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PLEASE RESPOND TO:
KINGSPORT OFFICE

WRITER'S DIRECT DIAL NUMBER:
(423) 378-8858

April 10, 2015

WRITER'S E-MAIL ADDRESS:
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VIA EMAIL & FEDEX

KPOW.89998

ATTN: Sharla Dillon, Dockets & Records Manager
Herbert Hilliard, Chairman
Tennessee Regulatory Authority
502 Deaderick Street, 4th Floor
Nashville, TN 37243

Re: Petition of Kingsport Power Company d/b/a
AEP Appalachian Power; **Docket No. 15-00024**

Dear Chairman Hilliard:

Enclosed with this letter are Kingsport Power Company's Responses to the Staff's Data Request No. 1, posed in Mr. Foster's letter to me dated April 1, 2015.

We are enclosing the original and three copies of the Responses. The disks referenced in Response 1-001 and 1-013 are also included in this package for Monday delivery via Federal Express.

If you have any questions, please do not hesitate to contact the writer.

Very sincerely yours,

HUNTER, SMITH & DAVIS, LLP

A handwritten signature in black ink, appearing to read "W. Bovender", is written over a horizontal line.

William C. Bovender
Counsel for Kingsport Power Company

Enclosures

ATTN: Sharla Dillon, Dockets & Records Manager

Page 2

April 10, 2015

c: Cynthia E. Kinser (Mills) (via mail)
Jean A. Stone, General Counsel (via mail)
David Foster (via email)
William Castle (via email)
Hector Garcia, Esq. (via email)
Larry Foust (via email)

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-001:

Please provide an electronic copy of Mr. Simmon's Exhibits in excel format with working formulas.

Response Staff 1-001:

Please see the attached Staff 1-001, Attachments 1 and 2 on the attached CD.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSFORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-002:

Provide support for the 2013 demand allocation factors used, the 2012 loss factor, the metered kWh, the number of lamps and the 2013 billing demand kW.

Response Staff 1-002:

Please see Staff 1-002, Attachment 1 for the metered kWh, billing demand kW and number of lamps, Staff 01-002 Attachment 2 for the 2013 12 NCP average peak load calculation, and Staff 01-002, Attachment 3 for the support for the 2012 loss factors.



American Electric Power

KINGSPORT POWER COMPANY

TARIFF SUMMARY BILLED REVENUE - ALL REVENUE CLASSES

12 MONTHS BILLED - MCSR0162

Prepared: 01/08/2014 06:01:41 AM

Page: 1

December 2013

REALIZATION

TARIFF	REVENUE	FUEL CLAUSE	REVENUE EXCL FUEL CLAUSE	METERED KWH	OFF PK KWH	BILLING DEMAND	# OF CUST INCL	# OF CUST EXCL	# OF LAMPS	INCL FUEL	EXCL FUEL	FACILITY CHARGE
011	RS-LMWH	35,763.98	4,509.28	31,254.70	439,036	0	0.0	21	0	8.15	7.12	0.00
015	RS	58,875,972.33	7,248,380.08	51,627,592.25	688,881,382	0	17,435.8	41,130	0	8.55	7.49	0.00
018	RS EMP	130,769.76	17,604.76	113,162.00	1,669,264	0	0.0	92	0	7.83	6.78	0.00
030	RS TOD-ON	2,548.92	303.24	2,245.68	28,221	17,562	0.0	2	0	9.03	7.96	0.00
051	RSW-LM-EM	1,410.17	195.17	1,215.00	18,686	0	0.0	1	0	7.55	6.50	0.00
093	OL 7000	41,605.93	0.00	41,605.93	298,863	0	0.0	0	324	13.92	13.92	85.40
094	9500 HPS	273,284.16	0.00	273,284.16	1,349,526	0	0.0	0	2,349	20.25	20.25	13,151.43
095	OL 20000	7,614.85	0.00	7,614.85	72,232	0	0.0	0	24	10.54	10.54	0.00
097	22000 HPS	102,987.64	0.00	102,987.64	676,277	0	0.0	0	422	15.23	15.23	12,249.03
103	27500SVPT	1,787.16	0.00	1,787.16	4,944	0	0.0	1	4	36.15	36.15	0.00
107	22000HPSF	64,286.26	0.00	64,286.26	402,343	0	0.0	0	218	15.98	15.98	7,497.79
109	50000HPSF	18,809.03	0.00	18,809.03	172,736	0	0.0	0	32	10.89	10.89	1,962.61
110	17000 MH	7,968.91	0.00	7,968.91	57,373	0	0.0	0	30	13.89	13.89	112.20
111	9500HPSPT	50,114.08	0.00	50,114.08	154,422	0	0.0	0	60	32.45	32.45	3,340.96
115	9500 HPSF	12,706.48	0.00	12,706.48	51,265	0	0.0	0	69	24.79	24.79	387.00
116	28800 MH	126,491.23	0.00	126,491.23	1,080,027	0	0.0	0	186	11.71	11.71	14,152.11
120	50000HPSB	3,879.00	0.00	3,879.00	25,532	0	0.0	0	1	15.19	15.19	940.70
122	16000SVPT	6,664.35	0.00	6,664.35	11,222	0	0.0	0	6	59.39	59.39	0.00
124	50000SVPF	1,934.06	0.00	1,934.06	8,000	0	0.0	0	1	24.18	24.18	0.00
126	36000MHPF	2,539.42	0.00	2,539.42	9,464	0	0.0	0	3	26.83	26.83	124.94
208	EHG	2,006,381.64	229,424.29	1,776,957.35	21,755,272	0	101,362.9	469	0	9.22	8.17	0.00
209	EHG MIN	442,581.28	49,417.54	393,163.74	4,725,331	0	27,107.9	144	0	9.37	8.32	0.00
221	CS	958,912.72	103,971.29	854,941.43	9,831,595	0	57,864.8	186	0	9.75	8.70	0.00
229	MGS TODON	53,051.57	6,438.27	46,613.30	617,058	356,074	0.0	6	0	8.60	7.55	0.00
231	SGS FIXED	2,050,373.93	198,423.71	1,851,950.22	18,785,948	0	25,957.4	3,243	0	10.91	9.86	0.00
232	SGS MEAS	224,352.69	23,506.42	200,846.27	2,226,253	0	5,428.9	241	0	10.08	9.02	0.00
233	SGS NMTR	23,255.98	1,929.07	21,326.91	181,576	0	0.0	67	0	12.81	11.75	0.00
235	MGS SEC	10,046,232.31	1,127,006.74	8,919,225.57	106,489,992	0	404,423.0	1,376	0	9.43	8.38	0.00
237	MGS PRI	48,052.45	6,180.69	41,871.76	586,000	0	1,248.0	2	0	8.20	7.15	0.00
240	LGS SEC	17,494,770.90	2,333,543.09	15,161,227.81	220,069,782	0	631,743.0	231	0	7.95	6.89	0.00
242	LGS M SEC	352,159.63	49,646.75	302,512.88	4,704,800	0	11,324.0	4	0	7.49	6.43	0.00
244	LGS PRI	1,139,571.82	137,535.69	1,002,036.13	13,089,250	0	57,686.0	7	0	8.72	7.67	0.00
322	IP PRI	4,794,831.13	683,962.18	4,110,868.95	64,587,150	0	175,813.0	3	0	7.42	6.36	0.00
324	IP TRAN	46,386,775.22	8,540,843.17	37,845,932.05	815,491,816	87,011,540	1,267,778.0	4	0	5.69	4.64	0.00
523	SL	1,440,390.29	0.00	1,440,390.29	8,067,916	0	0.0	4	0	17.85	17.85	0.00
640	PS	654,908.72	77,376.33	577,532.39	7,350,822	0	29,421.1	15	0	8.91	7.86	0.00
641	PS UNITS	74,552.00	10,208.65	64,343.35	970,200	0	4,020.0	1	0	7.68	6.63	0.00



American Electric Power
KINGSPORT POWER COMPANY

TARIFF SUMMARY BILLED REVENUE - ALL REVENUE CLASSES

12 MONTHS BILLED - MCSR0162

Prepared: 01/08/2014 06:01:41 AM

December 2013 Page: 2

TARIFF	REVENUE	FUEL CLAUSE	REVENUE EXCL FUEL CLAUSE	METERED KWH	OFF PK KWH	BILLING DEMAND	# OF CUST INCL	# OF CUST EXCL	# OF LAMPS	REALIZATION			FACILITY CHARGE
										INCL FUEL	EXCL FUEL		
642 PS ALL E	1,498,470.50	212,520.58	1,285,949.92	20,290,870	0	78,281.1	15	0	0	7.38	6.34	0.00	
Grand Total	149,458,759.50	21,062,926.99	128,395,832.51	2,015,212,446	86,637,904	2,896,894.9	47,265	3,724	5,438	7.42	6.37	54,014.17	

Kingsport Class Non-Coincident Customer Peaks 2013

[illegible]

APPALACHIAN POWER COMPANY KINGSPORT POWER

2012 Analysis of System Losses

May 2014

Prepared by:



Management Applications Consulting, Inc.
1103 Rocky Drive – Suite 201
Reading, PA 19609
Phone: (610) 670-9199 / Fax: (610) 670-9190



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May 20, 2014

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Director Regulatory Pricing & Analysis
American Electric Power
1 Riverside Plaza
Columbus, OH 43215

Mr. Chad Burnett
Director Economic Forecasting
American Electric Power
212 East 6th Street
Tulsa, OK 74119

RE: 2012 APPALACHIAN POWER COMPANY – KINGSPORT POWER

Dear Messrs. Roush and Burnett:

Transmitted herewith are the results of the 2012 Analysis of System Losses of the Appalachian Power Company – Kingsport Power's (Kingsport) power system. Our analysis develops cumulative expansion factors (loss factors) for both demand (peak/kW) and energy (average/kWh) losses by discrete voltage levels applicable to metered sales data. Table 1 of the Executive Summary presents the results and appropriate loss factors to apply to metered load research or sales data for adjustment to system input.

On behalf of MAC, we appreciate the opportunity to assist you in updating the loss analysis contained herein. Our review of these data and the updated loss results support the proposed loss factors as presented herein for your use in various cost of service, rate studies, and demand analyses.

This revision included updated sales (kWh) and demand (kW) data for 2012 based on a review of the data gathering assumptions made in the original study. In addition, we have also expanded the loss study to now include a new Exhibit 9 which identifies, in detail, all aspects of the loss results by voltage level.

Should you require any additional information, please let us know at your earliest convenience.

Sincerely,

Paul M. Normand
Principal

Enclosure
PMN/rjp

Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

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Appendix A – Results of the 2012 Integrated Appalachian Power Company Transmission
System Loss Analysis

Appendix B – Results of the Appalachian Power Company – Kingsport Power 2012 Loss
Analyses

Appendix C – Discussion of Hoebel Coefficient



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

1.0 EXECUTIVE SUMMARY

This report presents Appalachian Power Company – Kingsport Power’s (Kingsport) 2012 Analysis of System Losses as performed by Management Applications Consulting, Inc. (MAC). The study developed separate demand (kW) and energy (kWh) loss factors for each voltage level of service in the power system. The cumulative loss factor results by voltage level, as presented herein, can be used to adjust metered kW and kWh sales data for losses in performing cost of service studies, determining voltage discounts, and other analyses which may require a loss adjustment.

The procedures used in the overall loss study were similar to the prior study and emphasized the use of “in house” resources where possible. To this end, extensive use was made of the Company's peak hour power flow data and transformer plant investments in the model. In addition, measured and estimated load data provided a means of calculating reasonable estimates of losses by using a “top-down” and “bottom-up” procedure. In the “top-down” approach, losses from the high voltage system, through and including distribution substations, were calculated along with power flow data, conductor and transformer loss estimates, and metered sales.

