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January 25, 2010

FEDEX

Mr. Jeff DeRouen
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

Re: Application of Kenergy Corp. for Approval
Of Sample Meter Testing Plan

Dear Mr. DeRouen:

2010-00034

Enclosed for filing please find the original and 10 copies of the above application. Please file stamp the enclosed separate cover page of the Application and return to the undersigned as proof of filing.

Your assistance in this matter is appreciated.

Very truly yours,

DORSEY, KING, GRAY, NORMENT & HOPGOOD

By Frank N. King, Jr.
Frank N. King, Jr.
Attorney for Kenergy Corp.

FNKJr/cds
Encls.
COPY/w/Encls.: Kenergy Corp.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:	)	
	)	
The Application of Kenergy Corp.	)	**CASE NO. 2010-** 00034
For Approval of Sample Meter	)	
Testing Plan	)	

APPLICATION

The application of KENERGY CORP. ("Kenergy") respectfully shows:

(a) Kenergy is a nonprofit electric cooperative organized under KRS Chapter 279 and is engaged in the business of distributing retail electric power to member customers in the Kentucky counties of Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Webster, Breckinridge, Union, Crittenden, Caldwell, Lyon, and Livingston.

(b) The post office address of Kenergy is Post Office Box 18, Henderson, Kentucky 42419-018. The street address of Kenergy is 6402 Old Corydon Road, Henderson, Kentucky 42420.

(c) Kenergy is the consolidation successor of Green River Electric Corporation and Henderson Union Electric Cooperative Corp. A copy of the articles of consolidation is filed in Case No. 99-136.

(d) Kenergy desires to adopt a scientific sample meter testing plan for its single phase meters pursuant to 807 KAR 5:041, Section 16. Kenergy's proposed plan is attached as "Exhibit 1."

(e) The proposed plan provides for a more efficient way for Kenergy to test its meters and is cost effective. Kenergy estimates that the cost savings in following this plan in lieu of current periodic testing will amount to approximately $138,600.00 annually. See page 7 of 7 of attached "Exhibit 1."

WHEREFORE, Kenergy requests that the Commission approve its sample meter testing plan and that Kenergy be authorized to adopt said plan, and Kenergy further requests that it be afforded all proper relief.

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By _____
FRANK N. KING, JR.

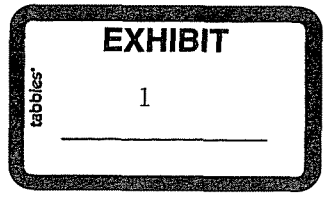
PROPOSED SAMPLE METER TESTING PLAN FOR KENERGY CORP.'S SINGLE-PHASE CLASS 200 & 320 METERS

Kenergy Corp.

Henderson, Kentucky

Prepared by
Robert Hayden
Kenergy Corp.

January 22, 2010



PROPOSAL FOR SINGLE-PHASE SAMPLE METER TESTING

INTRODUCTION

Kenergy Corp. is an electric distribution cooperative located in western Kentucky. Kenergy is presently on schedule with its eight-year meter testing program. By adopting a sample meter testing program, Kenergy will take a significant step towards maximizing efficiency in the single-phase meter testing area of its operation. It is the purpose of this proposal to demonstrate the methods to be used and the cost savings to be achieved in sample testing.

RULES AND REGULATIONS

Kentucky Public Service Commission (PSC) rules and regulations outline the required method and techniques of sample meter testing. Kenergy will comply with **807 KAR 5:041, Section 16** when implementing its sample meter testing program.

Section 16. Sample Testing of Single Phase Meters. *A utility desiring to adopt a scientific sample meter testing plan for single phase meters shall submit its application to the commission for approval. Upon approval the sample testing plan may be followed in lieu of the periodic test prescribed in Section 15(3) of this administrative regulation. The plan shall include the following:*

(1) Meters shall be divided into separate groups to recognize differences in operating characteristics due to changes in design, taking into consideration date of manufacture and serial number.

