ESTIMATED COST (\$)
	534.9		519.3		504.2		489.5		475.2	PEAK kW	CALCULA
15,936,193	1,913,383	14,022,810	1,803,547	12,219,263	1,700,016	10,519,247	1,602,428	8,916,819	1,510,442	INNUAL KWH	TED LOSSES
40,556	3,256	37,300	3,412	33,888	3,576	30,312	3,747	26,566	3,926	FIXED CHARGES	YEARLY TOTAL F
0	0	0	0	0	0	 0	0	0	0	MAINTENANCE	RESENT WORTH
838,711	92,719	745,992	89,529	656,463	86,466	569,997	83,523	486,474	80,696	LOSSES	H OF INFLA
879,267	95,975	783,292	92,942	690,351	90,041	600,309	87,270	513,039	84,622	ROW TOTALS	TED COST (\$)

YEAR	PEAK KWA	NNUAL KWH	FIXED CHARGES MAINTENAN		LOSSES ROV
2019	550.9	2,029,908	3,107	0	0,96
2020	567.5	2,153,529	2,965	0	99,49
2021	584.5	2,284,679	2,830	0	103,1
2022	602.0	2,423,816	2,700	0	106,8
2023	620.1	2,571,426	2,577	0	110,7
2024	638.7	2,728,026	2,459	0	114,8;
2025	657.8	2,894,163	2,347	0	119,0
2026	677.6	3,070,418	2,239	0	123,49
2027	697.9	3,257,406	2,137	0	128,10
2028	718.8	3,455,782	2,039	0	132,89
2029	740.4	3,666,239	1,946	0	137,9
2030	762.6	3,889,513	1,857	0	143,1-
2031	785.5	4,126,385	1,772	0	148,5
2032	809.1	4,377,681	1,691	0	154,2
2033	833.3	4,644,282	1,614	0	160,1
2034	858.3	4,927,119	1,540	0	166,2
2035	884.1	5,227,181	1,470	0	172,69
2036	910.6	5,545,516	1,403	0	179,3
2037	937.9	5,883,238	1,339	0	186,3
2038	966.1	6,241,527	1,277	0	193,6

. ...

Page 2

YEAR: 2011

 $=\frac{1}{7}$

PROJECT NAME: Cedar Grove Substation to Clarks Lane

CFR CODE: 305

ESTIMATED COST: \$190,350

DESCRIPTION OF PROPOSED CONSTRUCTION:

This project involves the conversion of 2.35 miles of 2acwc to 336.4 acsr along Ky 480 in central Bullitt County. This conversion is on Cedar Grove fdr 03.

REASON FOR PROPOSED CONSTRUCTION This project will correct voltage problems on this circuit. This feeder has an existing set of regulators and a 100 lot subdivision is already developed with houses being started in 2007.

RESULTS OF PROPOSED CONSTRUCTION: With the construction of this project all design criteria items will be met.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED: Alternative plan 2 to use another set of regulators did not prove to be economically feasible.
COMPARISON OF TOTAL ACCUMULATED COST and kWH LOSSES OF PLAN 1 vs PLAN 2

(All costs are the the accumulated present worth of the inflated cost)

TOTAL COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	3,600	88,900
2009	7,400	237,000
2010	11,300	390,100
2011	46,000	548,400
2012	79,400	712,100
2013	111,700	881,500
2018	257,100	1,821,600
2023	381,800	2,942,000
2028	492,200	4,283,700
2033	593,600	5,897,400
2038	702,000	7,846,000

For first 6 years, favor: PLAN 1 by 87.3%





TOTAL CAPITALIZED COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	0	0
2009	0	370
2010	0	710
2011	30,660	1,050
 2012	59,920	1,360
 2013	87,850	1,670
2018	209,400	3,000
2023	305,600	4,000
2028	381,800	4,800
2033	442,100	5,500
2038	500,800	6,100

For first 6 years, favor: PLAN 2 by 98.1%



At 30 years, favor PLAN 2 by 98.8%



4

TOTAL COST OF LOSSES (\$)

YEAR	PLAN 1	PLAN 2
2008	3,640	88,850
2009	7,410	236,590
2010	11,300	389,360
2011	15,330	547,350
2012	19,500	710,780
2013	23,808	879,864
2018	47,700	1,818,600
2023	76,200	2,938,000
2028	110,400	4,278,900
2033	151,500	5,891,900
2038	201,200	7,839,900
1		

For first 6 years, favor: PLAN 1 by 97.3%







TOTAL ACCUMULATED LOSSES (MWH)

		and the second sec
YEAR	PLAN 1	PLAN 2
2008	60	2,300
2009	120	4,730
2010	190	7,320
2011	260	10,060
2012	330	12,970
2013	410	16,060
2018	880	34,560
2023	1,510	59,420
2028	2,360	92,830
2033	3,500	137,720
2038	5,040	198,050



At 30 years, favor PLAN 1 by 97.5%



3.25% Given annual inflation rate

4.79% Given annual present worth rate

 PLAN 1
 PLAN 1
 CEDAR
 GROVE FDR 03
 WITH LINE CONVERSION

 PLAN 2
 PLAN 2
 CEDAR
 GROVE FDR 03
 WITH REGULATORS

~
~
5
2
5
2
Ç 0
≻
Ô
ö
Ë
Z
2
1
5
4
mi
Ξ.
7
Ų.
2
2
2
Q
5
e
σ
Ź
m
Ś
m
Z
=
-
2
O
Ť
4
ΞŤ.
~
<u> </u>
-
7
Ø
₹
÷.
Ë,
≽
-
ш
D
0
DOO
D COS
D COST
D COSTS
D COSTS
D COSTS of
D COSTS of (
D COSTS of C,
D COSTS of CA
D COSTS of CAR
D COSTS of CARR
D COSTS of CARRY
D COSTS of CARRYIN
D COSTS of CARRYING
D COSTS of CARRYING
D COSTS of CARRYING C
D COSTS of CARRYING CH.
D COSTS of CARRYING CHA
D COSTS of CARRYING CHAR
D COSTS of CARRYING CHARG
D COSTS of CARRYING CHARGE
D COSTS of CARRYING CHARGES
D COSTS of CARRYING CHARGES, I
D COSTS of CARRYING CHARGES, M
D COSTS of CARRYING CHARGES, MA
D COSTS of CARRYING CHARGES, MAIN
D COSTS of CARRYING CHARGES, MAINT
D COSTS of CARRYING CHARGES, MAINTE
D COSTS of CARRYING CHARGES, MAINTEN
D COSTS of CARRYING CHARGES, MAINTENA
D COSTS of CARRYING CHARGES, MAINTENAN
D COSTS of CARRYING CHARGES, MAINTENANC
D COSTS of CARRYING CHARGES, MAINTENANCE
D COSTS of CARRYING CHARGES, MAINTENANCE :
D COSTS of CARRYING CHARGES, MAINTENANCE at
D COSTS of CARRYING CHARGES, MAINTENANCE and
D COSTS of CARRYING CHARGES, MAINTENANCE and I
D COSTS of CARRYING CHARGES, MAINTENANCE and LC
D COSTS of CARRYING CHARGES, MAINTENANCE and LOS
D COSTS of CARRYING CHARGES, MAINTENANCE and LOSS
D COSTS of CARRYING CHARGES, MAINTENANCE and LOSSE

2013	2012	2011	2010	2009 MO	2008	YEAR	AM	5.22 DEI 0.039 ENI 863.00 CIR 3.0 CIR 51.37 ANI 0.304 CAI	6.81 DEI 5.14 OPI 16.84% FIX	2008 PRI 3.25 ANI 4.79 BLE 0.10 TAX	COMPANY: SAL
				IVE REGULATOR BANK		SCRIPTION OF NEW CONSTRUCTION OF ADDITIONAL MAINTENANCE	CREASE IN CIRCUIT PEAK DEMAND AR DECREASE EXPECTED OUNT (kW) (Present Year)	MAND COST (\$/kW/MONTH) ERGY COST (\$/kWH) ICUIT or AREA PEAK MONTHLY AVE ICUIT or AREA ANNUAL GROWTH RA ICUIT or AREA ANNUAL GROWTH RA NUAL LOAD FACTOR (%) (~ 40 to 90° LCULATED LOSS FACTOR	PERECIATION RATE (%) ERERATIONS & MAINTENANCE RATI ED CHARGE RATE (Sum of Above)	ESENT YEAR (First year of plan) NUAL INFLATION RATE (%) ENDED INTEREST RATE (%) (& Pre: < RATE (%)	T RIVER ELECTRIC
	-			2,200		PRESENT ESTIMATED COST (CONSTRUCTIONMAINTENANC	LOSSES (Optional)	RAGE DEMAND LOSSES (KW) ATE (%) %)	E (%)	sent Worth Factor)	DATE
LUUU.5	971.3	943.0	915.6	888.9	0.0	E (avg./mo.)		2013 2018 2023 2028 2033 2038	YEAR		: 11/15/07
3,087,147 16,059,557	2,909,932 12,972,410	2,742,890 10,062,477	2,585,437 7,319,587	2,437,023 4,734,150	2,297,127 2,297,127	Annual kWH Accum. kWH	TOTAL COST OF A	16,060 34,560 59,420 92,830 137,720 198,050	PLAN MWH LOSSES		
1,666	317 1,363	332 1,046	348 713	365 365	0 0	YEARLY I DI AL PRES ANNUAL for Year (Top); FIXED CHARGES MAIN	JEW CONSTRUCTION	1,700 3,000 4,000 4,800 5,500 6,100	1 SUMMARY (Accun PRESENT WC FIXED CHARGES MAIN		
0.0		00	0 0	0 0	0 0	ACCUMULA	\$2,200 0	0 0 0 0 0 0	nulated Total		
879,864	163,429 710,777	157,991 547,348	152,764 389,358	147,741 236,593	88,853 88,853	TED through	-2008 C	879,900 1,818,600 2,938,000 4,278,900 5,891,900 7,839,900	s, Rounded ATED COST LOSSES		
881,530	103,740 712,140	158,323 548,394	153,113 390,071	148,106 236,958	88,853 88,853	Year (Bottom) OW TOTALS	JOLLARS	881,600 1,821,600 2,942,000 4,283,700 5,897,400 7,846,000	Off) (\$) TOTALS		