At this point in the analysis, system loads and losses at the input into the distribution substation system are known with reasonable accuracy. However, it is the remaining loads and losses on the distribution substations, primary system, secondary circuits, and services which are generally difficult to estimate. Estimated and actual Company load data provided the starting point for performing a “bottom-up” approach for calculating the remaining distribution losses. Basically, this “bottom-up” approach develops line loadings by first determining loads and losses at each level beginning at a customer’s meter service entrance and then going through secondary lines, line transformers, primary lines and finally distribution substation. These distribution system loads and associated losses are then compared to the initial calculated input into Distribution Substation loadings for reasonableness prior to finalizing the loss factors. An overview of the loss study is shown on Figure 1.

With the recent emergence of transmission as a stand-alone function throughout various regions of the country, a modification to the historical calculation of the transmission loss factors was required. Previous loss studies recognized the multipath approach to losses from high voltage to low voltage delivery. The current definition of transmission losses recognized in the industry is simply to sum all losses at transmission as an integrated system. This approach will typically increase the resulting transmission loss factors.

The updated load research data provided the starting point for performing a “bottom-up” approach for estimating the remaining distribution losses. Basically, this “bottom-up” approach develops line loadings by first determining loads and losses at each level beginning at a customer’s meter and service entrance and then going through secondary lines, line transformers, primary lines and finally distribution substation. These distribution system loads and associated losses are then compared to the initial calculated input into Distribution Substation loadings for



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

reasonableness prior to finalizing the loss factors. An overview of the loss study is shown on Figure 1 on the next page.

Appendix A of this report presents the APCO transmission only loss analysis which was calculated separately and was inputted into the APCO-Kingsport Jurisdiction Loss Model presented in Appendix B. The Transmission voltages analyzed included 765 kV, 500 kV, 345 kV, 230 kV and 138 kV facilities.

Table 1, below, provides the final results from Appendix B for the 2012 calendar year. Exhibits 8 and 9 of Appendix B present a more detailed analysis of the final calculated summary results of losses by segments and delivery voltage of the power system. These Table 1 cumulative loss expansion factors are applicable only to metered sales at the point of receipt for adjustment to the power system's input level.

TABLE 1
Loss Factors at Sales Level, Calendar Year 2012

<u>Voltage Level of Service</u>	<u>Total APCO Kingsport Power</u>	<u>Delivery System (Excludes Transmission)</u>
<u>Demand (kW)</u>		
Transmission ¹	1.04664	—
Subtransmission	1.05258	1.00567
Primary Lines	1.07388	1.02602
Secondary	1.10523	1.05597
<u>Energy (kWh)</u>		
Transmission ¹	1.03537	—
Subtransmission	1.04138	1.00580
Primary Lines	1.05493	1.01889
Secondary	1.08741	1.05027
Losses – Net System Input ²	6.03% MWh 8.39% MW	
Losses – Net System Output ³	6.42% MWh 9.16% MW	
Composite Loss Factors at Metered Sales Level		
	<u>MW</u>	<u>MWH</u>
Retail	1.09157	1.06419

¹ Reflects service at transmission voltages of 138 kV or greater.

² Net system input equals (Internal) firm sales plus losses, Company use less non-requirement sales and related losses. See Appendix A, Exhibit 1, for their calculations.

³ Net system output uses losses divided by output or sales data as a reference.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

The loss factors presented in the Distribution Delivery System column of Table 1 are the Total Appalachian Power Company – Kingsport Power loss factors divided by the transmission loss factor in order to remove these losses from each service level loss factor. For example, the secondary distribution demand loss factor of 1.05597 includes only the recovery of all subtransmission and distribution losses from the subtransmission lines and substations, distribution substation, primary lines, line transformers, secondary conductors and services.

The net system input shown in Table 1 represents the MWh losses of 6.03% for the total APCO-TN load using calculated losses divided by the associated input energy to the system. The 6.42% represents the same losses using system output instead of input as a reference. The net system input reference shown in Table 1 represents MW losses of 8.39% and the same MW losses of 9.16% referenced to output. These results use the appropriate total losses for each but are divided by system output or sales. These calculations are all based on the data and results shown on Exhibits 1, 7 and 9 of the study.

Due to the very nature of losses being primarily a function of equipment loadings, the loss factor derivations for any voltage level must consider both the load at that level plus the loads from lower voltages and their associated losses. As a result, cumulative losses on losses equates to additional load at higher levels along with future changes (+ or –) in loads throughout the power system. It is therefore important to recognize that losses are multiplicative in nature (future) and not additive (test year only) for all future years to ensure total recovery based on prospective fixed loss factors for each service voltage.

The derivation of the cumulative loss factors shown in Table 1 have been detailed for all electrical facilities in Exhibit 9, page 1 for demand and page 2 for energy. Beginning on line 1 of page 1 (demand) under the secondary column, metered sales are adjusted for service losses on lines 3 and 4. This new total load (with losses) becomes the load amount for the next higher facilities of secondary conductors and their loss calculations. This process is repeated for all the installed facilities until the secondary sales are at the input level (line 45). The final loss factor for all delivery voltages using this same process is shown on line 46 and Table 1 for demand. This procedure is repeated in Exhibit 9, page 2, for the energy loss factors.

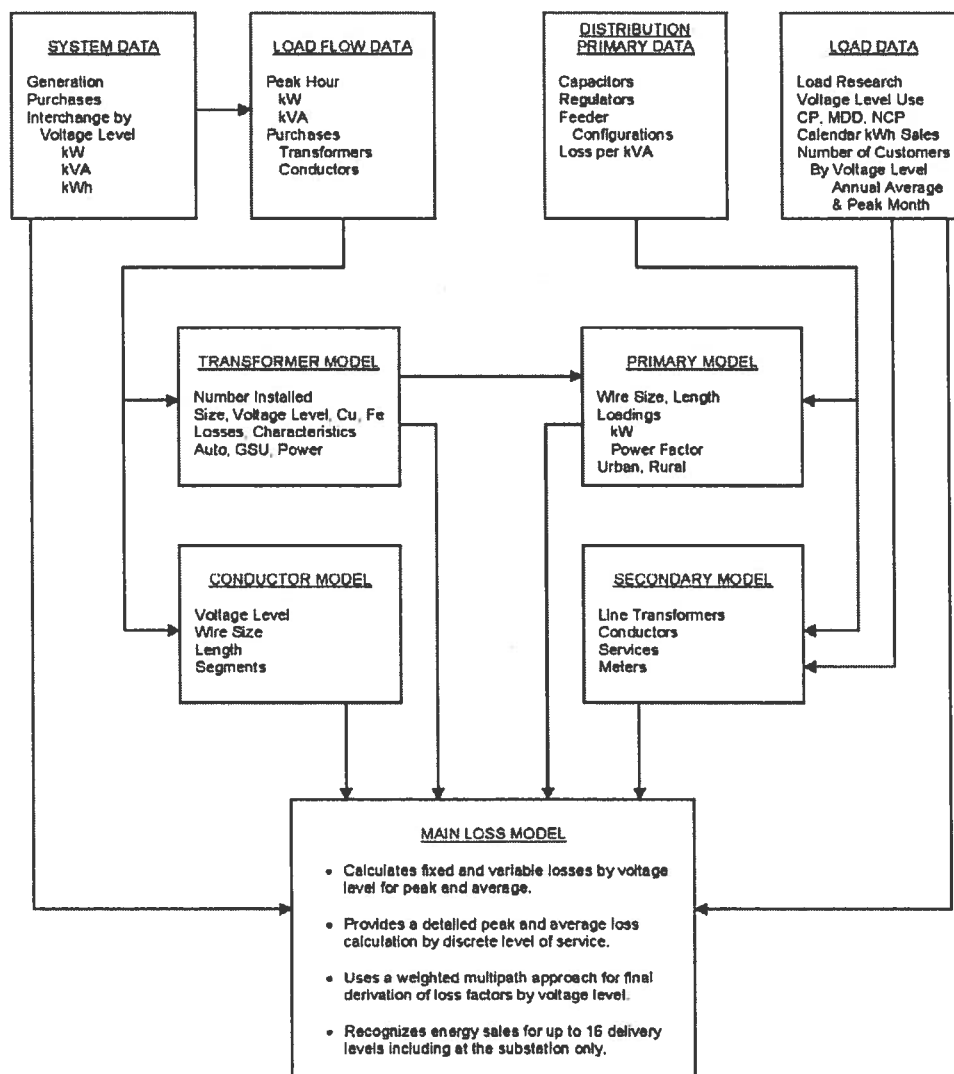
The loss factor calculation is simply the input required (line 45) divided by the metered sales (line 43).

An overview of the loss study is shown on Figure 1 on the next page. Figure 2 simply illustrates the major components that must be considered in a loss analysis.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

Figure 1
MANAGEMENT APPLICATIONS CONSULTING, INC.
ELECTRIC LOSS MODEL OVERVIEW

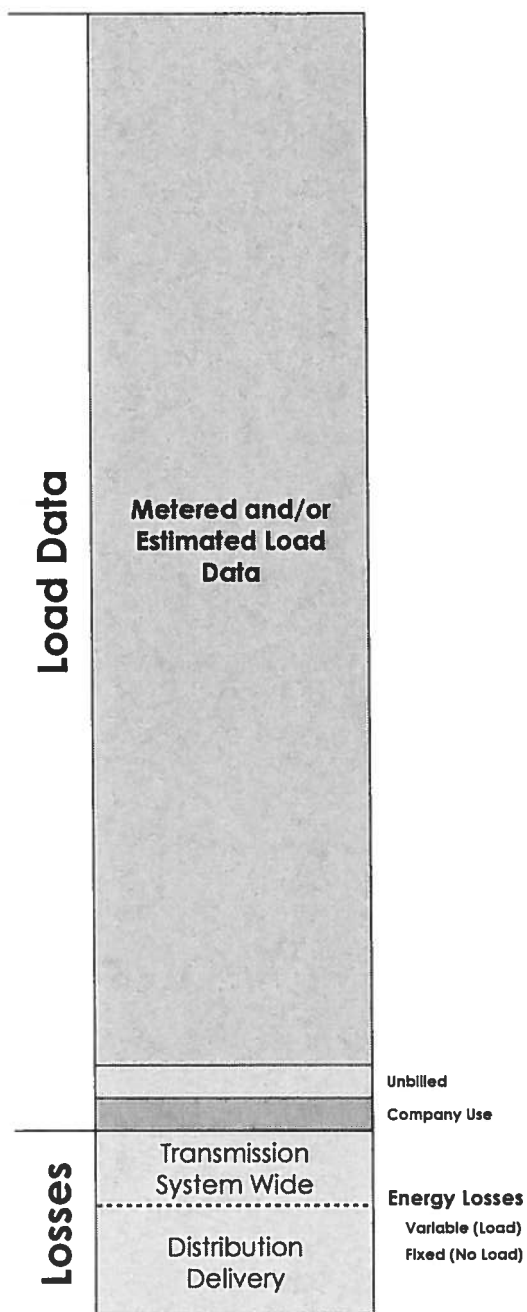


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Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

Figure 2
Generic Energy Loss Components



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

2.0 INTRODUCTION

This report of the 2012 Analysis of System Losses for Appalachian Power Company – Kingsport Power provides a summary of results, conceptual background or methodology, description of the analyses, and input information related to the study.

2.1 Conduct of Study

Typically, between five to ten percent of the total kWh requirements of an electric utility is lost or unaccounted for in the delivery of power to customers. Investments must be made in facilities which support the total load which includes losses or unaccounted for load. Revenue requirements associated with load losses are an important concern to utilities and regulators in that customers must equitably share in all of these cost responsibilities. Loss expansion factors are the mechanism by which customers' metered demand and energy data are mathematically adjusted to the generation or input level (point of reference) when performing cost and revenue calculations.