(2) The sampling procedure shall be based upon accepted statistical principles.

(3) The same sampling procedure shall be applied to each group.

(4) Each utility authorized to test meters by sample meter testing plan shall comply with the following conditions:

(a) The number of meters in addition to the sample shall be taken from those meters in each group longest in service since last test unless a particular meter type is known to be increasing the percentage of meters requiring test for the sample group. In such a case where a particular meter type is increasing the percentage of meters requiring test in any group, these meters may be selected first regardless of test date with any additional tests as required for that group coming from those in that group longest in service since last test. Each year the utility shall use the following table to determine the percentage of the total meters in each group to be tested.

Percentage of Meters Within Limits of 2% Fast or Slow (Indicated by Sample)		*Percentage of Meters to be Tested the Next Year*
99.0	*100.0*	*2*
98.0	*98.9*	*4*
97.0	*97.9*	*6*
96.0	*96.9*	*8*
95.0	*95.9*	*10*
93.0	*94.9*	*12*
91.0	*92.9*	*14*
Less than	*91.0*	*16*

(a) Provided, however, that no meter shall remain in service without periodic test for a period longer than twenty-five (25) years.

(5) Whenever a meter is found to be more than two (2) percent fast or slow, refunds or back billing shall be made for the period during which the meter error is known to have existed or if not known for one-half (1/2) the elapsed time since the last test but in no case to exceed three (3) years. This provision shall apply only when sample testing of single phase meters has been approved by the commission and utilized by the utility.

PROCEDURE

As shown in the table below, meters will be divided into various **test groups** based upon manufacturer and type. Similar meters may be further divided by serial number break points.

Kenergy Meter Groups

Group	Manufacturer	Type	Population	Sample
1	A.B.B./Elster	AB1	2,800	56
2	A.B.B./Elster	AB1	2,800	56
3	A.B.B./Elster	AB1	2,800	56
4	A.B.B./Elster	AB1	959	19
5	A.B.B.	AB1R	761	15
6	Sangamo/Siemens	ALALT	93	2
7	Landis & Gyr	ALF	241	5
8	Sangamo/Itron	C1S	1,345	27
9	A.B.B./Westinghouse	D4S	2,800	56
10	A.B.B./Westinghouse	D4S	2,076	42
11	A.B.B./Westinghouse	D5S	2,800	56
12	A.B.B./Westinghouse	D5S	660	13
13	Sangamo/Sensus	ISA1	98	2
14	Sangamo	I60S	422	8
15	G.E.	I70S	2,800	56
16	G.E.	I70S	2,800	56
17	G.E.	I70S	2,800	56
18	G.E.	I70S	422	8
19	Sangamo	J4ES	65	1
20	Sangamo	J4S	2,800	56
21	Sangamo	J4S	951	19
22	Sangamo/Schlum	J5S	2,800	56
23	Sangamo/Schlum	J5S	2,800	56
24	Sangamo/Schlum	J5S	2,800	56
25	Sangamo/Schlum	J5S	510	10
26	Landis&Gyr/Duncan	MQS	1,309	26
27	Landis&Gyr/Duncan	MS	2,800	56
28	Landis&Gyr/Duncan	MS	1,365	27
29	Landis&Gyr	MSE2	121	2
30	Landis&Gyr/Duncan	MSK	49	1
31	Landis & Gyr	MS2	2,800	56
32	Landis & Gyr	MS2	2,800	56
33	Landis & Gyr	MS2	564	11
34	Landis & Gyr	MX	2,800	56
35	Landis & Gyr	MX	1,950	39

The statistical meter sample testing will follow ***American National Standard Institute ANSI/ASZC Z1.9-2003(Sampling Procedures and Tables for Inspection).*** Each test group will be randomly sampled by a computerized process. The Kenergy billing computer system will be used for this process.