2:04 PN

 $\frac{1}{7}$ N

-		2018		2017		2016		2015		2014	YEAR	
											or ADDITIONAL MAINTENANCE	DESCRIPTION of NEW CONSTRUCTION
											CONSTRUCTIONMAINTENANCE	PRESENT ESTIMATED COST (\$)
		1159.8		1126.0		1093.2		1061.4		1030.5	PEAK KWA	CALCULA
	34,555,111	4,148.868	30,406,244	3,910,706	26,495,538	3,686,215	22,809,323	3,474,611	19,334,711	3,275,154	NNUAL KWH	TED LOSSES
	2,984	240	2,744	251	2,493	263	2,230	276	1,955	289	FIXED CHARGES MAINT	YEARLY TOTAL PRESE
	0	0	0	0	0	0	0	0	0	0	ENANCE	INT WORT
	1,818,612	201.047	1,617,566	194,130	1,423,435	187,488	1,235,948	181,107	1,054,841	174,977	LOSSES	H OF INFLA
	1,821,596	201,286	1,620,310	194,381	1,425,929	187,751	1,238,178	181,382	1,056,796	175,266	ROW TOTALS	TED COST (\$)

419,903	0	94	13,533,763	2094.7	2038
404,117	0	86	12,756,870	2033.7	2037
388,981	0	103	12,024,573	1974.5	2036
374,465	0	108	11,334,314	1917.0	2035
360,545	0	113	10,683,678	1861.1	2034
347,194	0	119	10,070,391	1806.9	2033
334,388	0	124	9,492,309	1754.3	2032
322,105	0	130	8,947,412	1703.2	2031
310,321	0	137	8,433,794	1653.6	2030
299,017	0	143	7,949,660	1605.4	2029
288,171	0	150	7,493,317	1558.7	2028
277,764	0	157	7,063,170	1513.3	2027
267,778	0	165	6,657,715	1469.2	2026
258,194	0	173	6,275,535	1426.4	2025
248,997	0	181	5,915,293	1384.9	2024
240,168	0	190	5,575,731	1344.5	2023
231,694	0	199	5,255,661	1305.4	2022
223,559	0	208	4,953,965	1267.3	2021
215,748	0	218	4,669,587	1230.4	2020
208,248	0	229	4,401,534	1194.6	2019
LOSSES	MAINTENANCE	FIXED CHARGES	NNUAL KWH	PEAK KWA	YEAR
		ANNOAL PAG		C) LOOL	

· "2

2:04 PI

COMPANY: 16.84% 0.304 2010 2009 YEAR 2013 2012 2011 2008 0.039 2008 51.37 PLAN: 5.22 5,14 6.81 0.10 4.79 3.25 22.0 <u>3.0</u> ANNUAL LOAD FACTOR (%) (~ 40 to 90%) CIRCUIT or AREA ANNUAL GROWTH RATE (%) CIRCUIT or AREA MONTHLY AVERAGE PEAK DEMAND LOSSES ENERGY COST (\$/kWH) DEMAND COST (\$/kW/MONTH) FIXED CHARGE RATE (Sum of Above) DEPERECIATION RATE (%) BLENDED INTEREST RATE (%) (& Present Worth Factor) ANNUAL INFLATION RATE (%) PRESENT YEAR (First year of plan) SALT RIVER ELECTRIC PLAN 1. CEDAR GROVE FDR 03 WITH LINE CONVERSION 3 PHASE 2ACWC TO 336.4 ACSR CALCULATED LOSS FACTOR **OPERERATIONS & MAINTENANCE RATE (%)** TAX RATE (%) DESCRIPTION of NEW CONSTRUCTION PRESENT ESTIMATED COST (\$) AMOUNT (kW) (Present Year) YEAR DECREASE EXPECTED DECREASE IN CIRCUIT PEAK DEMAND LOSSES (Optional) **or ADDITIONAL MAINTENANCE** CONSTRUCTIONMAINTENANCE 190,350 ENGINEER: (kW) DATE: GARY PILE (avg./mo.) PEAK kW CALCULATED LOSSES 11/15/07 <u>YEAR</u> 2013 2018 2023 2028 2028 2038 24.0 23.3 24.8 22.7 22.0 25.5 Annual kWH TOTAL COST OF ADDED MAINTENANC TOTAL COST OF NEW CONSTRUCTION Accum. kWH 409,398 330,699 69,923 256,517 65,909 186,594 62,126 120,685 LOSSES 58,559 58,559 74,181 2,360 3,500 880 1,510 78,699 5,040 410 MWH PLAN 1 SUMMARY (Accumulated Totals, Rounded Off) YEARLY TOTAL PRESENT WORTH OF INFLATED COSTS (\$) FIXED CHARGES MAINTENANCE FIXED CHARGES MAINTENANCE ANNUAL for Year (Top); 305,600 381,800 500,800 209,400 442,100 87,800 30,662 30,662 27,923 87,846 59,923 29,261 PRESENT WORTH OF INFLATED COST (\$) 0 0 0 0 00 \$190,350 0 ACCUMULATED through Year (Bottom) 0 0 0 0 0 0 0 0 oc 00 0 0 0 00 LOSSES ROW TOTALS 110,400 201,200 151,500 LOSSES 76,200 47,700 23,800 4,310 23,808 4,166 19,498 4,028 15,331 3,894 11,304 3,766 7,409 3,643 3,643 -2008 -2008 B DOLLARS 381,800 492,200 257,100 702,000 593,600 111,600 111,654 TOTALS 34,690 45,994 3,894 11,304 32,234 33,427 79,421 7,409 3,766 3,643 3,643

ANNUAL & ACCUMULATED TOTALS of the PRESENT WORTH of the INFLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOSSES

. 1

2:04 PN

	2018		2017		2016		10.0	2015		2011	2014	YEAR	
												or ADDITIONAL MAINTENANCE	DESCRIPTION of NEW CONSTRUCTION
												CONSTRUCTIONMAINTENANCE	PRESENT ESTIMATED COST (\$)
	29.6		28.7		27.9	r		27.1			26.3	PEAK KWA	CALCULA
880,895	105,765	775,130	99,694	675,437	93,971		581,466	88,576	060'764	000 000	83,492	NNUAL KWH	TED LOSSES
209,444	22,099	187,346	23,157	164,189	24,266		139,922	25,429	117,700	201 V11	26,647	FIXED CHARGES	YEARLY TOTAL
0	0	0	0	0	0		0	0		0	0	MAINTENANCE	PRESENT WORTH
47,739	5,125	42,614	4,949	37,665	4,780		32,885	4,617	10,100	020 80	4,461	LOSSES	I OF INFLA
257,183	27,224	229,960	28,106	201,853	29,046	You	172,808	30,046		142 762	31,107	ROW TOTALS	TED COST (\$)

19,373	10,704	0	8,669	345,009	53.4	2038
19,386	10,302	0	9,084	325,204	51.8	2037
19,435	9,916	0	9,519	306,536	50.3	2036
120,01	9,546	0	9,975	288,940	48.9	2035
19,044	1,61		10,453	272,353	47,4	2034
10014		•				
19,805	8,851	0	10,954	256,719	46.1	2033
20,003	8,524	0	11,479	241,982	44.7	2032
20,240	8,211	0	12,028	228,092	43.4	2031
20,515	7,911	0	12,605	214,998	42.2	2030
20,831	7,623	0	13,208	202,656	40.9	2029
21,107	7,346	0	13,841	191,023	39.7	2028
202,12	180,7	o c	14,504	180,058	38.6	2027
22,025	6,826	0 0	15,199	169,722	37.5	2026
22,509	6,582	0	15,927	159,979	36.4	2025
23,037	6,348	0	16,690	150,795	35.3	2024
23,612	6,122	O	17,489	142,139	34.3	2023
24,233	5,906	0 0	18,327	133,980	33.3	2022
24,904	5,699	0	19,205	126,289	32.3	2021
25,625	5,500	0	20,125	119,039	31.4	2020
26,397	5,309	0	21,089	112,206	30.5	2019
W ICIALS			FIXED CHARGES IN	ANNUAL KWH	PEAK KW	YEAR
UST (\$)	INFLATED CO	ENT WORTH OF	ANNUAL PRES	TED LOSSES	CALCULA	

2:04 P

Page 2

7

PROJECT NAME: North Springfield Substation to Thompsonville

CFR CODE: 306

ESTIMATED COST: \$215,460

DESCRIPTION OF PROPOSED CONSTRUCTION:

This project involves the conversion of 2.26 miles of 2a cwc to 336.4 acsr along Kelly Shop road in central Washington County. This conversion is on North Springfield Substation fdr 01.

REASON FOR PROPOSED CONSTRUCTION

This conversion will correct voltage problems on this feeder. This is a long circuit in the rural part of Washington County and the addition of city water will increase the load on this feeder.

RESULTS OF PROPOSED CONSTRUCTION:

All Design Criteria will be met with the completion of this conversion.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

The alternative of adding regulators to this feeder was evaluated and found to not be the best solution for the future.

COMPARISON OF TOTAL ACCUMULATED COST and kWH LOSSES OF PLAN 1 vs PLAN 2 (All costs are the the accumulated present worth of the inflated cost)

TOTAL COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	46,700	71,500
2009	130,700	197,900
2010	214,800	328,100
2011	298,900	462,200
2012	383,400	600,300
2013	468,300	742,600
2018	904,100	1,525,300
2023	1,372,100	2,447,500
2028	1,891,200	3,543,200
2033	2,482,300	4,854,100
2038	3,181,100	6,434,000

For first 6 years, favor: PLAN 1 by 36.9%



At 30 years, favor PLAN 1 by 50.6%



TOTAL CAPITALIZED COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	0	0
2009	35,750	7,680
2010	69,870	15,010
2011	102,420	22,010
2012	133,490	28,690
2013	163,140	35,060
2018	292,200	62,800
2023	394,400	84,800
2028	475,300	102,200
2033	539,300	116,000
2038	601,600	129,400

For first 6 years, favor: PLAN 2 by 78.5%



At 30 years, favor PLAN 2 by 78.5%



TOTAL COST OF LOSSES (\$)

큭

YEAR	PLAN 1	PLAN 2
2008	46,700	71,450
2009	94,980	190,260
2010	144,890	313,110
2011	196,520	440,160
2012	249,920	571,590
2013	305,175	707,562
2018	611,900	1,462,500
2023	977,700	2,362,700
2028	1,415,900	3,441,000
2033	1,943,000	4,738,100
2038	2,579,500	6,304,600

For first 6 years, favor: PLAN 1 by 56.9%



At 30 years, favor PLAN 1 by 59.1%



TOTAL ACCUMULATED LOSSES (MWH)

YEAR	PLAN 1	PLAN 2
2008	750	1,850
2009	1,550	3,810
2010	2,390	5,890
2011	3,290	8,090
2012	4,240	10,430
2013	5,250	12,910
2018	11,290	27,790
2023	19,410	47,780
2028	30,330	74,640
2033	45,000	110,740
2038	64,710	159,260