An acceptable accounting of losses can be determined for any given time period using available engineering, system, and customer data along with empirical relationships. This loss analysis for the delivery of demand and energy utilizes such an approach. A microcomputer loss model⁴ is utilized as the vehicle to organize the available data, develop the relationships, calculate the losses, and provide an efficient and timely avenue for future updates and sensitivity analyses. Our procedures and calculations are similar with prior loss studies, and they rely on numerous databases that include customer statistics and power system investments.

Company personnel performed most of the data gathering and data processing efforts and checked for reasonableness. MAC provided assistance as necessary to construct databases, transfer files, perform calculations, and check the reasonableness of results. A review of the preliminary results provided for additions to the database and modifications to certain initial assumptions based on available data. Efforts in determining the data required to perform the loss analysis centered on information which was available from existing studies or reports within the Company. From an overall perspective, our efforts concentrated on five major areas:

1. System information concerning peak demand and annual energy requirements by voltage level of service using metered data and load research,
2. High voltage power system power flow data and associated loss calculations,
3. Distribution system primary and secondary loss calculations,
4. Derivation of fixed and variable losses by voltage level, and
5. Development of final cumulative expansion factors at each voltage for peak demand (kW) and annual energy (kWh) requirements at the point of delivery (meter).

⁴Copyright by Management Applications Consulting, Inc.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

2.2 Electric Power Losses

Losses in power systems consist of primarily technical losses with a much smaller level of non-technical losses.

Technical Losses

Electrical losses result from the transmission of energy over various electrical equipment. The largest component of these losses is power dissipation as a result of varying loading conditions and are oftentimes called load losses which are proportional to the square of the current (I^2R). These losses can be as high as 75% of all technical losses. The remaining losses are called no-load and represent essentially fixed (constant) energy losses throughout the year. These no-load losses represent energy required by a power system to energize various electrical equipment regardless of their loading levels. The major portion of no-load losses consists of core or magnetizing energy related to installed transformers throughout the power system.

Non-Technical Losses

These are unaccounted for energy losses that are related to energy theft, metering, non-payment by customers, and accounting errors. Losses related to these areas are generally very small and can be extremely difficult and subjective to quantify. Our efforts generally do not develop any meaningful level as appropriate because we assume that improving technology and utility practices have minimized these amounts.

2.3 Description of Model

The loss model is a customized applications model, constructed using the Excel software program. Documentation consists primarily of the model equations at each cell location. A significant advantage of such a model is that the actual formulas and their corresponding computed values at each cell of the model are immediately available to the analyst.

A brief description of the three (3) major categories of effort for the preparation of each loss model is as follows:

- Main sheet which contains calculations for all primary and secondary losses, summaries of all conductor and transformer calculations from other sheets discussed below, output reports and supporting results.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

- Transformer sheet which contains data input and loss calculations for each distribution substation and high voltage transformer. Separate iron and copper losses are calculated for each transformer by identified type.
- Conductor sheet containing summary data by major voltage level as to circuit miles, loading assumptions, and kW and kWh loss calculations. Separate loss calculations for each line segment were made using the Company's power flow data by line segment and summarized by voltage level in this model.

Appendix A presents a detailed loss study result which derives the loss factors for the Company's system-wide power system. Appendix A, Exhibits 8 and 9, presents the final detailed summary results of the demand and energy losses for each major portion of the total power system.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

3.0 METHODOLOGY

3.1 Background

The objective of a Loss Study is to provide a reasonable set of energy (average) and demand (peak) loss expansion factors which account for system losses associated with the transmission and delivery of power to each voltage level over a designated period of time. The focus of this study is to identify the difference between total energy inputs and the associated sales with the difference being equitably allocated to all delivery levels. Several key elements are important in establishing the methodology for calculating and reporting the Company's losses. These elements are:

- Selection of voltage level of services,
- Recognition of losses associated with conductors, transformations, and other electrical equipment/components within voltage levels,
- Identification of customers and loads at various voltage levels of service,
- Review of generation or net power supply input at each level for the test period studied, and
- Analysis of kW and kWh sales by voltage levels within the test period.

The three major areas of data gathering and calculations in the loss analysis were as follows:

1. System Information (monthly and annual)

- MWH generation and MWH sales.
- Coincident peak estimates and net power supply input from all sources and voltage levels.
- Customer load data estimates from available load research information, adjusted MWH sales, and number of customers in the customer groupings and voltage levels identified in the model.
- System default values, such as power factor, loading factors, and load factors by voltage level.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

2. High Voltage System (Appendix A)

- Conductor information was summarized from a database by the Company which reflects the transmission system by voltage level. Extensive use was made of the Company's power flow data with the losses calculated and incorporated into the final loss calculations.
- Transformer information was developed in a database to model transformation at each voltage level. Substation power, step-up, and auto transformers were individually identified along with any operating data related to loads and losses.
- Power flow data of peak condition was the primary source of equipment loadings and derivation of load losses in the high voltage loss calculations (greater than 100 KV).

3. Delivery System

- Subtransmission – Peak load data and calculations form the Power flow analysis for each substation and conductor circuit.
- Distribution Substations – Data was developed for modeling each substation as to its size and loading. Loss calculations were performed from this data to determine load and no load losses separately for each transformer.
- Primary lines – Line loading and loss characteristics for primary circuits were obtained from the Company. These loss results developed kW loss per MW of load and a composite average was calculated to derive the primary loss estimate.
- Line transformers – Losses in line transformers were based on each customer service group's size, as well as the number of customers per transformer. Accounting and load data provided the foundation with which to model the transformer loadings and to calculate load and no load losses.
- Secondary network – Typical secondary networks were estimated for conductor sizes, lengths, loadings, and customer penetration for residential and small general service customers based on data provided by the Company.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

- Services – Typical services were estimated for each secondary service class of customers identified in the study with respect to type, length, and loading.

The loss analysis was thus performed by constructing the model in segments and subsequently calculating the composite until the constraints of peak demand and energy were met:

- Information as to the physical characteristics and loading of each transformer and conductor segment was modeled.
- Conductors, transformers, and distribution were grouped by voltage level, and unadjusted losses were calculated.
- The loss factors calculated at each voltage level were determined by "compounding" the per-unit losses. Equivalent sales at the supply point were obtained by dividing sales at a specific level by the compounded loss factor to determine losses by voltage level.
- The resulting demand and energy loss expansion factors were then used to adjust all sales to the generation or input level in order to estimate the difference.
- Reconciliation of kW and kWh sales by voltage level using the reported system kW and kWh was accomplished by adjusting the initial loss factor estimates until the mismatch or difference was eliminated.

3.2 Calculations and Analysis

This section provides a discussion of the input data, assumptions, and calculations performed in the loss analysis. Specific appendices have been included in order to provide documentation of the input data utilized in the model.

3.2.1 Bulk and Transmission Lines

The transmission line losses were calculated based on a modeling of unique voltage levels identified by the power flow data and configuration for the entire integrated APCO high voltage Power System. Specific information as to length of line, type of conductor, voltage level, peak load, maximum load, etc., were provided based on Company records and utilized as data input in the loss model.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

Actual MW and MVA line loadings were based on APCO's peak loading conditions. Calculations of line losses were performed for each line segment separately and combined by voltage levels for reporting purposes as shown in the Discussion of Results (Section 4.0) of this report. The loss calculations consisted of determining a circuit current value based on MVA line loadings and evaluating the I^2R results for each line segment.

After system coincident peak hour losses were identified for each voltage level, a separate calculation was then made to develop annual average energy losses based on a loss factor approach. Load factors were determined for each voltage level based on system and customer load information. An estimate of the Hoebel coefficient (see Appendix C) was then used to calculate energy losses for the entire period being analyzed. The results are presented in Section 4.0 of this report.

3.2.2 Transformers

The transformer loss analysis required several steps in order to properly consider the characteristics associated with various transformer types; such as, step-up, auto transformers, distribution substations, and line transformers. In addition, further efforts were required to identify both iron and copper losses within each of these transformer types in order to obtain reasonable peak (kW) and average energy (kWh) losses. While iron losses were considered essentially constant for each hour, recognition had to be made for the varying degree of copper losses due to hourly equipment loadings.

Standardized test data tables were used to represent no load (fixed) and full load losses for different types and sizes of transformers. This test data was incorporated into the loss model to develop relationships representing copper and iron losses for the transformer loss calculation. These results were then totaled by various groups, as identified and discussed in Section 4.0.

The remaining miscellaneous losses considered in the loss study consisted of several areas which do not lend themselves to any reasonable level of modeling for estimating their respective losses and were therefore lumped together into a single loss factor of 0.10%. The typical range of values for these losses is from 0.10% to 0.25%, and we have assumed the lower value to be conservative at this time. The losses associated with this loss factor include bus bars, unmetered station use, and grounding transformers.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

3.2.3 Distribution System

The load data at the substation and customer level, coupled with primary and secondary network information, was sufficient to model the distribution system in adequate detail to calculate losses.

Primary Lines

Primary line loadings take into consideration the available distribution load along with the actual customer loads including losses. Primary line loss estimates were prepared by the Company for use in this loss study. These estimates considered loads per substation, voltage levels, loadings, total circuit miles, wire size, and single- to three-phase investment estimates. All of these factors were considered in calculating the actual demand (kW) and energy (kWh) for the primary system.

Line Transformers

Losses in line transformers were determined based on typical transformer sizes for each secondary customer service group and an estimated or calculated number of customers per transformer. Accounting records and estimates of load data provided the necessary database with which to model the loadings. These calculations also made it possible to determine separate copper and iron losses for distribution line transformers, based on a table of representative losses for various transformer sizes.

Secondary Line Circuits

A calculation of secondary line circuit losses was performed for loads served through these secondary line investments. Estimates of typical conductor sizes, lengths, loadings and customer class penetrations were made to obtain total circuit miles and losses for the secondary network. Customer loads which do not have secondary line requirements were also identified so that a reasonable estimate of losses and circuit miles of these investments could be made.

Service Drops and Meters

Service drops were estimated for each secondary customer reflecting conductor size, length and loadings to obtain demand losses. A separate calculation was also performed using customer maximum demands to obtain kWh losses. Meter loss estimates were also made for each customer and incorporated into the calculations of kW and kWh losses included in the Summary Results.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

4.0 DISCUSSION OF RESULTS

A brief description of each Exhibit provided in Appendices A and B follows:

Exhibit 1 - Summary of Company Data

This exhibit reflects system information used to determine percent losses and a detailed summary of kW and kWh losses by voltage level. The loss factors developed in Exhibit 7 are also summarized by voltage level.

Exhibit 2 - Summary of Conductor Information

A summary of MW and MWH load and no load losses for conductors by voltage levels is presented. The sum of all calculated losses by voltage level is based on input data information provided in Appendix A. Percent losses are based on equipment loadings.

Exhibit 3 - Summary of Transformer Information

This exhibit summarizes transformer losses by various types and voltage levels throughout the system. Load losses reflect the copper portion of transformer losses while iron losses reflect the no load or constant losses. MWH losses are estimated using a calculated loss factor for copper and the test year hours times no load losses.

Exhibit 4 - Summary of Losses Diagram (2 Pages)

This loss diagram represents the inputs and output of power at system peak conditions. Page 1 details information from all points of the power system and what is provided to the distribution system for primary loads. This portion of the summary can be viewed as a "top down" summary into the distribution system.

Page 2 represents a summary of the development of primary line loads and distribution substations based on a "bottom up" approach. Basically, loadings are developed from the customer meter through the Company's physical investments based on load research and other metered information by voltage level to arrive at MW and MVA requirements during peak load conditions by voltage levels.