Part A7. Sample Selection, from the above standard, states that **Inspection Level II** shall be used for the discrimination level. Unless otherwise required by the PSC, this level will be in effect for the Kenergy program.

The **Acceptance Quality Level** (AQL) is defined as the quality level that is the worst tolerable product average when a continuing series of lots is submitted for acceptance sampling.

Due to the ±2% limits, the sample groups shall be tested using an AQL of 2.5. This value can be found in Table A-1.

Table A-1
AQL Conversion Table

For specified AQL values falling within these ranges	Use this AQL Value
- to 0.109	.10
1.110 to 0.164	.15
0.165 to 0.279	.25
0.280 to 0.439	.40
0.440 to 0.669	.65
0.700 to 1.09	1.0
1.10 to 1.64	1.5
1.65 to 2.79	2.5
2.80 to 4.39	4.0
4.40 to 6.99	6.5
7.00 to 10.9	10.0

Kenergy reserves the right to revise its Meter Groups within ANSI and PSC criteria. New meters from a different manufacturer or with different characteristics/features will require the formation of a new group. Newly installed meters will be added to the proper group and will be eligible for sample testing the following year. As new meters are purchased each new meter will be tested. An AQL of 1.0 will apply to the new meter testing.

Randomly selected meters (lot) from each group will be sent to Kenergy's meter shop. More specifically, the random selection is processed from within Kenergy's billing system using group number, type, and sample data based on a "time-stamped" program. Program continues process for each meter group until all selections are complete.

All non-registering meters will be replaced by another random selection. The meters will be tested under full load, light load and 50% power factor.

For each lot, calculations will be based on the Double Specification Limit Variability Unknown-Standard Deviation Method. The average of the full-load test results and light-load test results will be evaluated pursuant to **Table B-3.**

Table B-3 Standard Deviation Method

Master Table for Normal and Tightened Inspection for Plans Based on Variability Unknown
(*Double Specification Limit and Form 2—Single Specification Limit*)

Sample Size Code Letter	Sample Size	Acceptance Quality Limits (normal inspection)											
		T	.10	.15	.25	.40	.65	1.00	1.50	2.50	4.00	6.50	10.00
		M	M	M	M	M	M	M	M	M	M	M	M
B	3	↓	↓	↓	↓	↓	↓	↓	↓	7.59	18.86	26.91	33.69
C	4	↓	↓	↓	↓	↓	↓	1.48	5.46	10.88	16.41	22.84	29.43
D	5	↓	↓	↓	↓	0.041	1.34	3.35	5.82	9.89	14.37	20.19	26.55
E	7	↓	0.065	0.087	0.421	1.05	2.13	3.54	5.34	8.40	12.19	17.34	23.30
F	10	0.077	0.179	0.349	0.714	1.27	2.14	3.27	4.72	7.26	10.53	15.17	20.73
G	15	0.186	0.311	0.491	0.839	1.33	2.09	3.06	4.32	6.55	9.48	13.74	18.97
H	20	0.228	0.356	0.531	0.861	1.33	2.05	2.93	4.10	6.15	8.95	13.01	18.07
I	25	0.250	0.378	0.551	0.874	1.32	2.01	2.86	3.97	5.98	8.65	12.60	17.55
J	35	0.253	0.373	0.534	0.833	1.24	1.87	2.66	3.70	5.58	8.11	11.89	16.67
K	50	0.243	0.355	0.503	0.726	1.16	1.73	2.47	3.44	5.21	7.61	11.23	15.87
L	75	0.225	0.326	0.461	0.711	1.06	1.59	2.27	3.17	4.85	7.18	10.58	15.07
M	100	0.218	0.315	0.444	0.684	1.02	1.52	2.18	3.06	4.67	6.88	10.29	14.71
N	150	0.202	0.292	0.412	0.636	0.956	1.42	2.05	2.88	4.42	6.56	9.86	14.18
P	200	0.201	0.291	0.414	0.637	0.945	1.42	2.04	2.86	4.39	6.52	9.80	14.11
		.10	.15	.25	.40	.65	1.00	1.50	2.50	4.00	6.50	10.00	
		Acceptance Quality Limits tightened inspection											

All AQL values are in percent nonconforming. T denotes plan used exclusively on tightened inspection and provides symbol for identification of appropriate OC curve.