At 30 years, favor PLAN 1 by 59.4%



3.25% Given annual inflation rate

4.79% Given annual present worth rate

р р

 PLAN 1
 PLAN 1
 NORTH SPRINGFIELD FDR 01 WITH LINE CONVERSION

 PLAN 2
 PLAN 2
 NORTH SPRINGFIELD
 FDR 01 WITH REGULATORS

	2
-	Z
1	20
	Þ
-	ဂ္ဂ
(Ş
ļ	2
1	E
į	ō
	Ā
	S
	<u>o</u>
	the F
	꼬
	S
	z
	Š
	Ž
;	Ţ
	9
	he
	Z
1	
-	
	ATED
	ATED CC
	ATED COST
	ATED COSTS
	ATED COSTS of
	ATED COSTS of CA
	ATED COSTS of CARR
	ATED COSTS of CARRYII
	ATED COSTS of CARRYING
	ATED COSTS of CARRYING CH
	ATED COSTS of CARRYING CHAP
	ATED COSTS of CARRYING CHARG
	ATED COSTS of CARRYING CHARGES.
	ATED COSTS of CARRYING CHARGES. MA
	ATED COSTS of CARRYING CHARGES. MAIN
	ATED COSTS of CARRYING CHARGES. MAINTE
	ATED COSTS of CARRYING CHARGES. MAINTENA
	ATED COSTS of CARRYING CHARGES. MAINTENANC
	ATED COSTS of CARRYING CHARGES. MAINTENANCE
	ATED COSTS of CARRYING CHARGES. MAINTENANCE and
	ATED COSTS of CARRYING CHARGES. MAINTENANCE and L
	ATED COSTS of CARRYING CHARGES. MAINTENANCE and LOS
	ATED COSTS of CARRYING CHARGES. MAINTENANCE and LOSSE

	2013	2012	2011	2010	2009	2008	YEAR		5.22 0.039 282.0 3.0 51.37 0.304	6.81 5.14 16.84%	2008 3.25 4.79 0.10	COMPANY:
					3 PHASE 2ACWC TO 336.4 ASCR		DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMAND YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	DEMAND COST (\$/kW/MONTH) ENERGY COST (\$/kWH) CIRCUIT or AREA MONTHLY AVERAGE CIRCUIT or AREA ANNUAL GROWTH R ANNUAL LOAD FACTOR (%) (~ 40 to 90 CALCULATED LOSS FACTOR	DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RAT FIXED CHARGE RATE (Sum of Above)	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Pr TAX RATE (%)	SALT RIVER ELECTRIC
					215,460		PRESENT ESTIMATED COST (CONSTRUCTIONMAINTENANO) LOSSES (Optional)	E PEAK DEMAND LOSSES (kW ATE (%) %)	re (%)	esent Worth Factor)	DATE
L	326.9	317.4	308.1	299.2	290.5	282.0	S) PEAK kW E (avg./mo.)		2013 2018 2023 2028 2033 2038	YEAR		: 11/13/07
	1,008,778 5,247,735	950,870 4,238,957	896,286 3,288,086	844,836 2,391,800	796,339 1,546,964	750,626	Annual KWH Accum. KWH	TOTAL COST OF A	5,250 11,290 19,410 30,330 45,000 64,710	PLA MWH LOSSES		
	29,648 163,140	31,068 133,491	32,557 102,423	34,116 69,866	35,750 35,750	0 0	FIXED CHARGES MA	ADDED MAINTENANCI	163,100 292,200 394,400 475,300 539,300 601,600	IN 1 SUMMARY (Acc PRESENT		
	0 0	0 0	0 0	0 0	0 0	0 0	P); ACCUMU	\$215,460 0		umulated Tota WORTH OF IN		
	55,252 305,175	53,403 249,923	51,626 196,520	49,918 144,894	48,277 94,975	46,699 46,699	LATED through	-2008 -2008	305,200 611,900 977,700 1,415,900 1,943,000 2,579,500	IIs, Rounded C FLATED COST LOSSES		
	84,901 468,315	84,472 383,414	84,183 298,943	84,034 214,760	84,027 130,726	46,699 46,699	Year (Bottom) ROW TOTALS	DOLLARS	468,300 904,100 1,372,100 1,891,200 2,482,300 3,181,100)ff) T (\$) TOTALS		

-) -

Page 1

2018	2017	2016	2015	2014	YEAR
					DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE
					I PRESENT ESTIMATED COST (\$)
379.0	367.9	357.2	346.8	336.7	CALCUL/
1,355,713 11,291,473	1,277,890 9,935,760	1,204,534 8,657,870	1,135,389 7,453,336	1,070,213 6,317,947	ATED LOSSES ANNUAL KWH
23,464 292,250	24,588 268,786	25,766 244,198	27,000 218,432	28,293 191,433	YEARLY TOTAL PF
0 0	0 0	0 0	00	0 0	RESENT WORT
65,695 611,927	63,435 546,232	61,265 482,796	59,180 421,532	57,177 362,352	H OF INFLA
89,159 904,177	88,023 815,018	87,030 726,994	86,179 639,964	85,470 553,785	TED COST (\$) ROW TOTALS

PEAK KWA	NNUAL KWH	FIXED CHARGES MAINT	ENANCE	LOSSES RO	W TOTALS
390.4	1,438,276	22,391	0	68,049	90,440
402.1	1,525,867	21,368	0	70,499	91,867
414.1	1,618,793	20,391	0	73,052	93,443
426.6	1,717,377	19,459	0	75,710	95,169
439.3	1,821,965	18,570	0	78,479	97,049
452.5	1,932,923	17,721	0	81,364	99,085
466.1	2,050,638	16,911	0	84,369	101,280
480.1	2,175,522	16,138	0	87,501	103,639
494.5	2,308,011	15,400	0	90,764	106,164
509.3	2,448,569	14,696	0	94,165	108,861
524.6	2,597,687	14,024	0	97,709	111,733
540.3	2,755,886	13,383	0	101,403	114,786
556.6	2,923,720	12,772	0	105,253	118,025
573.2	3,101,774	12,188	0	109,267	121,455
590.4	3,290,672	11,631	0	113,452	125,082
608.2	3,491,074	11,099	0	117,814	128,913
626.4	3,703,681	10,592	0	122,363	132,955
645.2	3,929,235	10,107	0	127,106	137,214
664.6	4,168,525	9,645	0	132,052	141,698
684.5	4,422,388	9,205	0	137,210	146,415
	PEAK KW A 390.4 402.1 414.1 426.6 439.3 452.5 466.1 494.5 509.3 5540.3 5556.6 573.2 5590.4 608.2 666.2 666.2 664.6 664.5	PEAK kw/ ANNUAL kwH 390.4 1,438,276 402.1 1,525,867 414.1 1,618,793 426.6 1,717,377 439.3 1,821,965 452.5 1,932,923 466.1 2,050,638 480.1 2,175,522 494.5 2,308,011 509.3 2,448,569 552.6 2,923,720 556.6 2,923,720 5573.2 3,101,774 5590.4 3,290,672 608.2 3,491,074 626.4 3,703,681 645.2 3,929,235 664.5 4,168,525	PEAK KW ANNUAL KWH FIXED CHARGES MAINT 390.4 1,438,276 22,391 402.1 1,525,867 21,368 414.1 1,618,793 20,391 426.6 1,717,377 19,459 439.3 1,821,965 18,570 452.5 1,932,923 17,721 466.1 2,050,638 16,911 480.1 2,175,522 16,138 494.5 2,309,011 14,696 509.3 2,448,569 14,696 524.6 2,597,687 14,024 540.3 2,923,720 12,772 555.6 2,923,720 12,772 573.2 3,101,774 12,188 590.4 3,290,672 11,631 608.2 3,491,074 10,592 626.4 3,703,681 10,592 626.4 4,168,525 9,645 684.5 4,422,388 9,205	PEAK KW ANNUAL KWH FIXED CHARGES MAINTENANCE 390.4 1,438,276 22,391 0 402.1 1,525,867 21,368 0 414.1 1,618,793 20,391 0 426.6 1,717,377 19,459 0 439.3 1,821,965 18,570 0 452.5 1,932,923 17,721 0 466.1 2,050,638 16,911 0 480.1 2,175,522 16,138 0 480.1 2,175,522 16,138 0 540.3 2,755,886 13,383 0 556.6 2,923,720 12,772 0 556.6 2,923,720 12,178 0 556.6 2,923,720 12,178 0 556.6 2,923,720 12,178 0 566.4 3,703,681 10,592 0 668.2 3,491,074 10,592 0 0 626.4 3,703,681 10,107 0 0	PEAK KW/ANNUAL IXED CHARGES MAINTENANCE LOSSES IRO 390.4 1,438,276 22,391 0 68,049 402.1 1,525,867 21,368 0 70,499 414.1 1,618,793 20,391 0 73,052 426.6 1,717,377 19,459 0 75,710 439.3 1,821,965 18,570 0 81,364 466.1 2,050,638 16,911 0 84,369 480.1 2,175,522 16,138 0 87,501 494.5 2,308,011 15,400 0 90,764 509.3 2,448,569 14,024 0 97,709 540.3 2,755,886 13,383 0 101,403 556.6 2,923,720 12,188 0 97,709 590.4 3,290,672 11,631 0 103,267 590.4 3,290,672 11,631 0 113,452 684.5 4,168,525 9,645 0 122,363

à

	2013	2012	2011	2010	2009	2008	YEAR		5.22 0,039 694,00 3.0 51.37 0.304	0.10 6.81 5.14 16.84%	2008 3.25 4.79	ANNUAL PLAN: COMPANY:
					3 PHASE 300 AMP REGULATOR		DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMANE YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	DEMAND COST (\$/kW/MONTH) ENERGY COST (\$/kWH) CIRCUIT of AREA PEAK MONTHLY AVI CIRCUIT of AREA ANNUAL GROWTH R ANNUAL LOAD FACTOR (%) (~ 40 to 90 CALCULATED LOSS FACTOR	TAX RATE (%) DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RA1 FIXED CHARGE RATE (Sum of Above)	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Pr	& ACCUMULATED TOTALS of th PLAN 2 NORTH SPRINGFIELD FDR 01 SALT RIVER ELECTRIC
					46,300		PRESENT ESTIMATED COST (\$) CONSTRUCTIONMAINTENANCE	LOSSES (Optional)	ERAGE DEMAND LOSSES (kW) ATE (%) %)	re (%)	esent Worth Factor)	e PRESENT WORTH of the WITH REGULATC ENGINEER: DATE:
L	804.5	781.1	758.4	736.3	714.8	0.0	CALCULA PEAK kW (avg./mo.)		<u>теак</u> 2013 2023 2028 2028 2033 2038			INFLATED
	2,482,596 12,914,638	2,340,085 10,432,042	2,205,754 8,091,958	2,079,135 5,886,203	1,959,784 3,807,068	1,847,284 1,847,284	Annual kWH Accum. kWH	TOTAL COST OF N	<u>Losses</u> 12,910 27,790 47,780 74,640 110,740 159,260	PLAN) COSTS of C
	6,371 35,057	6,676 28,686	6,996 22,010	7,331 15,014	7,682 7,682	00	YEARLY TOTAL PRES	IEW CONSTRUCTION	129,400 129,400 102,200 116,000 129,400	1 SUMMARY (Accu		CARRYING CHARG
	0 0	0 0	0 0	00	0 0	0 0	SENT WORT	\$46,300 0		mulated Tota		ies, Maint
	135,975 707,562	131,425 571,586	127,052 440,162	122,849 313,110	118,809 190,262	71,453 71,453	H OF INFLAT ATED through	-2008 -2008	1,462,500 2,362,700 3,441,000 4,738,100 6,304,600	als, Rounded		TENANCE
	142,346 742,619	138,101 600,272	134,048 462,171	130,180 328,124	126,491 197,944	71,453 71,453	red costs (\$) Year (Bottom) YOW TOTALS	DOLLARS DOLLARS	101ALS 742,700 1,525,300 2,447,500 3,543,200 4,854,100 6,434,000	(\$)		and LOSSES