Exhibit 5 - Summary of Sales and Calculated Losses

Summary of Calculated Losses represents a tabular summary of MW and MWH load and no load losses by discrete areas of delivery within each voltage level. Losses have been identified and are derived based on summaries obtained from Exhibits 2 and 3 and losses associated with meters, capacitors and regulators.



Appalachian Power Company – Kingsport Power 2012 Analysis of System Losses

Exhibit 6 - Development of Loss Factors, Unadjusted

This exhibit calculates demand and energy losses and loss factors by specific voltage levels based on sales level requirements. The actual results reflect loads by level and summary totals of losses at that level, or up to that level, based on the results as shown in Exhibit 5. Finally, the estimated values at generation are developed and compared to actual generation to obtain any difference or mismatch.

Exhibit 7 - Development of Loss Factors, Adjusted

These adjusted loss factors in Appendix B are the results of adjusting Exhibit 6 for any difference. All differences between estimated and actual are prorated to each level based on the ratio of each level's total load plus losses to the system total. These new loss factors reflect an adjustment in losses due only to the kW and kWh mismatch.

Exhibit 8 – Adjusted Losses and Loss Factors by Facility

These calculations in Appendix B present an expanded summary detail of Exhibit 7 for each segment of the power system with respect to the flow of power and associated losses from the receipt of energy at the meter to the generation for the Appalachian Power Company – Kingsport Power power system.

Exhibit 9 – Summary of Losses by Delivery Voltage

These calculations present a reformatted summary of losses presented in Exhibits 7 and 8 by power system delivery segment as calculated by voltage level of service based on reported metered sales.



**Appalachian Power Company – Kingsport Power
2012 Analysis of System Losses**

Appendix A

**Results of 2012 Integrated
APCO Transmission System
Loss Analysis**



APCO TRANS 2012 LOSS ANALYSIS

APCO TRANS

EXHIBIT 1

SUMMARY OF COMPANY DATA

ANNUAL PEAK	7,297 MW
ANNUAL SYSTEM INPUT	37,791,236 MWH
ANNUAL SALES	36,500,184 MWH
SYSTEM LOSSES @ INPUT	1,291,052 or 3.42%
SYSTEM LOSSES @ OUTPUT	1,291,052 or 3.54%
SYSTEM LOAD FACTOR	59.1%

SUMMARY OF LOSSES - OUTPUT RESULTS

SERVICE	KV	--- MW --- Input	% TOTAL	--- MWH --- Input	% TOTAL
TRANS	765,500,345 230,138	325.2 4.46%	100.00%	1,291,052 3.42%	100.00%
SUBTRANS	69,34		0.00%		0.00%
PRIMARY	34,12,1		0.00%		0.00%
SECONDARY	120/240,to,477		0.00%		0.00%
TOTAL		325.2 4.46%	100.00%	1,291,052 3.42%	100.00%

SUMMARY OF LOSS FACTORS

SERVICE	KV	CUMMULATIVE SALES EXPANSION FACTORS			
		DEMAND (Peak)		ENERGY (Annual)	
		d	1/d	e	1/e
TOT TRANS	765,500,345 230,138	1.04664	0.95544	1.03537	0.96584
SUBTRAN	69,34	0.00000	0.00000	0.00000	0.00000
PRIMARY	34,12,1	0.00000	0.00000	0.00000	0.00000
SECONDARY	120/240,to,477	0.00000	0.00000	0.00000	0.00000

EXHIBIT 2

SUMMARY OF CONDUCTOR INFORMATION

DESCRIPTION	CIRCUIT MILES	LOADING % RATING	LOAD	MW LOSSES NO LOAD	TOTAL
--- BULK ---	765 KV OR GREATER				
TIE LINES	0.0	0.00%	0.000	0.000	0.000
BULK TRANS	641.6	85.81%	70.614	16.374	86.988
SUBTOT	641.6		70.614	16.374	86.988
--- TRANS ---	345 KV TO 765.00 KV				
TIE LINES	0	0.00%	0.000	0.000	0.000
TRANS1	95.7	0.00%	1.988	0.574	2.563
TRANS2	379.1	56.30%	29.004	2.945	31.949
SUBTOT	474.8		30.993	3.519	34.512
--- SUBTRANS ---	34 KV TO 345 KV				
TIE LINES	0	0.00%	0.000	0.000	0.000
SUBTRANS1	15.5	37.30%	1.032	0.000	1.032
SUBTRANS2	2,678.5	41.59%	147.096	1.339	148.435
SUBTRANS3	0.0	0.00%	0.000	0.000	0.000
SUBTOT	2,693.9		148.128	1.339	149.467
PRIMARY LINES	0		0.000	0.000	0.000
SECONDARY LINES	0		0.000	0.000	0.000
SERVICES	0		0.000	0.000	0.000
TOTAL	3,810		249.734	21.233	270.967

LOAD	--- MW LOSSES ---	TOTAL
0	0	0
252,356	143,183	395,538
252,356	143,183	395,538
0	0	0
7,106	7,283	14,389
103,653	18,420	122,073
110,759	25,702	136,461
0	0	0
3,687	136	3,823
435,842	11,732	447,574
0	0	0
439,530	11,867	451,397
0	0	0
0	0	0
0	0	0
802,644	180,752	983,396

EXHIBIT 3

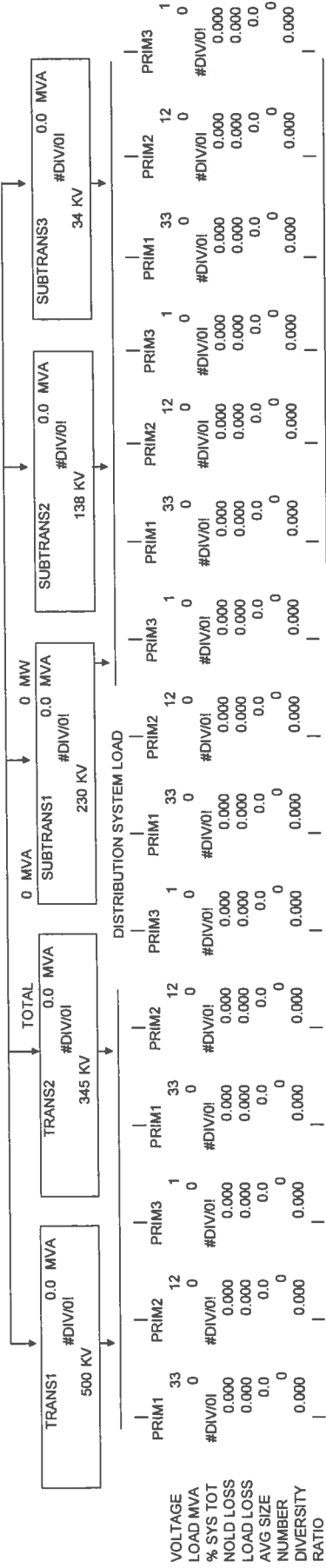
SUMMARY OF TRANSFORMER INFORMATION

DESCRIPTION	KV CAPACITY VOLTAGE	MVA	NUMBER TRANSFMR	AVERAGE SIZE	LOADING %	MVA LOAD	MW LOSSES		MWH LOSSES	
							LOAD	NO LOAD	LOAD	NO LOAD
BULK STEP-UP	765	3,950.0	9	438.9	81.35%	3,213	4,871	3,036	7,907	14,796
BULK - BULK		0.0	0	0.0	0.00%	0	0	0.000	0.000	0
BULK - TRANS1	500	3,000.0	6	500.0	37.26%	1,118	0.561	3,455	4,016	2,005
BULK - TRANS2	345	3,000.0	6	500.0	44.36%	1,331	0.841	3,399	4,240	3,456
TRANS1 STEP-UP	500	1,200.0	6	200.0	13.79%	166	0.030	1,161	1,191	107
TRANS1 - TRANS2	345	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
TRANS1-SUBTRANS1	230	750.0	3	250.0	25.89%	194	0.072	0.890	0.962	257
TRANS1-SUBTRANS2	138	6,672.0	24	278.0	55.36%	3,694	5.734	9,596	15,330	16,990
TRANS1-SUBTRANS3	34	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
TRANS2 STEP-UP	345	950.0	1	950.0	78.52%	746	0.854	1,165	2,019	2,153
TRANS2-SUBTRANS1	230	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
TRANS2-SUBTRANS2	138	6,025.0	13	463.5	49.65%	2,991	3.140	7,667	10,807	9,304
TRANS2-SUBTRANS3	34	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN1 STEP-UP	230	900.0	2	450.0	14.42%	130	0.002	0.527	0.529	7
SUBTRAN2 STEP-UP	138	2,931.5	29	101.1	37.73%	1,106	2.799	4,412	7,211	3,900
SUBTRAN3 STEP-UP	34	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN1-SUBTRAN2	138	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN1-SUBTRAN3	34	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN2-SUBTRAN3	34	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
DISTRIBUTION SUBSTATIONS										
TRANS1 -	500	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
TRANS1 -	500	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
TRANS1 -	500	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
TRANS2 -	345	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
TRANS2 -	345	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
TRANS2 -	345	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN1-	230	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN1-	230	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN1-	230	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN2-	138	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN2-	138	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN2-	138	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN3-	34	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN3-	34	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
SUBTRAN3-	34	0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
PRIMARY - PRIMARY		0.0	0	0.0	0.00%	0	0.000	0.000	0.000	0
LINE TRANSFMR		0.0	0	1.0	0.00%	0	0.000	0.000	0.000	0
TOTAL		29,379	99				18,904	35,308	54,212	52,975
										254,681
										307,656

APCO TRANS 2012 LOSS ANALYSIS

EXHIBIT 4 PAGE 2 of 2

FROM HIGH VOLTAGE SYSTEM



PRIM CUST	LOADS
NO LINES	0.000 MW
CUST SUB	0.000 MVA
NO LINES	0.000 MW
CO. SUB	0.000 MVA
PRIM WITH	0.000 MW
LINES	0.000 MVA