↓ Use first sampling plan below arrow; that is, both sample size as well as k value. When sample size equals or exceeds lot size, every item in the lot must be inspected.

Lot performance for new and existing meters shall be deemed acceptable if the full-load and light-load performance of the meters within the lot meets the acceptability criteria of the *ANSI/ASZC Z1.9-2003*.

COST SAVINGS/CONCLUSION

A substantial reduction in cost will be achieved by implementing the sample meter test method. Once the program is established, only a small percentage of the present labor and testing efforts will be required. This reduction results in estimated annual cost savings of approximately $138,600 without compromising single-phase revenue metering accuracy.

Cost Savings to Kenergy Corp. due to a change to Sample Metering

Table # 1

Contractor Annual Costs Associated per Periodic Meter Change and Test

1. Field Expense	Labor (time and wages)		Hours	Hourly Effective Rate	Total Costs
	Estimated time for travel and meter changeout function* (direct and overheads)		0.49	$36.57	$17.92
	Total Paid Expense	$17.92			
2. Clerical and Office Expense	A. Supplies	Number of Forms Annually		$ per 1,000 rate	$ Per Form
	Meter Test/Change Forms	6647		$270.00	$0.27
	B. Labor (time and wage)		Hours	Hourly rate	Total Costs
	2010 Contractor Rate per Single Phase Meter Test			$5.99	$5.99
	CSR Hours per Meter Change (direct and overheads)		0.025	$35.35	$0.88
	Meter Tech Hours per Meter Change(direct and overheads)		0.03	$36.57	$1.10
	Total Clerical and Office and Testing Expense	$8.24			
3. Miscellanous Expense	A. Transportation		Miles	Rate	Total Costs
	Estimated length of average meter changeout trip		0.95	$0.50	$0.48
	Other (itemize)		0	$0.00	$0.00
	Total Miscellaneous Expenses	$0.48			
Total Cost per Periodic Meter Change and Test using contractor		$26.64			

Table # 2

In House Labor Annual Costs Associated per Sample Meter Change and Test

1. Field Expense	Labor (time and wages)		Hours	Hourly Effective Rate	Total Costs
	Estimated time for travel and meter changeout function* (direct and overheads)		0.49	$36.57	$17.92
	Total Fixed Expense	$17.92			
2. Clerical and Office Expense	A. Supplies	Number of Forms Annually		$ per 1,000 rate	$ Per Form
	Meter Test/Change Forms	1470		$270.00	$0.27
	B. Labor (time and wage)		Hours	Hourly rate	Total Costs
	CSR Hours per Meter Change (direct and overheads)		0.025	$35.35	$0.88
	Meter Tech Hours per Meter Change(direct and overheads)		0.03	$36.57	$1.10
	Meter Tech Hours to Shop Test Sample Meters(direct and overheads)		0.16	$36.57	$5.85
	Total Clerical and Office and Testing Expense	$8.10			
3. Miscellanous Expense	A. Transportation		Miles	Rate	Total Costs
	Estimated length of average meter changeout trip		0.21	$0.50	$0.11
	Other (itemize)		0	$0.00	$0.00
	Total Miscellaneous Expenses	$0.11			
Total Cost per Sample Change and Test in House		$26.13			

Table # 3

Total Savings between Periodic Test Program and Sample Test Program

	Total Number of Meters	Annual Number of Meters to test	Cost per Meter	Total Cost
Existing Periodic Meter Test Schedule	59,761	6647	$26.64	$177,043.84
Proposed Sample Meter Test Plan	59,761	1470	$26.13	$38,405.73
Annual Cost Savings				$138,638.11