Page 1

2018	2017	2016		2015		2014	YEAR	
							OF ADDITIONAL MAINTENANCE	DESCRIPTION of NEW CONSTRUCTION
							CONSTRUCTIONMAINTENANCE	PRESENT ESTIMATED COST (\$)
932.7	905.5		070 4	853.5		828.7	PEAK kW	CALCULA
3,336,401 27,788,236	3,144,878 24,451,834	21,306,956	18,342,607	2,794,183	15,548,424	2,633,786	NNUAL KWH	TED LOSSES
5,042 62,801	57,759	52,475	46,939	5,802	41,137	6,080	FIXED CHARGES MA	YEARLY TOTAL PR
00	00		0	0	0	0	INTENANCE	ESENT WORT
161,676 1,462,476	1,300,800	1,144,686	993,914	145,641	848,273	140,711	LOSSES	H OF INFLA
1,525,278	1,358,559	1,197,162	1,040,853	151,443	889,410	146,791	ROW TOTALS	TED COST (\$)

	CALCULAT	ED LOSSES	ANNUAL PRESENT WORTH		Neses IROW	
YEAR	PEAN KWIA	NNUAL KAN	FIXED CHARGES WAINT ENANG	l n r		
2019	960.7	3,539,588	4,812		167,467	172,279
2020	989.5	3,755,149	4,592		173,498	178,090
2021	1019.2	3,983,837	4,382		179,780	184,161
2022	1049.7	4,226,453	4,182		186,322	190,503
2023	1081.2	4,483,844	3,990	0	193,137	197,127
2024	1113.7	4,756,910	3,808		200,236	204,044
2025	1147.1	5,046,606	3,634	0	207,633	211,266
2026	1181.5	5,353,944	3,468	0	215,339	218,807
2027	1216.9	5,680,000	3,309	0	223,370	226,679
2028	1253.4	6,025,912	3,158	0	231,739	234,897
2029	1291.0	6,392,890	3,014	0	240,461	243,475
2030	1329.8	6,782,217	2,876	0	249,552	252,428
2031	1369.7	7,195,254	2,744	0	259,027	261,772
2032	1410.8	7,633,444	2,619	0	268,905	271,524
2033	1453.1	8,098,321	2,499	0	279,203	281,703
2034	1496.7	8,591,509	2,385	0	289,940	292,325
2035	1541.6	9,114,732	2,276	0	301,134	303,410
2036	1587.8	9,669,819	2,172	0	312,807	314,979
2037	1635.5	10,258,711	2,073	0	324,980	327,052
2038	1684.5	10,883,467	1,978	0	337,674	339,652

- }

PROJECT NAME: West Bardstown to Boston Road

CFR CODE: 307

ESTIMATED COST: \$634,920

*** Carryover Item 310 2005-2008 CWP

DESCRIPTION OF PROPOSED CONSTRUCTION:

This project will be a conversion of 4.29 miles of double circuit 1/0 cu to double circuit 336.4 acsr along Ben Irvin Road in central Nelson County. This conversion will be on West Bardstown Substation fdrs 04 & 05.

REASON FOR PROPOSED CONSTRUCTION

This project will correct voltage and reliability problems on these feeders. This area is primed for increased growth due to the relocation of major highway and the construction of a new road to connect other major roads around Bardstown.

RESULTS OF PROPOSED CONSTRUCTION:

By constructing this project all Design criteria will be met and reliability will be increased.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

The alternative would be to install two sets of regulators on these circuits to correct these voltage problems. This alternative proved to be the most cost effective method but was rejected because of the road changes and growth in this area.

COMPARISON OF TOTAL ACCUMULATED COST and kWH LOSSES OF PLAN 1 vs PLAN 2

(All costs are the the accumulated present worth of the inflated cost)

TOTAL COSTS (\$)

	and the second se	and the second se
YEAR	PLAN 1	PLAN 2
2008	15,900	145,400
2009	32,300	387,100
2010	153,100	646,100
2011	269,800	913,200
2012	382,500	1,188,900
2013	491,500	1,473,400
2018	988,700	3,043,600
2023	1,424,100	4,902,200
2028	1,819,300	7,117,600
2033	2,193,400	9,773,800
2038	2,599,600	12,977,500

For first 6 years, favor: PLAN 1 by 66.6%





TOTAL CAPITALIZED COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	0	0
2009	0	0
2010	103,800	9,060
2011	202,860	17,700
2012	297,390	25,950
2013	387,590	33,820
2018	780,400	68,100
2023	1,091,300	95,200
2028	1,337,300	116,700
2033	1,532,000	133,700
2038	1,721,500	150,200

For first 6 years, favor: PLAN 2 by 91.3%



At 30 years, favor PLAN 2 by 91.3%



4

TOTAL COST OF LOSSES (\$)

	YEAR	PLAN 1	PLAN 2
	2008	15,900	145,380
	2009	32,330	387,100
	2010	49,330	637,050
	2011	66,900	895,550
	2012	85,080	1,162,940
	2013	103,889	1,439,593
	2018	208,300	2,975,500
	2023	332,800	4,807,000
ļ	2028	482,000	7,000,900
	2033	661,400	9,640,100
	2038	878,100	12,827,300

1,600,000

For first 6 years, favor: PLAN 1 by 92.8%

800,000

600,000

400.000

200,000

0

2008

2009

2010

2011

2012

At 30 years, favor PLAN 1 by 93.2%



TOTAL ACCUMULATED LOSSES (MWH)

YEAR	PLAN 1	PLAN 2
2008	260	3,760
2009	530	7,750
2010	810	11,980
2011	1,120	16,460
2012	1,440	21,220
2013	1,790	26,280
2018	3,840	56,540
2023	6,610	97,210
2028	10,330	151,870
2033	15,320	225,320
2038	22,030	324,030



At 30 years, favor PLAN 1 by 93.2%



3.25% Given annual inflation rate

4.79% Given annual present worth rate

 PLAN 1
 PLAN 1
 WEST BARDSTOWN FDR 04 & 05 WITH LINE CONVERSION

 PLAN 2
 PLAN 2
 WEST BARDSTOWN FDR 04 & 05 WITH REGULATORS

2013

2013	2012	2011	2010	2009	2008	YEAR		51.37 0.304	96.0 3.0	5.22	16.84%	0.10 6.81 5.14	2008 3.25 4.79	PLAN:	ANNUAL 8
			DC 1/0 CU TO DC 397 SPACER CABLE			DESCRIPTION of NEW CONSTRUCTION P or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMAND LYEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	ANNUAL LOAD FACTOR (%) (~ 40 to 90%) CALCULATED LOSS FACTOR	CIRCUIT of AREA MONTHLY AVERAGE P	DEMAND COST (\$/kW/MONTH)	FIXED CHARGE RATE (Sum of Above)	TAX RATE (%) DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RATE	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Press	PLAN 1 WEST BARDSTOWN FDR 04 & 05 SALT RIVER ELECTRIC	ACCUMULATED TOTALS of the PI
			634,920			RESENT ESTIMATED COST (\$)	OSSES (Optional)		PEAK DEMAND LOSSES (KW)			(%)	ent Worth Factor)	WITH LINE CO ENGINEER: DATE:	RESENT WORTH of the IN
111.3	108.0	104.9	101.8	98.9	96.0	CALCULA PEAK kW (avg./mo.)		2033 2038	2023 2028	2013 2018	YEAR			GARY PILE 11/13/07	FLATED
343,414 1,786,463	323,700 1,443,049	305,119 1,119,349	287,604 814,230	271,094 526,626	255,532 255,532	Annual KWH Accum. KWH	FOTAL COST OF A	15,320 22,030	6,610 10,330	1,790 3,840	MWH	PL			COSTS of C/
90,207 387,593	94,528 297,386	99,000 202,857	103,801 103,801	0 0	0 0	YEARLY TOTAL PRE: ANNUAL for Year (Top, FIXED CHARGES MAII	NEW CONSTRUCTION	1,532,000 1,721,500	1,091,300 1,337,300	387,600 780,400	FIXED CHARGES MAII	NN 1 SUMMARY (Accu			ARRYING CHARGE
0 0	0 0	00	000	0 0	00	SENT WORT); ACCUMUL NTENANCE	\$634,920 0	0 0	000	0 0	NTENANCE	mulated Total			IS, MAINTE
18,809 103,889	18,180 85,080	66,900	16,993 49,326 47 575	16,435 32,332	15,897 15,897	ATED through	-2008 -2008	661,400 878,100	332,800 482,000	103,900 208,300	LOSSES	's, Rounded O			ENANCE a
109,017 491,482	112,708 382,466	269,758	120,794 153,127 116,631	16,435 32,332	15,897 15,897	North Year (Bottom)	DOLLARS	2,193,400 2,599,600	1,424,100 1,819,300	491,500 988,700	r (\$) TOTALS)))			nd LOSSES

2:37 PN

• Live

	2018		2017		2016		2015		2014	YEAR	
										or ADDITIONAL MAINTENANCE	DESCRIPTION of NEW CONSTRUCTION
										CONSTRUCTIONMAINTENANCE	PRESENT ESTIMATED COST (\$)
	129.0		125.3		121.6		118.1		114.6	PEAK KWA	CALCULA
3,843,906	461,519	3,382,386	435,026	2,947,360	410,054	2,537,306	386,515	2,150,791	364,328	NNUAL KWH	TED LOSSES
780,421	71,391	709,030	74,811	634,220	78,394	555,826	82,149	473,677	86,084	FIXED CHARGES	YEARLY TOTAL
0	0	0	0	0	0	0	0	0	0	MAINTENANCE	PRESENT WORTH
208,316	22,364	185,951	21,595	164,356	20,856	143,500	20,146	123,354	19,464	LOSSES	1 OF INFLA
988,737	93,755	894,982	96,406	798,576	99,250	699,326	102,295	597,031	105,548	ROW TOTALS	TED COST (\$)