PRIM/PRIM TRANSF	MW
LOADING	0.000
NOLD LOSS	0.000
LOAD LOSS	0.000
AVG SIZE	0.000
NUMBER	0

PRIMARY LINES	0.000 MW
LOADING	0.000 MVA
@ SYS PF	0.000 MW
LOAD LOSS	0.000 MW
NOLD LOSS	0.000 MW
TOT LOSS	0.000 MW

LINE TRANSFORMERS	0.000 MW
LOADING	0.000 MVA
NOLD LOSS	0.000 MW
LOAD LOSS	0.000 MW
AVG SIZE	1.0 KVA
NUMBER	0.001

NO SECONDARY LINES	0.000 MW
LOAD	0.000 MW

SECONDARY LINES	0.000 MW
LOAD	0.000 MVA
LOAD LOSS	0.000 MW
NOLD LOSS	0.000 MW
TOT LOSS	0.000 MW

SERVICES	0.000 MW
LOAD	0.000 MVA
LOAD LOSS	0.000 MW
NOLD LOSS	0.000 MW
TOT LOSS	0.000 MW

CUSTOMER SECONDARY LOAD	0.000 MW
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APCO TRANS 2012 LOSS ANALYSIS

SUMMARY of SALES and CALCULATED LOSSES

EXHIBIT 5

LOSS # AND LEVEL	MW LOAD	NO LOAD +	LOAD =	TOT LOSS	EXP FACTOR	CUM EXP FAC	MWH LOAD	NO LOAD +	LOAD =	TOT LOSS	EXP FACTOR	CUM EXP FAC
1 BULK XFMR	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0	0
2 BULK LINES	3,149.0	19.41	75.49	94.90	1.031071	1.031071	17,669,286	173,553	267,152	440,704	1.0255798	1.0255798
3 TRANS1 XFMR	1,095.5	3.45	0.56	4.02	1.003679	1.034865	5,949,880	26,262	2,005	28,266	1.0047734	1.0304754
4 TRANS1 LINES	1,257.7	1.74	2.02	3.75	1.002993	1.033453	6,830,820	16,860	7,213	24,073	1.0035366	1.0301756
5 TRANS2TR1 SD	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
6 TRANS2BLK SD	1,304.1	3.40	0.84	4.24	1.003262	1.034435	7,082,828	25,012	3,456	28,468	1.0040355	1.0297185
7 TRANS2 LINES	2,035.1	4.11	29.86	33.97	1.016975	1.039415	10,675,162	24,871	105,806	130,677	1.0123929	1.0323552
** TOT TRANS LOSS FAC	7,297.0	56.54	268.64	325.18	1.046642	1.046642	37,791,236	435,433	855,619	1,291,052	1.0353711	1.0353711
8 INCLUDES LINES 1-21												
9 STR1T1 SD		0.89	0.07	0.96	0.000000	0.000000		7,103	257	7,360	0.0000000	0.0000000
10 STR1T2 SD		0.00	0.00	0.00	0.000000	0.000000		0	0	0	0.0000000	0.0000000
11 SUBTRANS1 LINES	Included above	0.53	1.03	1.56	0.000000	0.000000	Included above	4,285	3,694	7,979	0.0000000	0.0000000
12 STR2T1 SD		9.60	5.73	15.33	0.000000	0.000000		70,833	16,990	87,823	0.0000000	0.0000000
13 STR2T2 SD		7.67	3.14	10.81	0.000000	0.000000		56,453	9,304	65,757	0.0000000	0.0000000
14 STR2S1 SD		0.00	0.00	0.00	0.000000	0.000000		0	0	0	0.0000000	0.0000000
15 SUBTRANS2 LINES	Included above	5.75	149.89	155.65	0.000000	0.000000	Included above	30,203	439,743	469,945	0.0000000	0.0000000
16 STR3T1 SD		0.00	0.00	0.00	0.000000	0.000000		0	0	0	0.0000000	0.0000000
17 STR3T2 SD		0.00	0.00	0.00	0.000000	0.000000		0	0	0	0.0000000	0.0000000
18 STR3S1 SD		0.00	0.00	0.00	0.000000	0.000000		0	0	0	0.0000000	0.0000000
19 STR3S2 SD		0.00	0.00	0.00	0.000000	0.000000		0	0	0	0.0000000	0.0000000
20 SUBTRANS3 LINES		0.00	0.00	0.00	0.000000	0.000000		0	0	0	0.0000000	0.0000000
21 SUBTRANS TOTAL	Included above	24.43	159.87	184.31	0.000000	0.000000	Included above	168,876	469,988	638,864	0.0000000	0.0000000
DISTRIBUTION SUBST												
TRANS1	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
TRANS2	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
SUBTR1	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
SUBTR2	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
SUBTR3	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
WEIGHTED AVERAGE	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
PRIMARY INTRCHNGE	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
PRIMARY LINES	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
LINE TRANSF	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
SECONDARY	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
SERVICES	0.0	0.00	0.00	0.00	0.000000	0.000000	0	0	0	0	0.0000000	0.0000000
TOTAL SYSTEM		56.54	268.64	325.18				435,433	855,619	1,291,052		

APCO TRANS 2012 LOSS ANALYSIS

DEVELOPMENT of LOSS FACTORS
UNADJUSTED
DEMAND

EXHIBIT 6

LOSS FACTOR LEVEL	CUSTOMER SALES MW a	CALC LOSS TO LEVEL b	SALES MW @ GEN c	CUM PEAK EXPANSION FACTORS d	1/d
BULK LINES	0.0	0.0	0.0	0.00000	0.00000
TRANS SUBS	0.0	0.0	0.0	0.00000	0.00000
TRANS LINES	0.0	0.0	0.0	0.00000	0.00000
SUBTRANS SUBS	0.0	0.0	0.0	0.00000	0.00000
TOTAL TRANS	6,971.8	325.2	7,297.0	1.04664	0.95544
PRIM SUBS	0.0	0.0	0.0	0.00000	0.00000
PRIM LINES	0.0	0.0	0.0	0.00000	0.00000
SECONDARY	0.0	0.0	0.0	0.00000	0.00000
TOTALS	6,971.8	325.2	7,297.0		

DEVELOPMENT of LOSS FACTORS
UNADJUSTED
ENERGY

LOSS FACTOR LEVEL	CUSTOMER SALES MWH a	CALC LOSS TO LEVEL b	SALES MWH @ GEN c	CUM ANNUAL EXPANSION FACTORS d	1/d
BULK LINES	0	0	0	0.00000	0.00000
TRANS SUBS	0	0	0	0.00000	0.00000
TRANS LINES	0	0	0	0.00000	0.00000
SUBTRANS SUBS	0	0	0	0.00000	0.00000
TOTAL TRANS	36,500,184	1,291,052	37,791,236	1.03537	0.96584
PRIM SUBS	0	0	0	0.00000	0.00000
PRIM LINES	0	0	0	0.00000	0.00000
SECONDARY	0	0	0	0.00000	0.00000
TOTALS	36,500,184	1,291,052	37,791,236		

ESTIMATED VALUES AT GENERATION

LOSS FACTOR AT
VOLTAGE LEVEL

	MW	MWH
BULK LINES	0.00	0
TRANS SUBS	0.00	0
TRANS LINES	0.00	0
SUBTRANS SUBS	0.00	0
SUBTRANS LINES	7,297.00	37,791,236
PRIM SUBS	0.00	0
PRIM LINES	0.00	0
SECONDARY	0.00	0
SUBTOTAL	7,297.00	37,791,236
ACTUAL ENERGY	7,297.00	37,791,236
MISSMATCH	(0.00)	0
% MISSMATCH	0.00%	0.00%

APCO TRANS 2012 LOSS ANALYSIS

DEVELOPMENT of LOSS FACTORS
ADJUSTED
DEMAND

EXHIBIT 7

LOSS FACTOR LEVEL	CUSTOMER SALES MW a	SALES ADJUST b	CALC LOSS TO LEVEL c	SALES MW @ GEN d	CUM PEAK EXPANSION FACTORS e	f=1/e
BULK LINES	0.0	0.0	0.0	0.0	0.00000	0.00000
TRANS SUBS	0.0	0.0	0.0	0.0	0.00000	0.00000
TRANS LINES	0.0	0.0	0.0	0.0	0.00000	0.00000
SUBTRANS SUBS	0.0	0.0	0.0	0.0	0.00000	0.00000
TOTAL TRANS	6,971.8	0.0	325.2	7,297.0	1.04664	0.95544
PRIM SUBS	0.0	0.0	0.0	0.0	0.00000	0.00000
PRIM LINES	0.0	0.0	0.0	0.0	0.00000	0.00000
SECONDARY	0.0	0.0	0.0	0.0	0.00000	0.00000
TOTALS	6,971.8	0.0	325.2	7,297.0		

DEVELOPMENT of LOSS FACTORS
ADJUSTED
ENERGY

LOSS FACTOR LEVEL	CUSTOMER SALES MWH a	SALES ADJUST b	CALC LOSS TO LEVEL c	SALES MWH @ GEN d	CUM ANNUAL EXPANSION FACTORS e	f=1/e
BULK LINES	0	0	0	0	0.00000	0.00000
TRANS SUBS	0	0	0	0	0.00000	0.00000
TRANS LINES	0	0	0	0	0.00000	0.00000
SUBTRANS SUBS	0	0	0	0	0.00000	0.00000
TOTAL TRANS	36,500,184	0	1,291,052	37,791,236	1.03537	0.96584
PRIM SUBS	0	0	0	0	0.00000	0.00000
PRIM LINES	0	0	0	0	0.00000	0.00000
SECONDARY	0	0	0	0	0.00000	0.00000
TOTALS	36,500,184	0	1,291,052	37,791,236		

ESTIMATED VALUES AT GENERATION

LOSS FACTOR AT
VOLTAGE LEVEL

	MW	MWH
BULK LINES	0.00	0
TRANS SUBS	0.00	0
TRANS LINES	0.00	0
SUBTRANS SUBS	0.00	0
SUBTRANS LINES	7,297.00	37,791,236
PRIM SUBS	0.00	0
PRIM LINES	0.00	0
SECONDARY	0.00	0
	7,297.00	37,791,236
ACTUAL ENERGY	7,297.00	37,791,236
MISSMATCH	0.00	0
% MISSMATCH	0.00%	0.00%

**Appalachian Power Company – Kingsport Power
2012 Analysis of System Losses**

Appendix B

**Results of the
Appalachian Power Company
Kingsport Power
2012 Loss Analysis**



KINGSPORT 2012 LOSS ANALYSIS

KINGSPORT

EXHIBIT 1

SUMMARY OF COMPANY DATA

ANNUAL PEAK	422 MW
ANNUAL SYSTEM INPUT	2,184,210 MWH
ANNUAL SALES	2,052,463 MWH
SYSTEM LOSSES @ INPUT	131,747 or 6.03%
SYSTEM LOSSES @ OUTPUT	131,747 or 6.42%
SYSTEM LOAD FACTOR	59.1%

SUMMARY OF LOSSES - OUTPUT RESULTS

SERVICE	KV	--- MW --- Input	% TOTAL	--- MWH --- Input	% TOTAL
TRANS	765,345,138	17.8 4.22%	50.35%	70,966 3.25%	53.87%
SUBTRANS	88,35	1.9 0.44%	5.24%	7,338 0.34%	5.57%
PRIMARY	35,12,1	7.4 1.75%	20.88%	21,126 0.97%	16.04%
SECONDARY	120/240,to,477	8.3 1.97%	23.52%	32,318 1.48%	24.53%
TOTAL		35.4 8.39%	100.00%	131,747 6.03%	100.00%

SUMMARY OF LOSS FACTORS

SERVICE	KV	CUMMULATIVE SALES EXPANSION FACTORS			
		DEMAND (Peak)		ENERGY (Annual)	
		d	1/d	e	1/e
TOT TRANS	765,345,138	1.04664	0.95544	1.03537	0.96584
SUBTRAN	88,35	1.05258	0.95005	1.04138	0.96026
PRIMARY	35,12,1	1.07388	0.93121	1.05493	0.94793
SECONDARY	120/240,to,477	1.10523	0.90479	1.08741	0.91961

KINGSPORT 2012 LOSS ANALYSIS

EXHIBIT 3

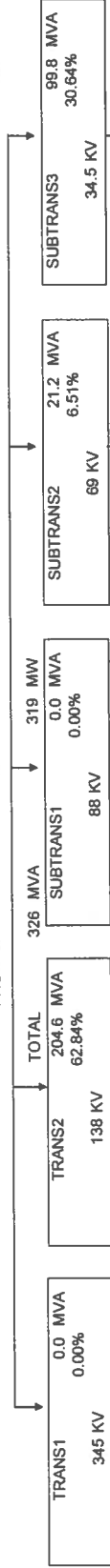
SUMMARY OF TRANSFORMER INFORMATION

DESCRIPTION	KV CAPACITY VOLTAGE	MVA	NUMBER TRANSFMR	AVERAGE SIZE	LOADING %	MVA LOAD	MW LOSSES		MWH LOSSES		TOTAL
							LOAD	NO LOAD	LOAD	NO LOAD	
BULK STEP-UP	765	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
BULK - BULK		0.0	0	0.0	0.00%	0	0	0.000	0	0	0
BULK - TRANS1	345	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
BULK - TRANS2	138	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS1 STEP-UP	345	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS1 - TRANS2	138	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS1-SUBTRANS1	88	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS1-SUBTRANS2	69	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS1-SUBTRANS3	34.5	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS2 STEP-UP	138	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS2-SUBTRANS1	88	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS2-SUBTRANS2	69	60.0	2	30.0	76.02%	46	0.104	0.109	298	788	1,086
TRANS2-SUBTRANS3	34.5	215.0	5	43.0	55.24%	119	0.443	0.327	1,270	2,440	3,710
SUBTRAN1 STEP-UP	88	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN2 STEP-UP	69	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN3 STEP-UP	34.5	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN1-SUBTRAN2	69	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN1-SUBTRAN3	34.5	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN2-SUBTRAN3	34.5	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
DISTRIBUTION SUBSTATIONS											
TRANS1 -	33	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS1 -	345	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS1 -	345	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
TRANS2 -	138	60.0	2	30.0	98.51%	59	0.206	0.128	412	910	1,322
TRANS2 -	138	152.0	8	19.0	95.72%	145	0.560	0.329	1,119	2,362	3,481
TRANS2 -	138	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN1-	33	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN1-	88	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN1-	88	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN2-	69	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN2-	69	20.0	1	20.0	106.03%	21	0.086	0.045	173	320	493
SUBTRAN2-	69	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN3-	34.5	0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
SUBTRAN3-	34.5	117.0	9	13.0	84.48%	99	0.397	0.250	793	1,835	2,628
SUBTRAN3-	34.5	3.8	1	3.8	24.45%	1	0.002	0.008	3	67	70
PRIMARY - PRIMARY		0.0	0	0.0	0.00%	0	0.000	0.000	0	0	0
LINE TRANSFMR		774.4	16,571	46.7	41.93%	325	1.649	2.286	3,195	20,028	23,223
TOTAL		1,402	16,599				3,447	3,482	7,264	28,750	36,014

KINGSPORT 2012 LOSS ANALYSIS

EXHIBIT 4 PAGE 2 of 2

FROM HIGH VOLTAGE SYSTEM



DISTRIBUTION SYSTEM LOAD

VOLTAGE	PRIM1	PRIM2	PRIM3	PRIM1	PRIM2	PRIM3	PRIM1	PRIM2	PRIM3	PRIM1	PRIM2	PRIM3	PRIM1	PRIM2	PRIM3	PRIM1	PRIM2	PRIM3	PRIM1	PRIM2	PRIM3	PRIM1	PRIM2	PRIM3
LOAD MVA	33	12	0	0	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% SYS TOT	0.00%	0.00%	0.00%	0.00%	44.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NOLD LOSS	0.000	0.000	0.000	0.000	0.329	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LOAD LOSS	0.000	0.000	0.000	0.000	0.560	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AVG SIZE	0.0	0.0	0.0	0.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NUMBER	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIVERSITY	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RATIO																								

PRIMARY LINES
LOADING
@ SYS PF
LOAD LOSS
NOLD LOSS
TOT LOSS

PRIM/PRIM TRANSF
LOADING
NOLD LOSS
LOAD LOSS
AVG SIZE
NUMBER

PRIM CUST LOADS
NO LINES
CUST SUB
NO LINES
CO. SUB
PRIM WITH
LINES

LINE TRANSFORMERS
LOADING
NOLD LOSS
LOAD LOSS
AVG SIZE
NUMBER

SECONDARY LINES
LOAD
LOAD LOSS
NOLD LOSS
TOT LOSS

NO SECONDARY LINES
LOAD

SERVICES
LOAD
LOAD LOSS
NOLD LOSS
TOT LOSS

CUSTOMER SECONDARY LOAD
MW

KINGSPORT 2012 LOSS ANALYSIS

EXHIBIT 5

SUMMARY of SALES and CALCULATED LOSSES

LOSS# AND LEVEL	MW/LD	NO LOAD +	TOT LOSS	EXP FACTOR	CUM EXP FAC	MW/LD	NO LOAD +	TOT LOSS	EXP FACTOR	CUM EXP FAC
1 BULK XFMMR	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0
2 BULK LINES	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
3 TRANS1 XFMR	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
4 TRANS1 LINES	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
5 TRANS2TR1 SD	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
6 TRANS2BLK SD	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
7 TRANS2 LINES	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
TOTAL TRAN	400.0	3.10	14.73	1.046642	1.046642	2,077,280	23,935	47,031	70,966	1.0353711
8 STR1BLK SD	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
9 STR1T1 SD	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
10 SRT1T2 SD	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
11 SUBTRANS1 LINES	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
12 STR2T1 SD	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
13 STR2T2 SD	44.7	0.11	0.10	1.004779	1.051644	215,365	788	298	1,086	1.0050686
14 STR2S1 SD	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
15 SUBTRANS2 LINES	44.7	0.00	0.02	1.000385	1.047045	215,365	0	49	49	1.0002290
16 STR3T1 SD	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
17 STR3T2 SD	116.4	0.33	0.44	1.006660	1.053613	560,815	2,440	1,270	3,710	1.0066592
18 STR3S1 SD	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
19 STR3S2 SD	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
20 SUBTRANS3 LINES	116.4	0.04	0.82	1.007399	1.054386	560,815	148	2,345	2,493	1.0044643
21 SUBTRANS TOTAL	328.7	0.47	1.38	1.005675	1.052582	1,271,424	3,375	3,962	7,338	1.0058048
DISTRIBUTION SUBST										
TRANS1	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
TRANS2	200.5	0.46	0.77	1.006137	1.053065	792,335	3,273	1,531	4,804	1.0060997
SUBTR1	0.0	0.00	0.00	0.000000	0.000000	0	0	0	0	0.000000
SUBTR2	20.8	0.05	0.09	1.006377	1.053316	82,123	320	173	493	1.0060384
SUBTR3	97.8	0.26	0.40	1.006758	1.061511	386,334	1,901	797	2,698	1.0070324
WEIGHTED AVERAGE	319.1	0.76	1.25	1.006343	1.055669	1,260,792	5,494	2,500	7,995	1.0063813
PRIMARY INTRCHNGE	1.0			1.000000		3,499			1.000000	
PRIMARY LINES	318.1	0.19	4.77	1.015821	1.072372	1,256,220	1,523	11,487	13,010	1.0104650
LINE TRANSF	296.6	2.29	1.65	1.013444	1.086789	1,123,776	20,028	3,195	23,223	1.0211013
SECONDARY	292.7	0.00	1.73	1.005953	1.093259	1,100,553	0	3,151	3,151	1.0028711
SERVICES	291.0	0.10	2.08	1.007544	1.101506	1,097,402	853	4,905	5,758	1.0052745
TOTAL SYSTEM		6.90	27.59				55,209	76,231		131,440

KINGSPORT 2012 LOSS ANALYSIS

DEVELOPMENT of LOSS FACTORS
UNADJUSTED
DEMAND

EXHIBIT 6

LOSS FACTOR LEVEL	CUSTOMER SALES MW a	CALC LOSS TO LEVEL b	SALES MW @ GEN c	CUM PEAK EXPANSION FACTORS d	1/d
BULK LINES	0.0	0.0	0.0	0.00000	0.00000
TRANS SUBS	0.0	0.0	0.0	0.00000	0.00000
TRANS LINES	81.3	3.8	85.1	1.04664	0.95544
TOTAL TRANS	0.0	0.0	0.0	0.00000	0.00000
SUBTRANS	0.0	0.0	0.0	1.05258	0.95005
PRIM SUBS	0.0	0.0	0.0	0.00000	0.00000
PRIM LINES	16.5	1.2	17.7	1.07237	0.93251
SECONDARY	<u>288.8</u>	<u>29.3</u>	<u>318.1</u>	1.10151	0.90785
TOTALS	386.6	34.3	420.9		

DEVELOPMENT of LOSS FACTORS
UNADJUSTED
ENERGY

LOSS FACTOR LEVEL	CUSTOMER SALES MWH a	CALC LOSS TO LEVEL b	SALES MWH @ GEN c	CUM ANNUAL EXPANSION FACTORS d	1/d
BULK LINES	0	0	0	0.00000	0.00000
TRANS SUBS	0	0	0	0.00000	0.00000
TRANS LINES	841,385	29,761	871,146	1.03537	0.96584
TOTAL TRANS	0	0	0	0.00000	0.00000
SUBTRANS	0	0	0	1.04138	0.96026
PRIM SUBS	0	0	0	0.00000	0.00000
PRIM LINES	119,434	6,488	125,922	1.05432	0.94848
SECONDARY	<u>1,091,644</u>	<u>93,180</u>	<u>1,184,824</u>	1.08536	0.92136
TOTALS	2,052,463	129,428	2,181,891		

ESTIMATED VALUES AT GENERATION

LOSS FACTOR AT
VOLTAGE LEVEL

	MW	MWH
BULK LINES	0.00	0
TRANS SUBS	0.00	0
TRANS LINES	85.09	871,146
SUBTRANS SUBS	0.00	0
SUBTRANS LINES	0.00	0
PRIM SUBS	0.00	0
PRIM LINES	17.69	125,922
SECONDARY	318.11	1,184,824
SUBTOTAL	420.90	2,181,891
ACTUAL ENERGY	422.00	2,184,210
MISSMATCH	(1.10)	(2,319)
% MISSMATCH	-0.26%	-0.11%

KINGSPORT 2012 LOSS ANALYSIS

DEVELOPMENT of LOSS FACTORS
ADJUSTED
DEMAND

EXHIBIT 7

LOSS FACTOR LEVEL	CUSTOMER SALES MW a	SALES ADJUST b	CALC LOSS TO LEVEL c	SALES MW @ GEN d	CUM PEAK EXPANSION FACTORS e	f=1/e
BULK LINES	0.0	0.0	0.0	0.0	0.00000	0.00000
TRANS SUBS	0.0	0.0	0.0	0.0	0.00000	0.00000
TRANS LINES	81.3	0.0	3.8	85.1	1.04664	0.95544
TOTAL TRANS	0.0	0.0	0.0	0.0	0.00000	0.00000
SUBTRANS	0.0	0.0	0.0	0.0	1.05258	0.95005
PRIM SUBS	0.0	0.0	0.0	0.0	0.00000	0.00000
PRIM LINES	16.5	0.0	1.2	17.7	1.07388	0.93121
SECONDARY	<u>288.8</u>	<u>0.0</u>	30.4	<u>319.2</u>	1.10523	0.90479
			35.4			
TOTALS	386.6	0.0	35.4	422.0		

DEVELOPMENT of LOSS FACTORS
ADJUSTED
ENERGY

LOSS FACTOR LEVEL	CUSTOMER SALES MWH a	SALES ADJUST b	CALC LOSS TO LEVEL c	SALES MWH @ GEN d	CUM ANNUAL EXPANSION FACTORS e	f=1/e
BULK LINES	0	0	0	0	0.00000	0.00000
TRANS SUBS	0	0	0	0	0.00000	0.00000
TRANS LINES	841,385	0	29,761	871,146	1.03537	0.96584
TOTAL TRANS	0	0	0	0	0.00000	0.00000
SUBTRANS	0	0	0	0	1.04138	0.96026
PRIM SUBS	0	0	0	0	0.00000	0.00000
PRIM LINES	119,434	0	6,560	125,994	1.05493	0.94793
SECONDARY	<u>1,091,644</u>	<u>0</u>	95,426	<u>1,187,070</u>	1.08741	0.91961
			131,747			
TOTALS	2,052,463	0	131,747	2,184,210		