YEAR 2019 2020 2021	132.9 136.9 141.0	NNUAL KWH 489,626 519,444 551,078	EXED CHARGES 68,128 65,013 62,042	SMA	INTENANCE 0 0 0
2021 2022	141.0 145.2	551,078 584,639	62,042 59,206	0, 10	00
2023	149.6	620,244	56,499	U	0
2024 2025	154.1 158.7	658,016 698,090	53,917 51,452	10 1	00
2026 2027	163.4 168.3	740,603 785,706	49,100 46,856	0, 0	00
2028	173.4	833,555	44,714	4	0
2029	178.6	884,319	42,670	0	0
2030	183.9	938,174	40,720	0	0
2031	189.5	995,309	38,858	ω	0
2032 2033	195.1 201.0	1,055,923 1,120,229	37,082 35,387	7 0	00
2034	207.0	1,188,451	33,770	0	0
2035	213.2	1,260,827	32,226		00
2036	219.6 226.2	1,337,612 1.419.072	30,753 29.347	73	0 0
2038	233.0	1,505,494	28,006		0

2:37 PA

2013	2012	2011	2010	2009	2008	YEAR		5.22 0.039 1412.00 3.0 51.37 0.304	4.79 0.10 6.81 5.14 16.84%	2008	PLAN:
			THREE PHASE 150 AMP REGULATOR THREE PHASE 150 AMP REGULATOR			DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMAND YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	DEMAND COST (\$/KW/MONTH) ENERGY COST (\$/KWH) CIRCUIT or AREA PEAK MONTHLY AVE CIRCUIT or AREA ANNUAL GROWTH R/ ANNUAL LOAD FACTOR (%) (~ 40 to 90' CALCULATED LOSS FACTOR	DEPERECIATION RATE (%) DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RATI FIXED CHARGE RATE (Sum of Above)	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%)	PLAN 2 WEST BARDSTOWN FDR 04 & SALT RIVER ELECTRIC
			27,700			PRESENT ESTIMATED COST (\$) CONSTRUCTIONMAINTENANCE	LOSSES (Optional)	RAGE DEMAND LOSSES (KW) ATE (%) %)	E (%)	sent Worth Factor)	05 WITH REGULA ENGINEER: DATE:
1636.9	1589.2	1542.9	1498.0	1454.4	0.0	PEAK kW (avg./mo.)		2013 2018 2023 2028 2033 2038	YEAR		GARY PILE 11/13/07
5,051,045 26,275,892	4,761,094 21,224,847	4,487,788 16,463,752	4,230,171 11,975,964	3,987,342 7,745,793	3,758,452 3,758,452	Annual kWH Accum. kWH	TOTAL COST OF A	26,280 56,540 97,210 151,870 225,320 324,030	PLAN MWH		
7,871 33,819	8,248 25,948	0,043 17,700	9,057	00	00	ANNUAL for Year (Top	EW CONSTRUCTION DDED MAINTENANCI	33,800 68,100 95,200 116,700 133,700 150,200	1 SUMMARY (Accur PRESENT W		
0 0	00			0 0	0 0); ACCUMU NTENANCE	\$55,400 0	00000	nulated Tota IORTH OF INI		
276,653 1,439,593	1,162,940	895,545	249,946 637,049	241,726 387,103	145,377 145,377	LATED through	-2008 [-2008 [H OF INFLAT	1,439,600 2,975,500 4,807,000 7,000,900 9,640,100 12,827,300	als, Rounded		
284,524 1,473,412	1,188,888	913,246 975,642	259,003 646,106	241,726 387,103	145,377 145,377	Year (Bottom) OW TOTALS	DOLLARS DOLLARS	1,473,400 3,043,600 4,902,200 7,117,600 9,773,800 12,977,500	Off) (\$) TOTALS		

ANNUAL & ACCUMULATED TOTALS of the PRESENT WORTH of the INFLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOSSES

2018	2017	2016	2015	2014	YEAR
					DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE
					PRESENT ESTIMATED COST (\$) CONSTRUCTIONMAINTENANCE
1897.6	1842.3	1788.7	1736.6	1686.0	CALCULAT PEAK kWAN
6,788,182 56,537,448	6,398,513 49,749,265	6,031,212 43,350,753	5,684,996 37,319,541	5,358,654 31,634,545	ED LOSSES
6,229	6,528	6,840 55,339	48,499	41,331	FIXED CHARGESMAINTEN
00	0 0	0 0	00	0 0	WORTH
328,943 2,975,528	317,627 2,646,585	306,758 2,328,958	296,318 2,022,200	1,725,882	LOSSES RC
335,172 3,043,624	324,155 2,708,451	313,599 2,384,297	303,486 2,070,698	1,767,212	DW TOTALS

	CALCULAT	ED LOSSES	ANNUAL PRESENT WORTH	1 PF I	NFLATED CUS	(\$)
YEAR	PEAK KWA	NNUAL KWH	FIXED CHARGES MAINTENANC	Ĭ I I I I I I I I I I I I I I I I I I I	OSSES ROW	IUIALS
2010	1054 5	7 201 582	5,944	0	340,726	346,671
2020	2013.2	7.640.159	5,673	0	352,997	358,669
2021	2073 6	8.105.444	5,413	0	365,776	371,190
2022	2135.8	8,599,066	5,166	0	379,087	384,253
2023	2199.8	9,122,749	4,930	0	392,952	397,882
2022	ם אמננ	0 678 325	4.705	0	407,397	412,101
7000	8 222C	10 267 735	4,489	0	422,445	426,935
2010	2403 B	10.893.040	4,284	0	438,125	442,410
2027	2476.0	11,556,426	4,088	0	454,465.	458,553
2028	2550.2	12,260,212	3,902	0	471,492	4/5,393
2020	7 9696	13.006.859	3,723	0	489,237	492,961
0500	2705 5	13,798,977	3,553	0	507,733	511,286
2031	2786.7	14,639,334	3,391	0	527,013	530,403
2032	2870.3	15,530,870	3,236	0	547,110	550,346
2033	2956.4	16,476,700	3,088	0	568,062	0/1,100
2034	3045.1	17,480,131	2,947	0	589,906	592,853
2035	3136.5	18,544,671	2,812) C	612,683	010,494
2036	3230.6	19,674,041	2,683		030,432	008,110
2037	3327.5	20,872,190	2,561	С	667,198	
2038	3427.3	22,143,307	2,444	C	620,780	009,403

2:37 PM

.,

PROJECT NAME: Plum Ridge Road

CFR CODE: 308

ESTIMATED COST: \$133,650

*** Carryover Item 312 2005-2008 CWP

DESCRIPTION OF PROPOSED CONSTRUCTION:

This project includes 1.65 mile 6a cwc to three phase 1/0 acsr along Plum Ridge Road in northern Spencer County. This conversion is on Darwin Thomas Substation fdr 04

REASON FOR PROPOSED CONSTRUCTION This conversion will correct voltage problems on this feeder.

RESULTS OF PROPOSED CONSTRUCTION:

With the construction of this project all design criteria will be met and reliability will be increased.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

No alternatives were considered because of the ampacity problems and because the installation of a regulator did not solve voltage problems.

4

PROJECT NAME: Dale Lane

CFR CODE: 309

ESTIMATED COST: \$289,170

DESCRIPTION OF PROPOSED CONSTRUCTION: This conversion consists of 3.57 mile of 2acwc to 336.4 acsr along Dale Lane in northern Spencer County.

REASON FOR PROPOSED CONSTRUCTION This project will correct voltage problems on circuit 03 out of Darwin Thomas substation.

RESULTS OF PROPOSED CONSTRUCTION:

By constructing this project all items not being met above will be corrected.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

Alternative number 2 includes the installation of three phase regulators. This plan is not as reliable. Economic analysis of this plan suggests that the conversion is the best option.

COMPARISON OF TOTAL ACCUMULATED COST and kWH LOSSES OF PLAN 1 vs PLAN 2

(All costs are the the accumulated present worth of the inflated cost)

TOTAL COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	28,500	67,400
2009	57,900	179,600
2010	135,700	300,000
2011	212,300	424,300
2012	287,900	552,400
2013	362,700	684,700
2018	728,600	1,414,300
2023	1,093,300	2,277,500
2028	1,472,600	3,305,900
2033	1,882,800	4,538,700
2038	2,357,300	6,025,500

For first 6 years, favor: PLAN 1 by 47.0%







TOTAL CAPITALIZED COSTS (\$)

	0.0	
YEAR	PLAN 1	PLAN 2
2008	0	0
2009	0	0
2010	47,280	4,530
2011	92,390	8,850
2012	135,440	12,970
2013	176,530	16,910
2018	355,400	34,000
2023	497,000	47,600
2028	609,100	58,300
2033	697,800	66,800
2038	784,100	75,100

For first 6 years, favor: PLAN 2 by 90.4%



At 30 years, favor PLAN 2 by 90.4%



Ę

TOTAL COST OF LOSSES (\$)

YEAR	PLAN 1	PLAN 2
2008	28,480	67,440
2009	57,930	179,570
2010	88,370	295,510
2011	119,860	415,430
2012	152,440	539,470
2013	186,135	667,800
2018	373,200	1,380,300
2023	596,300	2,229,900
2028	863,500	3,247,600
2033	1,185,000	4,471,900
2038	1,573,200	5,950,400

For first 6 years, favor: PLAN 1 by 72.1%



At 30 years, favor PLAN 1 by 73.6%



TOTAL ACCUMULATED LOSSES (MWH)

YEAR	PLAN 1	PLAN 2
2008	460	1,740
2009	940	3,590
2010	1,460	5,560
2011	2,010	7,640
2012	2,590	9,850
2013	3,200	12,190
2018	6,890	26,230
2023	11,840	45,100
2028	18,500	70,450
2033	27,450	104,520
2038	39,470	150,310