ESTIMATED VALUES AT GENERATION

LOSS FACTOR AT
VOLTAGE LEVEL

	MW	MWH
BULK LINES	0.00	0
TRANS SUBS	0.00	0
TRANS LINES	85.09	871,146
SUBTRANS SUBS	0.00	0
SUBTRANS LINES	0.00	0
PRIM SUBS	0.00	0
PRIM LINES	17.72	125,994
SECONDARY	319.19	1,187,070
	422.00	2,184,210
ACTUAL ENERGY	422.00	2,184,210
MISSMATCH	0.00	0
% MISSMATCH	0.00%	0.00%

KINGSPORT 2012 LOSS ANALYSIS

Adjusted Losses and Loss Factors by Facility

EXHIBIT 8

Unadjusted Losses by Segment				
	MW	Unadjusted	MWH	Unadjusted
Service Drop Losses	2.18	2.15	5,758	5,540
Secondary Losses	1.73	1.71	3,151	3,032
Line Transformer Losses	3.94	3.88	23,223	22,344
Primary Line Losses	4.95	4.89	13,010	12,518
Distribution Substation Losses	2.01	1.99	7,995	7,692
Subtransmission Losses	1.85	1.85	7,338	7,338
<u>Transmission System Losses</u>	<u>17.83</u>	<u>17.83</u>	<u>70,966</u>	<u>70,966</u>
Total	34.49	34.30	131,440	129,428

Mismatch Allocation by Segment		
	MW	MWH
Service Drop Losses	-0.16	-251
Secondary Losses	-0.13	-137
Line Transformer Losses	-0.29	-1,013
Primary Line Losses	-0.37	-568
Distribution Substation Losses	-0.15	-349
Subtransmission Losses	0.00	0
<u>Transmission System Losses</u>	<u>0.00</u>	<u>0</u>
Total	-1.10	-2,319

Adjusted Losses by Segment				
	MW	% of Total	MWH	% of Total
Service Drop Losses	2.31	6.5%	5,791	4.4%
Secondary Losses	1.84	5.2%	3,169	2.4%
Line Transformer Losses	4.18	11.8%	23,357	17.7%
Primary Line Losses	5.26	14.9%	13,085	9.9%
Distribution Substation Losses	2.13	6.0%	8,041	6.1%
Subtransmission Losses	1.85	5.2%	7,338	5.6%
<u>Transmission System Losses</u>	<u>17.83</u>	<u>50.4%</u>	<u>70,966</u>	<u>53.9%</u>
Total	35.40	100.0%	131,747	100.0%

Loss Factors by Segment		
	MW	MWH
Retail Sales from Service Drops	288.80	1,091,644
<u>Adjusted Service Drop Losses</u>	<u>2.31</u>	<u>5,791</u>
Input to Service Drops	291.11	1,097,435
Service Drop Loss Factor	1.00801	1.00630
Output from Secondary	291.11	1,097,435
<u>Adjusted Secondary Losses</u>	<u>1.84</u>	<u>3,169</u>
Input to Secondary	292.95	1,100,604
Secondary Conductor Loss Factor	1.00632	1.00289
Output from Line Transformers	292.95	1,100,604
<u>Adjusted Line Transformer Losses</u>	<u>4.18</u>	<u>23,357</u>
Input to Line Transformers	297.13	1,123,962
Line Transformer Loss Factor	1.01426	1.02122
Secondary Composite	1.02883	1.02960
Retail Sales from Primary	16.50	119,434
Req. Whls Sales from Primary	0.00	0
<u>Input to Line Transformers</u>	<u>297.13</u>	<u>1,123,962</u>
Output from Primary Lines	313.63	1,243,396
<u>Adjusted Primary Line Losses</u>	<u>5.26</u>	<u>13,085</u>
Input to Primary Lines	318.89	1,256,481
Primary Line Loss Factor	1.01677	1.01052
Output PI from Distribution Substations	318.89	1,256,481
Req. Whls Sales from Substations	0.00	0
Retail Sales from Substations	0.00	0
Total Output from Distribution Substations	318.89	1,256,481
<u>Adjusted Distribution Substation Losses</u>	<u>2.13</u>	<u>8,041</u>
Input to Distribution Substations	321.02	1,264,522
Distribution Substation Loss Factor	1.00669	1.00640
Retail Sales at from SubTransmission	0.00	0
Req. Whls Sales from SubTransmission	0.00	0
<u>Input to Distribution Substations</u>	<u>97.77</u>	<u>386,334</u>
Output from SubTransmission	326.85	1,264,086.19
<u>Adjusted SubTransmission System Losses</u>	<u>1.85</u>	<u>7,338</u>
Input to SubTransmission	328.70	1,271,424
SubTransmission Loss Factor	1.00567	1.00580
Retail Sales at from Transmission	81.30	841,385
Req. Whls Sales from Transmission	0.00	0
<u>Input Subtransmission</u>	<u>328.70</u>	<u>1,271,424</u>
Output from Transmission	382.17	2,006,314
<u>Adjusted Transmission System Losses</u>	<u>17.83</u>	<u>70,966</u>
Input to Transmission	400.00	2,077,280
Transmission Loss Factor	1.04664	1.03537

DEMAND MW				SUMMARY OF LOSSES AND LOSS FACTORS BY DELIVERY VOLTAGE					
SERVICE LEVEL			SALES MW	LOSSES	SECONDARY	PRIMARY	SUBSTATION	SUBTRANS	TRANSMISSION
1	SERVICES								
2	SALES		288.80		288.8				
3	LOSSES			2.3	2.3				
4	INPUT				291.1				
5	EXPANSION FACTOR	1.00801							
6	SECONDARY								
7	SALES								
8	LOSSES			1.8	1.8				
9	INPUT				293.0				
10	EXPANSION FACTOR	1.00632							
11	LINE TRANSFORMER								
12	SALES								
13	LOSSES			4.2	4.2				
14	INPUT				297.1				
15	EXPANSION FACTOR	1.01426							
16	PRIMARY								
17	SECONDARY				297.1				
18	SALES		16.50			16.5			
19	LOSSES			5.3	5.0	0.3			
20	INPUT								
21	EXPANSION FACTOR	1.01677							
22	SUBSTATION								
23	PRIMARY				302.1	16.8			
24	SALES		0.0				0.0		
25	LOSSES			2.1	2.0	0.1	0.0		
26	INPUT				304.1	16.9	0.0		
27	EXPANSION FACTOR	1.00669							
28	SUB-TRANSMISSION								
29	DISTRIBUTION SUBS				97.8				
30	SALES		0.00			9.1	0.0	0.0	
31	LOSSES			0.6	0.6	0.1	0.0	0.0	
32	INPUT				98.3	9.2	0.0	0.0	
33	EXPANSION FACTOR	1.00667							
34	TRANSMISSION								
35	SUBTRANSMISSION				98.3	9.2		0.0	
36	DISTRIBUTION SUBS				190.9	7.8	0.0		
37	SALES		81.30						81.3
38	LOSSES			18.1	13.5	0.8	0.0	0.0	3.8
39	INPUT				310.5	17.7	0.0	0.0	85.1
40	EXPANSION FACTOR	1.04664							
41	TOTALS	LOSSES	CALCULATED	34.4	29.4	1.2	0.0	0.0	3.8
			SCALED	35.4	30.4	1.2	0.0	0.0	3.8
42		% OF TOTAL		100%	88.34%	3.54%	0.00%	0.00%	11.02%
43		SALES	386.6		288.8	16.5	0.0	0.0	81.3
44		% OF TOTAL	100.00%		74.70%	4.27%	0.00%	0.00%	21.03%
45		INPUT	422.0		319.2	17.7	0.0	0.0	85.1
46	CUMMULATIVE EXPANSION LOSS FACTORS				1.10523	1.07388	NA	NA	1.04664
	(from meter to system input)								

ENERGY MWH				SUMMARY OF LOSSES AND LOSS FACTORS BY DELIVERY VOLTAGE					
SERVICE LEVEL		SALES	LOSSES	SECONDARY	PRIMARY	SUBSTATION	SUBTRANS	TRANSMISSION	
1	SERVICES								
2	SALES	1,091,644		1,091,644					
3	LOSSES		5,791	5,791					
4	INPUT			1,097,435					
5	EXPANSION FACTOR	1.00530							
6	SECONDARY								
7	SALES								
8	LOSSES		3,169	3,169					
9	INPUT			1,100,604					
10	EXPANSION FACTOR	1.00289							
11	LINE TRANSFORMER								
12	SALES								
13	LOSSES		23,357	23,357					
14	INPUT			1,123,962					
15	EXPANSION FACTOR	1.02122							
16	PRIMARY								
17	SECONDARY			1,123,962					
18	SALES	119,434.000			119,434				
19	LOSSES		13,085	11,828	1,257				
20	INPUT								
21	EXPANSION FACTOR	1.01052							
22	SUBSTATION								
23	PRIMARY			1,135,790	120,691				
24	SALES	0				0			
25	LOSSES		8,041	7,268	772	0			
26	INPUT			1,143,058	121,463	0			
27	EXPANSION FACTOR	1.00640							
28	SUB-TRANSMISSION								
29	DISTRIBUTION SUBS			386,334.1		0.000			
30	SALES	0			65,590	0.000	0.000		
31	LOSSES		7,338	2,243	381	0.000	0.000		
32	INPUT			388,577	65,971		0.000		
33	EXPANSION FACTOR	1.00580							
34	TRANSMISSION								
35	SUBTRANSMISSION			388,577	65,971			0	
36	DISTRIBUTION SUBS			729,331	55,873	0			
37	SALES	841,385						841,385	
38	LOSSES		45,839	13,744	2,333	0	0	29,761	
39	INPUT			402,321	68,304	0	0	871,146	
40	EXPANSION FACTOR	1.03537							
41	TOTALS	LOSSES	Calculated	106,620	67,401	4,743	0	0	29,761
			Scaled	131,747	95,426	6,560	0	0	29,761
42		% OF TOTAL		100%	63.22%	4.45%	0.00%		27.91%
43		SALES	2,052,463		1,091,644	119,434	0	0	841,385
44		% OF TOTAL	100.00%		53.19%	5.82%	0.00%	0.00%	40.99%
45		INPUT	2,184,210		1,187,070	125,994	0	0	871,146
46	CUMMULATIVE EXPANSION LOSS FACTORS				1.08741	1.05493	NA	NA	1.03537
	(from meter to system input)								

**Appalachian Power Company – Kingsport Power
2012 Analysis of System Losses**

Appendix C

Discussion of Hoebel Coefficient



COMMENTS ON THE HOEBEL COEFFICIENT

The Hoebel constant represents an established industry standard relationship between peak losses and average losses and is used in a loss study to estimate energy losses from peak demand losses. H. F. Hoebel described this relationship in his article, "Cost of Electric Distribution Losses," Electric Light and Power, March 15, 1959.

Within any loss evaluation study, peak demand losses can readily be calculated given equipment resistance and approximate loading. Energy losses, however, are much more difficult to determine given their time-varying nature. This difficulty can be reduced by the use of an equation which relates peak load losses (demand) to average losses (energy). Once the relationship between peak and average losses is known, average losses can be estimated from the known peak load losses.

Within the electric utility industry, the relationship between peak and average losses is known as the loss factor. For definitional purposes, loss factor is the ratio of the average power loss to the peak load power loss, during a specified period of time. This relationship is expressed mathematically as follows:

$$\underline{(1) F_{LS} \cong A_{LS} \div P_{LS}} \quad \text{where: } \begin{array}{ll} F_{LS} & = \text{Loss Factor} \\ A_{LS} & = \text{Average Losses} \\ P_{LS} & = \text{Peak Losses} \end{array}$$

The loss factor provides an estimate of the degree to which the load loss is maintained throughout the period in which the loss is being considered. In other words, loss factor is the ratio of the actual kWh losses incurred to the kWh losses which would have occurred if full load had continued throughout the period under study.