 \square

At 30 years, favor PLAN 1 by 73.7%



3.25% Given annual inflation rate

4.79% Given annual present worth rate

 PLAN 1
 PLAN 1
 DARWIN THOMAS FDR 03 WITH LINE CONVERSION

 PLAN 2
 PLAN 2
 DARWIN THOMAS FDR 03 WITH REGULATORS

_
_
Z
C
\triangleright
—
Co
2
⊵
Ö.
೧
C
2
2
1
5
4
mi
2
ų.
7
2
20
~
<u>o</u>
_
5
Ð
77
Ť
ĩ
ö
ň
5
7
5
2
ч.
~
_
0
#
ดี
Z
T
٣
FL
FLAT
FLATE
FLATED
FLATED C
FLATED CC
FLATED COS
FLATED COST
FLATED COSTS
FLATED COSTS
FLATED COSTS of
FLATED COSTS of (
FLATED COSTS of C,
FLATED COSTS of CA
FLATED COSTS of CAR
FLATED COSTS of CARR
FLATED COSTS of CARRY
FLATED COSTS of CARRYIN
FLATED COSTS of CARRYING
FLATED COSTS of CARRYING
FLATED COSTS of CARRYING C
FLATED COSTS of CARRYING CH
FLATED COSTS of CARRYING CHA
FLATED COSTS of CARRYING CHAR
FLATED COSTS of CARRYING CHARC
FLATED COSTS of CARRYING CHARGE
FLATED COSTS of CARRYING CHARGES
FLATED COSTS of CARRYING CHARGES,
FLATED COSTS of CARRYING CHARGES, N
FLATED COSTS of CARRYING CHARGES, M/
FLATED COSTS of CARRYING CHARGES, MAIL
FLATED COSTS of CARRYING CHARGES, MAIN
FLATED COSTS of CARRYING CHARGES, MAINT
FLATED COSTS of CARRYING CHARGES, MAINTE
FLATED COSTS of CARRYING CHARGES, MAINTEN.
FLATED COSTS of CARRYING CHARGES, MAINTENA
FLATED COSTS of CARRYING CHARGES, MAINTENAN
FLATED COSTS of CARRYING CHARGES, MAINTENANC
FLATED COSTS of CARRYING CHARGES, MAINTENANCE
FLATED COSTS of CARRYING CHARGES, MAINTENANCE a
FLATED COSTS of CARRYING CHARGES, MAINTENANCE an
FLATED COSTS of CARRYING CHARGES, MAINTENANCE and
FLATED COSTS of CARRYING CHARGES, MAINTENANCE and L
FLATED COSTS of CARRYING CHARGES, MAINTENANCE and LC
FLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOS
FLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOSS
FLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOSSE

2013	2012	2011	2010	2009	2008	YEAR		5.22 0.039 172.0 3.0 51.37 0.304	0.10 6.81 5.14 16.84%	2008 3.25 4.79	PLAN: COMPANY:
			THREE PHASE 2ACWC TO 336.4 ACSR			DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMAND YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	DEMAND COST (\$/kW/MONTH) ENERGY COST (\$/kWH) CIRCUIT or AREA MONTHLY AVERAGE CIRCUIT or AREA ANNUAL GROWTH R ANNUAL LOAD FACTOR (%) (~ 40 to 90 CALCULATED LOSS FACTOR	TAX RATE (%) DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RAT FIXED CHARGE RATE (Sum of Above)	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Pre	PLAN 1 DARWIN THOMAS FDR 03 WITI SALT RIVER ELECTRIC
			289,170			PRESENT ESTIMATED COST (\$ CONSTRUCTION/MAINTENANC	LOSSES (Optional)	: PEAK DEMAND LOSSES (KW) ATE (%) %)	те (%)	sent Worth Factor)	H LINE CONVERS DATE:
199.4	193.6	187.9	182.5	177.2	172.0	PEAK kW E (avg./mo.)		2013 2018 2023 2028 2028 2033 2038			GARY PILI 11/13/07
615,283 3,200,746	579,963 2,585,463	546,671 2,005,500	515,290 1,458,828	485,710 943,539	457,828 457,828	Annual kWH Accum. kWH	TOTAL COST OF A	<u>- 1,2555</u> 3,200 6,890 11,840 18,500 27,450 39,470	- Deces		
41,084 176,527	43,052 135,442	45,114 92,390	47,275 47,275	00	0 0	YEARLY IOTAL PR	DED MAINTENANCI	176,500 355,400 497,000 609,100 697,800 784,100	IN 1 SUMMARY (Acc		
0 0	0 0	00	0 0	00	0 0	p); ACCUMUL	\$289,170 0	0 0 0 0 0 0	umulated Total WORTH OF INF		
33,700 186,135	32,572 152,435	31,488 119,863	30,447 88,375	29,445 57,928	28,483 28,483	ATED through	-2008 -2008	186,100 373,200 596,300 4,185,000 1,573,200	S, Rounded O		
74,784 362,662	75,624 287,877	76,603 212,253	77,722 135,650	29,445 57,928	28,483 28,483	Year (Bottom) ROW TOTALS	DOLLARS	362,600 728,600 1,093,300 1,472,600 1,472,800 1,882,800 2,357,300	ff) (\$) TOTAL S		

2:45 PN

2018	2017	2016	2015	2014	YEAR
					DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE
					CONSTRUCTIONMAINTENANCE
231.2	224.4	217.9	211.5	205.4	CALCULA PEAK KWA
826,889 6,886,998	779,422 6,060,109	734,680 5,280,687	692,507 4,546,006	652,754 3,853,500	NNUAL KWH
32,514 355,438	34,072 322,923	35,704 288,851	37,414 253,147	39,206 215,733	YEARLY TOTAL P
00	00	00	0 0	0 0	RESENT WORT
40,070 373,232	38,691 333,163	37,367 294,472	36,095 257,104	34,874 221,009	H OF INFLA
72,584 728,670	72,763 656,086	73,071 583,323	73,510 510,251	74,080 436,742	ROW TOTALS

YEAR	PEAK KW A	NNUAL KWH	FIXED CHARGES MA	INTENANCE	LOSSES RO
2019	238.1	877,247	31,028	0	41,
2020	245.2	930,671	29,610	0	43,(
2021	252.6	987,349	28,256	0	44,(
2022	260.2	1,047,478	26,965	0	46,
2023	268.0	1,111,270	25,732	0	47,8
2024	276.0	1,178,946	24,556	0	49,
2025	284.3	1,250,744	23,434	0	51,4
2026	292.8	1,326,914	22,362	0	53,3
2027	301.6	1,407,723	21,340	0	55,0
2028	310.7	1,493,454	20,365	0	57,4
2029	320.0	1,584,405	19,434	0	59,5
2030	329.6	1,680,895	18,546	0	61,8
2031	339.5	1,783,262	17,698	0	64,`
2032	349.6	1,891,862	16,889	0	66,6
2033	360.1	2,007,077	16,117	0	69,
2034	370.9	2,129,308	15,380	0	71,
2035	382.1	2,258,983	14,677	0	74,1
2036	393.5	2,396,555	14,006	0	77,
2037	405.3	2,542,505	13,366	0	80,
2038	417.5	2,697,343	12,755	0	83,

2:45 Pf

.

Page 2

ANNUAL & ACCUMULATED TOTALS of the PRESENT WORTH of the INFLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOSSES

2013	2012	2011	2010	2009	2008	YEAR		5.22 0.039 655.00 3.0 51.37 0.304	0.10 6.81 5.14 16.84%	2008 3.25 4.79	PLAN: COMPANY:
			THREE PHASE 150 AMP REGULATOR			DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMAND YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	DEMAND COST (\$/kW/MONTH) ENERGY COST (\$/kWH) CIRCUIT or AREA PEAK MONTHLY AVE CIRCUIT or AREA ANNUAL GROWTH R/ ANNUAL LOAD FACTOR (%) (~ 40 to 90' CALCULATED LOSS FACTOR	TAX RATE (%) DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RAT FIXED CHARGE RATE (Sum of Above)	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Pre	PLAN 2 DARWIN THOMAS FDR 03 WIT SALT RIVER ELECTRIC
			27,700			PRESENT ESTIMATED COST (\$ CONSTRUCTIONMAINTENANCE	LOSSES (Optional)	RAGE DEMAND LOSSES (KW) ATE (%) %)	E (%)	sent Worth Factor)	H REGULATORS ENGINEER: DATE:
759.3	737.2	715.7	694.9	674.7	0.0	PEAK kW		2013 2018 2023 2028 2033 2038	YEAR		GARY PIL 11/13/07
2,343,084 12,188,887	2,208,581 9,845,803	2,081,800 7,637,222	1,962,296 5,555,422	1,849,652 3,593,127	1,743,474 1,743,474	Annual kWH Accum. kWH	TOTAL COST OF N TOTAL COST OF A	12,190 26,230 45,100 70,450 104,520 150,310	PLAN MWH		m
3,936 16,910	4,124 12,974	4,322 8,850	4,529 4,529	0 0	0 0	ANNUAL for Year (Top))	DDED MAINTENANCI	16,900 34,000 47,600 58,300 66,800 75,100	1 SUMMARY (Accun PRESENT W		
00	0 0	0 0	0 0	0 0	. 0 0	ACCUMUL	\$27,700 0 0	000000	nulated Tota		
128,334 667,800	124,039 539,466	119,912 415,426	115,945 295,515	112,132 179,570	67,438 67,438	ATED through	-2008 -2008	667,800 1,380,300 2,229,900 3,247,600 4,471,900 5,950,400	sis, Roundec LATED COST		
132,270 684,709	128,163 552,440	124,233 424,277	120,474 300,043	112,132 179,570	67,438 67,438	h Year (Bottom) ROW TOTALS	DOLLARS DOLLARS	684,700 1,414,300 2,277,500 3,305,900 4,538,700 6,025,500	y Off) T (\$) TOTALS		

2:45 PN

Page 1

د،

2018	2017	2016	2015	2014	YEAR
					DESCRIPTION of NEW CONSTRUCTION
					PRESENT ESTIMATED COST (\$) CONSTRUCTIONMAINTENANCE
880.3	854.6	829.7	805.6	782.1	CALCULA PEAK kWA
3,148,909 26,226,649	2,968,149 23,077,740	2,797,765 20,109,591	2,637,162 17,311,827	2,485,778 14,674,665	NNUAL KWH
3,115 34,048	3,264 30,933	3,420 27,669	3,584 24,249	3,756 20,665	YEARLY TOTAL PRESEN
0 0	0 0	0 0	0 0	0 0	IT WORTH
152,590 1,380,291	147,341 1,227,701	142,299 1,080,359	137,456 938,060	132,804 800,604	LOSSES
155,705 1,414,339	150,605 1,258,634	145,719 1,108,029	141,040 962,309	136,560 821,269	TED COST (\$) ROW TOTALS

YEAR 2019 2020 2021 2022 2022 2022 2023	CALCULA 906.7 933.9 961.9 990.7 1020.5 1051.1	TED LOSSES 3,340,677 3,544,125 3,759,962 3,759,962 4,231,870 4,489,591	ANNUAL PRE IXED CHARGES 2,972 2,836 2,707 2,583 2,465 2,352	S MAINTENANCE	- INFL 158, 163, 169, 182, 188,
2024 2025	1051.1 1082.6	4,489,591 4,763,007	2,352 2,245		00
2027	1148.5 1183.0	5,360,807 5,687,280	2,044 1,951		000
2029	1218.5	6,033,635	1,862		0 0
2031	1292.7	6,790,909	1,695		0 0
2032 2033	1331.5 1371.4	7,204,476 7,643,228	1,618 1,544		00
2034 2035	1412.6 1454.9	8,108,701 8,602,521	1,473 1,406		00
2036 2037	1498.6 1543.6	9,126,414 9,682,213	1,342 1,280	_ 10	00
2038	1589.9	10,271,860	1,222		0

Page 2

.)

2:45 PN

PROJECT NAME: Pendleton Hill Road conversion

CFR CODE: 310

ESTIMATED COST: \$120,690

DESCRIPTION OF PROPOSED CONSTRUCTION:

This project requires the conversion of 1.49 miles of single phase 6acwc to three phase 1/0 ACSR along Pendleton Hill road in northern Bullitt County. This project is on Knob Creek Substation fdr 01.

REASON FOR PROPOSED CONSTRUCTION

This project will correct projected loads of over 100% ampacity problems on circuit 01. There currently over 130 customers on this tap and some very long spans. Coordination problems also exist with this project.

RESULTS OF PROPOSED CONSTRUCTION:

With this construction all design criteria will be met.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

No alternatives were considered because of the ampacity issues.

	2018		2017		2016	 	2015			2014	YEAR	
						~			-		OF ADDITIONAL MAINTENANCE	DESCRIPTION of NEW CONSTRUCTION
											CONSTRUCTIONMAINTENANCE	PRESENT ESTIMATED COST (\$)
	880.3		854.6		829.7		805.6			782.1	PEAK KWA	CALCULA
26,226,649	3,148,909	23,077,740	2,968,149	20,109,591	2,797,765	17,311,827	2,637,162	17,077,000	14 674 665	2,485,778	NNUAL KWH	TED LOSSES
34,048	3,115	30,933	3,264	27,669	3,420	24,249	3,584		20 882	3,756	FIXED CHARGESMAIL	YEARLY TOTAL PRE
0	0	0	0	0	0	0	0	4	2	0	NTENANCE	SENT WORT
1,380,291	152,590	1,227,701	147,341	1,080,359	142,299	938,060	137,456	000,001	800 604	132,804	LOSSES	H OF INFLA
1,414,339	155,705	1,258,634	150,605	1,108,029	145,719	962,309	141,040	001,100	821 289	136,560	ROW TOTALS	TED COST (\$)

	CALCULAT	NINI IAI WH	ANNUAL PRESENT WORTH	I OSSES R	COST (\$)
				-	
2019	906.7	3,340,677	2,972 0	158,056	161,029
2020	933.9	3,544,125	2,836 0	163,748	166,585
2021	961.9	3,759,962	2,707 0	169,677	172,383
2022	990.7	3,988,944	2,583 0	175,851	178,434
2023	1020.5	4,231,870	2,465 0	182,283	184,748
2024	1051.1	4,489,591	2,352 0	188,984	191,336
2025	1082.6	4,763,007	2,245 0	195,964	198,209
2026	1115.1	5,053,074	2,142 0	203,238	205,380
2027	1148.5	5,360,807	2,044 0	210,817	212,862
2028	1183.0	5,687,280	1,951 0	218,716	220,667
2029	1218.5	6,033,635	1,862 0	226,948	228,810
2030	1255.0	6,401,083	1,777 0	235,528	237,304
2031	1292.7	6,790,909	1,695 0	244,471	246,166
2032	1331.5	7,204,476	1,618 0	253,794	255,412
2033	1371.4	7,643,228	1,544 0	263,513	265,057
2034	1412.6	8,108,701	1,473 0	273,646	275,120
2035	1454.9	8,602,521	1,406 0	284,212	285,618
2036	1498.6	9,126,414	1,342 0	295,229	296,570
2037	1543.6	9,682,213	1,280 0	306,717	307,997
2038	1589.9	10,271,860	1,222 0	318,698	319,920

2:45 PM

 \rightarrow

PROJECT NAME: Pendleton Hill Road conversion

CFR CODE: 310

ESTIMATED COST: \$120,690

DESCRIPTION OF PROPOSED CONSTRUCTION:

This project requires the conversion of 1.49 miles of single phase 6acwc to three phase 1/0 ACSR along Pendleton Hill road in northern Bullitt County. This project is on Knob Creek Substation fdr 01.

REASON FOR PROPOSED CONSTRUCTION

This project will correct projected loads of over 100% ampacity problems on circuit 01. There currently over 130 customers on this tap and some very long spans. Coordination problems also exist with this project.

RESULTS OF PROPOSED CONSTRUCTION: With this construction all design criteria will be met.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

No alternatives were considered because of the ampacity issues.

PROJECT NAME: South St Gregory Road

CFR CODE: 311

ESTIMATED COST: \$55,890

DESCRIPTION OF PROPOSED CONSTRUCTION:

This project will consist of the conversion of 0.69 miles of single phase 2 acsr to three phase 1/0 ACSR along South St Gregory road in central Nelson County. This is on the proposed new Deatsville Substation fdr 01.

REASON FOR PROPOSED CONSTRUCTION:

This single phase tap currently has 193 customers and lots of new lots being built on in existing developed subdivisions on it. Cold load pickup has been a problem on this tap.

RESULTS OF PROPOSED CONSTRUCTION: All Design Criteria will be met.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

The utilization of a regulator solved the voltage problem but did not solve the coordination issue. Economic analysis confirmed the conversion to be the best solution in the long term.

COMPARISON OF TOTAL ACCUMULATED COST and kWH LOSSES OF PLAN 1 vs PLAN 2

(All costs are the the accumulated present worth of the inflated cost)

TOTAL COSTS (\$)

	YEAR	PLAN 1	PLAN 2
	2008	31,600	23,100
	2009	64,300	61,400
	2010	108,500	102,500
ļ	2011	153,300	144,900
ļ	2012	198,900	188,600
	2013	245,300	233,700
	2018	492,200	482,800
	2023	770,900	777,700
	2028	1,092,200	1,129,100
	2033	1,468,600	1,550,500
	2038	1,918,600	2,058,700
	1		





TOTAL CAPITALIZED COSTS (\$)

YEAR	PLAN 1	PLAN 2
2008	0	0
2009	0	0
2010	10,330	1,440
2011	20,190	2,810
2012	29,590	4,120
2013	38,570	5,370
2018	77,700	10,800
2023	108,600	15,100
2028	133,100	18,500
2033	152,500	21,200
2038	171,400	23,800

For first 6 years, favor: PLAN 2 by 86.1%



At 30 years, favor PLAN 2 by 86.1%



TOTAL COST OF LOSSES (\$)

-

YEAR PLAN 2 PLAN 1 23,060 2008 31,630 2009 64,330 61,410 101,060 2010 98,140 2011 133,100 142,070 184,490 2012 169,270 2013 206,697 228,377 472,000 2018 414,500 2023 662,300 762,600 1,110,600 2028 959,100 2033 1,316,100 1,529,300 2,034,900 2038 1,747,200

250,000 200.000 150.000 100,000 50,000 0

2010

2011

2012

2013

For first 6 years, favor: PLAN 1 by 9.5%

2008

2009

At 30 years, favor PLAN 1 by 14.1%



TOTAL ACCUMULATED LOSSES (MWH)

YEAR	PLAN 1	PLAN 2
2008	510	600
2009	1,050	1,230
2010	1,620	1,900
2011	2,230	2,610
2012	2,870	3,370
2013	3,550	4,170
2018	7,650	8,970
2023	13,150	15,420
2028	20,540	24,090
2033	30,480	35,740
2038	43,830	51,400



At 30 years, favor PLAN 1 by 14.7%



3.25% Given annual inflation rate

4.79% Given annual present worth rate

PLAN 1 PLAN 1 DEATSVILLE FDR 01 WITH LINE CONVERSION PLAN 2 PLAN 2 DEATSVILLE FDR 01 WITH REGULATORS

At 30 years, favor PLAN 1 by 6.8%

COMPANY: ANNUAL & ACCUMULATED TOTALS of the PRESENT WORTH of the INFLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOSSES 16.84% YEAR 0.304 2012 2011 2010 2009 2008 224.00 2013 51.37 0.039 2008 PLAN: 5.22 5.14 6.81 0.10 4.79 3.25 ι: Ο PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) SALT RIVER ELECTRIC DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RATE TAX RATE (%) BLENDED INTEREST RATE PLAN 2 DEATSVILLE FDR 01 WITH REGULATORS CIRCUIT OF AREA PEAK MONTHLY AVERAGE DEMAND LOSSES CIRCUIT OF AREA ANNUAL GROWTH RATE (%) ENERGY COST (\$/kWH) DEMAND COST (\$/kW/MONTH) FIXED CHARGE RATE (Sum of Above) CALCULATED LOSS FACTOR ANNUAL LOAD FACTOR (%) (~ 40 to 90%) DESCRIPTION OF NEW CONSTRUCTION PRESENT ESTIMATED COST (\$) AMOUNT (kW) (Present Year) YEAR DECREASE EXPECTED DECREASE IN CIRCUIT PEAK DEMAND LOSSES (Optional) SINGLE PHASE 150 AMP REGULATOR or ADDITIONAL MAINTENANCE (%) (& Present Worth Factor) CONSTRUCTIONMAINTENANCE (avg./mo.) Accum. kWH (%) 8,800 ENGINEER: (kW) DATE: GARY PILE PEAK kW Annual kWH 11/13/07 CALCULATED LOSSES YEAR 2013 2018 2023 2028 2028 2033 230.7 237.6 252.1 244.8 259.7 0.0 TOTAL COST OF ADDED MAINTENANCI TOTAL COST OF NEW CONSTRUCTION 755,301 3,367,114 4,168,413 2,611,813 671,075 1,899,870 632,553 1,228,794 596,242 596,242 LOSSES 711,944 801,299 51,400 24,090 35,740 15,420 8,970 4,170 MWH PLAN 1 SUMMARY (Accumulated Totals, Rounded Off) FIXED CHARGES MAINTENANCE YEARLY TOTAL PRESENT WORTH OF INFLATED COSTS (\$) FIXED CHARGES ANNUAL for Year (Top); 21,200 18,500 15,100 10,800 23,800 5,400 PRESENT WORTH OF INFLATED COST 1,439 1,439 1,310 4,122 1,373 2,812 1,250 5,372 0 0 0 0 MAINTENANCE ACCUMULATED through Year (Bottom) \$8,800 0 0 0 0 00 C 0 0 00 0 0 0 0 00 00 2,034,900 1,529,300 1,110,600 LOSSES ROW TOTALS 762,600 472,000 LOSSES 228,400 43,888 228,377 41,008 142,070 39,651 101,062 38,347 61,410 42,419 184,489 23,063 23,063 -2008 DOLLARS -2008 DOLLARS ۲ 2,058,700 1,550,500 1,129,100 777,700 482,800 233,800 TOTALS 45,139 233,749 41,090 102,500 38,347 61,410 43,730 188,611 144,881 23,063 42,381 23,063

3:22 PN

-4

Page 1

2018	2017	2016	2015	2014	YEAR
					DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE
					PRESENT ESTIMATED COST (
301.0	292.3	283.8	275.5	267.5	E PEAK kW
1,076,879 8,969,113	1,015,062 7,892,235	956,793 6,877,173	901,869 5,920,380	850,098 5,018,511	ANNUAL KWH
989 10,817	1,037 9,827	1,087 8,790	1,139 7,704	1,193 6,565	FIXED CHARGESMAINT
0 0	0 0	0 0	0 0	0 0	ENT WORTH
52,184 472,038	50,388 419,855	48,664 369,466	47,008 320,802	45,417 273,794	H OF INFLAT
53,173 482,855	51,425 429,682	49,751 378,257	48,147 328,506	46,610 280,359	TED COST (\$) NOW TOTALS

	CALCULAT	TED LOSSES	ANNUAL PRESENT WORTH		LATED COS	T (\$)
YEAR	PEAK KWA	NNUAL KWH	FIXED CHARGES MAINTENAN	i F		
2019	310.1	1,142,461	944	0	54,053	54,997
2020	319.4	1,212,037	901	0	55,999	56,901
2021	329.0	1,285,850	860	0	58,027	58,887
2022	338.8	1,364,158	821	0	60,138	60,959
2023	349.0	1,447,235	783	0	62,338	63,121
2024	359.5	1,535,372	747	0	64,629	65,377
2025	370.2	1,628,876	713	0	67,017	67,730
2026	381.3	1,728,074	681	0	69,504	70,185
2027	392.8	1,833,314	649	0	72,096	72,746
2028	404.6	1,944,963	620	0	74,798	75,417
2029	416.7	2,063,411	591	0	77,613	78,204
2030	429.2	2,189,073	564	0	80,547	81,111
2031	442.1	2,322,387	539	0	83,605	84,144
2032	455.3	2,463,821	514	0	86,794	87,308
2033	469.0	2,613,867	490	0	90,118	90,608
2034	483.1	2,773,052	468	0	93,583	94,051
2035	497.6	2,941,931	447	0	97,196	97,643
2036	512.5	3,121,094	426	0	00,964	101,390
2037	527.9	3,311,169	407	0	04,893	105,299
2038	543.7	3,512,819	388	0	08,990	109,378

3:22 PN

4

11/13/07	DATE:	SALT RIVER ELECTRIC	COMPANY:
GARY PILE	ENGINEER:	PLAN 1 DEATSVILLE FDR 01 WITH LINE CONVERSION	PLAN:
FLATED COSTS of CARRYING CHARGES, MAINTENANCE and LOSS	TH of the IN	& ACCUMULATED TOTALS of the PRESENT WOF	ANNUAL

2013	2012	2011	2010	2009	2008	YEAR		5.22 0.039 191.0 3.0 51.37 0.304	2008 3.25 4.79 0.10 6.81 5.14 16.84%
			1 PHASE 2 ACSR TO 3 PHASE 1/0 ACSI			DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE	DECREASE IN CIRCUIT PEAK DEMAND YEAR DECREASE EXPECTED AMOUNT (kW) (Present Year)	DEMAND COST (\$/KW/MONTH) ENERGY COST (\$/KWH) CIRCUIT or AREA MONTHLY AVERAGE CIRCUIT or AREA ANNUAL GROWTH R/ ANNUAL LOAD FACTOR (%) (~40 to 90° CALCULATED LOSS FACTOR	PRESENT YEAR (First year of plan) ANNUAL INFLATION RATE (%) BLENDED INTEREST RATE (%) (& Pre TAX RATE (%) DEPERECIATION RATE (%) OPERERATIONS & MAINTENANCE RAT FIXED CHARGE RATE (Sum of Above)
			63,180			PRESENT ESTIMATED COST (\$ CONSTRUCTIONMAINTENANCE	LOSSES (Optional)	PEAK DEMAND LOSSES (KW) NTE (%)	د.درست sent Worth Factor) E (%)
221.4	215.0	208.7	202.6	196.7	191.0	CALCULA PEAK kW (avg./mo.)		YEAR 2013 2023 2023 2028 2033 2038	
683,250 3,554,317	644,029 2,871,066	607,059 2,227,037	572,211 1,619,978	539,364 1,047,767	508,402 508,402	Annual kWH Accum. kWH	TOTAL COST OF N	LOSSES 3,550 7,650 13,150 20,540 30,480 43,830	MWH PL
8,976 38,569	9,406 29,592	9,857 20,186	10,329 10,329	0 0	0 0	YEARLY TOTAL PRES	NEW CONSTRUCTION	FIXED CHARGES MAIN 38,600 77,700 108,600 133,100 152,500 171,400	AN 1 SUMMARY (Accur PRESENT W
00	00	00	0 0	0 0	0 0	ACCUMUL	\$63,180 0		nulated Total
37,423 206,697	36,170 169,274	34,967 133,104	33,810 98,137	32,698 64,327	31,629 31,629	H OF INFLAT ATED through LOSSES	-2008 -2008	206,700 414,500 662,300 959,100 1,316,100 1,747,200	s, Rounded O
46,399 245,266	45,577 198,866	44,824 153,290	44,139 108,466	32,698 64,327	31,629 31,629	Year (Bottom) Yow TOTALS	DOLLARS	245,300 492,200 770,900 1,092,200 1,468,600 1,918,600	f) (\$)

3:22 PN

Page 1

2018	2017	2016	2015	2014	YEAR
					DESCRIPTION of NEW CONSTRUCTION or ADDITIONAL MAINTENANCE
					PRESENT ESTIMATED COST (\$)
256.7	249.2	242.0	234.9	228.1	CALCULA PEAK kW
918,231 7,647,771	865,521 6,729,539	815,837 5,864,018	769,004 5,048,182	724,860 4,279,177	ANNUAL KWH
7,104 77,659	7,444 70,555	7,801 63,110	8,175 55,309	8,566 47,135	YEARLY TOTAL PR
0 0	0 0	0 0	00	0 0	ESENT WORT
44,496 414,461	42,965 369,965	41,495 327,000	40,083 285,505	38,726 245,423	H OF INFLA
51,600 492,120	50,409 440,520	49,296 390,111	48,257 340,815	47,292 292,558	TED COST (\$) ROW TOTALS

YEAR	CALCULAT	NNUAL KWH	FIXED CHARGES MAINTENANC	E LOSSES R	OW TOTALS
2019	264.4	974,152	6,779 () 46,090	52,869
2020	272.3	1,033,478	6,469 () 47,750	54,219
2021	280.5	1,096,416	6,174 () 49,478	55,652
2022	288.9	1,163,188	5,891 (51,279	57,170
2023	297.6	1,234,026	5,622) 53,154	58,776
2024	306.5	1,309,178	5,365 (55,108	60,473
2025	315.7	1,388,907	5,120 () 57,144	62,264
2026	325.2	1,473,492	4,886 (59,265	64,151
2027	334.9	1,563,228	4,663 () 61,475	66,138
2028	345.0	1,658,428	4,449 () 63,778	68,228
2029	355.3	1,759,426	4,246 (0 66,179	70,425
2030	366.0	1,866,575	4,052	0 68,681	72,733
2031	377.0	1,980,250	3,867 (0 71,289	75,155
2032	388.3	2,100,847	3,690	0 74,007	77,697
2033	399.9	2,228,789	3,521	0 76,841	80,363
2034	411.9	2,364,522	3,360	0 79,796	83,156
2035	424.3	2,508,521	3,207	0 82,877	86,084
2036	437.0	2,661,290	3,060	000,98	89,150
2037	450.1	2,823,363	2,920	0 89,440	92,360
2038	463.6	2,995,306	2,787	0 92,933	95,720

3:22 P

 $\cdots \rightarrow \frac{1}{2}$

<u>د</u>

PROJECT NAME: Horsefly Hollow road

CFR CODE: 608-1

ESTIMATED COST: \$83,700

DESCRIPTION OF PROPOSED CONSTRUCTION:

A 1.35 mile conversion of single phase 6A to single phase $1\setminus 0$ ACSR through Horsefly Hollow road in southern Bullitt County. This is on Lebanon Jct #2 Substation fdr 02.

REASON FOR PROPOSED CONSTRUCTION

This is a conductor replacement item. Numerous outages occur in this section of line due to the terrain and the relocation to the road will help this dramatically.

RESULTS OF PROPOSED CONSTRUCTION:

With the construction of this project all design criteria will be met and more reliable service provided.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED:

No alternatives were considered.

PROJECT NAME: Mt. Elmira Road

CFR CODE: 608-2

-

ESTIMATED COST: \$146,940

*** Carryover Item 319 2005-2008 CWP

DESCRIPTION OF PROPOSED CONSTRUCTION:

This project is a 2.35 mile single phase 6a cwc to single phase 1/0 acsr conversion along Mt Elmira road in central Bullitt County. This is on Brooks Substation fdr 05.

REASON FOR PROPOSED CONSTRUCTION: This is a conductor replacement item.

RESULTS OF PROPOSED CONSTRUCTION: By completing this line all design criteria will be met.

ALTERNATIVE CORRECTIVE PLANS INVESTIGATED: No alternatives were considered.



BALLTOWN SUB BEFORE CORRECTIONS 13,875 KW


BALLTOWN SUB FDR 01 BEFORE CORRECTIONS 13,875 KW



BALLTOWN SUB FDR 02 BEFORE CORRECTIONS 13,875 KW



BALLTOWN SUB FDR 05 BEFORE CORRECTIONS 13,875 KW



BALLTOWN SUB FDR 04 BEFORE CORRECTIONS 13,875 KW



BALLTOWN SUB FDR 01 AFTER CORRECTIONS 13,875 KW



BALLTOWN SUB FDR 02 AFTER CORRECTIONS 13,875 KW



BALLTOWN SUB FDR 04 AFTER CORRECTIONS 13,875 KW



_)

BARDSTOWN SHOPPING CENTER SUB BEFORE CORRECTIONS 10,824 KW



BARDSTOWN SHOPPING CENTER SUB FDR 03 BEFORE CORRECTIONS 10,824 KW



BARDSTOWN SHOPPING CENTER SUB FDR 05 BEFORE CORRECTIONS 10,824 KW



10,824 KW





BARDSTOWN SHOPPING CENTER SUB FDR 02 AFTER CORRECTIONS 10,824 KW

Generated by Milsoft WindMil





BEAMS SUB BEFORE CORRECTIONS 5449 KW





BLOOMFIELD SUB FDR 01 BEFORE CORRECTIONS 8432 KW



BLOOMFIELD SUB FDR 02 BEFORE CORRECTIONS 8432 KW



BLOOMFIELD SUB FDR 04 BEFORE CORRECTIONS 8432 KW



BLOOMFIELD SUB FDR 05 BEFORE CORRECTIONS 8432 KW