Examining the loss factor expression in light of a similar expression for load factor indicates a high degree of similarity. The mathematical expression for load factor is as follows:

$$\underline{(2) F_{LD} \cong A_{LD} \div P_{LD}} \quad \text{where: } \begin{array}{ll} F_{LD} & = \text{Load Factor} \\ A_{LD} & = \text{Average Load} \\ P_{LD} & = \text{Peak Load} \end{array}$$

This load factor result provides an estimate of the degree to which the load loss is maintained throughout the period in which the load is being considered. Because of the similarities in definition, the loss factor is sometimes called the "load factor of losses." While the definitions are similar, a strict equating of the two factors cannot be made. There does exist, however, a relationship between these two factors which is dependent upon the shape of the load duration curve. Since resistive losses vary as the square of the load, it can be shown mathematically that the loss factor can vary between the extreme limits of load factor and load factor squared. The relationship between load factor and loss factor has become an industry standard and is as follows:

$$(3) F_{LS} \cong H \cdot F_{LD}^2 + (1-H) \cdot F_{LD}$$

where: F_{LS} = Loss Factor
 F_{LD} = Load Factor
 H = Hoebel Coefficient

As noted in the attached article, the suggested value for H (the Hoebel coefficient) is 0.7. The exact value of H will vary as a function of the shape of the utility's load duration curve. In recent years, values of H have been computed directly for a number of utilities based on EEI load data. It appears on this basis, the suggested value of 0.7 should be considered a lower bound and that values approaching unity may be considered a reasonable upper bound. Based on experience, values of H have ranged from approximately 0.85 to 0.95. The standard default value of 0.9 is generally used.

Inserting the Hoebel coefficient estimate gives the following loss factor relationship using Equation (3):

$$(4) F_{LS} \cong 0.90 \cdot F_{LD}^2 + 0.10 \cdot F_{LD}$$

Once the Hoebel constant has been estimated and the load factor and peak losses associated with a piece of equipment have been estimated, one can calculate the average, or energy losses as follows:

$$(5) A_{LS} \cong P_{LS} * [H \cdot F_{LD}^2 + (1-H) \cdot F_{LD}]$$

where: A_{LS} = Average Losses
 P_{LS} = Peak Losses
 H = Hoebel Coefficient
 F_{LD} = Load Factor

Loss studies use this equation to calculate energy losses at each major voltage level in the analysis.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-003:

Please provide all invoices and other documentation to support the storm cost expense of \$2,039,395.

Response Staff 1-003:

The \$2,039,395 of storm cost expense includes \$90,333 of under-recovered 2009 storm costs from Docket No. 12-00051. The \$90,333 of 2009 storm costs is the unrecovered portion of the total 2009 storm cost expense of \$1,629,352 that was approved by the TRA for recovery in Docket 12-00051 and as such, the total 2009 storm damage costs were supported in that docket. Refer also to the Company's response to Staff 1-13.

See Staff 1-3, Attachment 1, for details of the January 2013 incremental storm expenses totaling \$1,949,062 by the cost categories provided in the Company's petition and in the direct testimony of Company witness Webb. See Staff 1-3, Attachment 2, for the January 2013 incremental storm expenses totaling \$1,949,062 by Journal ID. See Staff 1-3, Attachment 3, for a list of the Accounts Payable invoices that make up the \$117,621 shown on Staff 1-3, Attachment 2. See Staff 1-3, Attachment 4, for a list of the Accounts Payable vouchers that make up the \$1,323,510 non-labor compatible unit allocations shown on Staff 1-3, Attachment 2.

Upon further request, the Company can provide copies of specific invoices or vouchers as selected by Staff.

Kingsport Power Company
2013 Storm Damage Expenses
By Cost Component

Staff 1-3
Attachment 1
Page 1 of 3

Unit	Account	Amount	Period	Year	Cost Comp	CC Descr	Journal ID	Line Descr	Long Descr
230	5930000	(58.19)	7	2013	121	Labor Fringes (Overtime)	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	67.61	5	2013	121	Labor Fringes (Overtime)	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	1,837.78	1	2013	121	Labor Fringes (Overtime)	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	58.44	6	2013	121	Labor Fringes (Overtime)	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	159.57	2	2013	121	Labor Fringes (Overtime)	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	8,072.34	2	2013	121	Labor Fringes (Overtime)	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	59.78	2	2013	121	Labor Fringes (Overtime)	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	302.07	2	2013	13E	Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	772.36	2	2013	13E	Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	512.98	2	2013	13E	Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	590.48	5	2013	13E	Exempt OT Labor	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	3,408.97	1	2013	13E	Exempt OT Labor	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	13,674.96	2	2013	13E	Exempt OT Labor	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	1,309.72	1	2013	13N	Non Exempt OT Labor	CUA1661703	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	244.88	1	2013	13N	Non Exempt OT Labor	CUA1661703	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	14,753.41	2	2013	13N	Non Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	2,329.96	2	2013	13N	Non Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	1,856.99	2	2013	13N	Non Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	500.90	6	2013	13N	Non Exempt OT Labor	CUA1735617	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	(500.90)	7	2013	13N	Non Exempt OT Labor	CUA1743379	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	(510.37)	7	2013	13N	Non Exempt OT Labor	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	2,052.96	1	2013	13N	Non Exempt OT Labor	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	510.37	6	2013	13N	Non Exempt OT Labor	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	1,399.68	2	2013	13N	Non Exempt OT Labor	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	26,090.63	2	2013	13N	Non Exempt OT Labor	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	1,290.26	1	2013	13S	Non Exempt OT Salaried Labor	CUA1661703	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	8,556.59	2	2013	13S	Non Exempt OT Salaried Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	1,541.12	2	2013	13S	Non Exempt OT Salaried Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	1,091.74	2	2013	13S	Non Exempt OT Salaried Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	1,035.39	2	2013	13S	Non Exempt OT Salaried Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	10,658.87	1	2013	13S	Non Exempt OT Salaried Labor	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	31,357.66	2	2013	13S	Non Exempt OT Salaried Labor	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	524.35	2	2013	13S	Non Exempt OT Salaried Labor	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	2,466.12	2	2013	13S	Non Exempt OT Salaried Labor	PAY1669059	Time and Labor-BalancedActuals	Time and Labor-BalancedActuals
		138,019.48				Internal Overtime Labor			
230	5930000	12,807.68	7	2013	210	Contract Labor (General)	AJERECL03	C/R WO TO O&M CORRECTION	JE RECLASS ENTRY - JULY 2013
230	5930000	7,650.00	1	2013	210	Contract Labor (General)	APACC62041	Accounts Payable Accrual	Accounts Payable Accrual
230	5930000	20,854.94	2	2013	210	Contract Labor (General)	APACC73100	Accounts Payable Accrual	Accounts Payable Accrual
230	5930000	35,418.05	2	2013	210	Contract Labor (General)	APACC75677	Accounts Payable Accrual	Accounts Payable Accrual
230	5930000	396.02	3	2013	210	Contract Labor (General)	APACC80058	Accounts Payable Accrual	Accounts Payable Accrual
230	5930000	19,784.63	3	2013	210	Contract Labor (General)	APACC84618	Accounts Payable Accrual	Accounts Payable Accrual
230	5930000	42,773.20	2	2013	210	Contract Labor (General)	CUMON78865	Non-labor CU allocation	Non-labor CU allocation
230	5930000	35,387.38	3	2013	210	Contract Labor (General)	CUMON92799	Non-labor CU allocation	Non-labor CU allocation
230	5930000	126.59	7	2013	210	Contract Labor (General)	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	2,152.00	2	2013	210	Contract Labor (General)	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	0.34	7	2013	220	Supply Chain Clearing	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5910000	5.01	1	2013	220	Supply Chain Clearing	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	5.82	2	2013	220	Supply Chain Clearing	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	83.88	7	2013	260	Professional Services	AJERECL03	C/R WO TO O&M CORRECTION	JE RECLASS ENTRY - JULY 2013
230	5930000	1,425.96	2	2013	260	Professional Services	CUMON78865	Non-labor CU allocation	Non-labor CU allocation
230	5930000	230.18	7	2013	260	Professional Services	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	3,912.98	2	2013	260	Professional Services	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	69.31	7	2013	290	Other Outside Services General	AJERECL03	C/R WO TO O&M CORRECTION	JE RECLASS ENTRY - JULY 2013
230	5930000	199,583.48	7	2013	290	Other Outside Services General	AJERECL03	C/R WO TO O&M CORRECTION	JE RECLASS ENTRY - JULY 2013
230	5910000	16,076.01	1	2013	290	Other Outside Services General	APACC64266	Accounts Payable Accrual	Accounts Payable Accrual
230	5910000	840.00	2	2013	290	Other Outside Services General	APACC66817	Accounts Payable Accrual	Accounts Payable Accrual
230	5880000	13,428.74	2	2013	290	Other Outside Services General	APACC76395	Accounts Payable Accrual	Accounts Payable Accrual
230	5880000	836.81	2	2013	290	Other Outside Services General	APACC77103	Accounts Payable Accrual	Accounts Payable Accrual
230	5930000	825,826.54	2	2013	290	Other Outside Services General	CUMON78865	Non-labor CU allocation	Non-labor CU allocation
230	5930000	1,178.27	3	2013	290	Other Outside Services General	CUMON92799	Non-labor CU allocation	Non-labor CU allocation
230	5930000	380,620.48	3	2013	290	Other Outside Services General	CUMON92799	Non-labor CU allocation	Non-labor CU allocation
230	5910000	2,627.30	1	2013	290	Other Outside Services General	INTCOM6087	Intercompany Billing	Intercompany Billing
		1,624,101.60				Outside Services			
230	5930000	407.88	1	2013	310	MMS From Stock General	INDUS59954	Indus Work Management	Indus Work Management
230	5930000	47.96	1	2013	310	MMS From Stock General	INDUS61549	Indus Work Management	Indus Work Management
230	5930000	(47.96)	1	2013	310	MMS From Stock General	INDUS62150	Indus Work Management	Indus Work Management
230	5930000	(251.62)	2	2013	310	MMS From Stock General	INDUS67714	Indus Work Management	Indus Work Management
230	5930000	134.75	1	2013	310	MMS From Stock General	STREXP6192	Stores Expense Clearing	Stores Expense Clearing
230	5930000	1.35	1	2013	320	Stores Clearing Charges Gen	STREXP6192	Stores Expense Clearing	Stores Expense Clearing
230	5880000	5.48	2	2013	324	Stores Clearing Fixed Percent	STREXP9545	Stores Expense Clearing	Stores Expense Clearing
230	5910000	19.60	2	2013	324	Stores Clearing Fixed Percent	STREXP9545	Stores Expense Clearing	Stores Expense Clearing
230	5930000	175.71	2	2013	393	Sales & Use Tax Accrual	APACC75677	Accounts Payable Accrual	Accounts Payable Accrual
230	5880000	906.44	2	2013	393	Sales & Use Tax Accrual	APACC76395	Accounts Payable Accrual	Accounts Payable Accrual
230	5930000	38.75	1	2013	393	Sales & Use Tax Accrual	TXIMX59985	Vertex Use Tax Accrual	Vertex Use Tax Accrual
230	5930000	4.56	1	2013	393	Sales & Use Tax Accrual	TXIMX61581	Vertex Use Tax Accrual	Vertex Use Tax Accrual
230	5930000	(4.56)	1	2013	393	Sales & Use Tax Accrual	TXIMX62182	Vertex Use Tax Accrual	Vertex Use Tax Accrual
230	5930000	(23.90)	2	2013	393	Sales & Use Tax Accrual	TXIMX67745	Vertex Use Tax Accrual	Vertex Use Tax Accrual

Kingsport Power Company
2013 Storm Damage Expenses
By Cost Component

Staff 1-3
Attachment 1
Page 2 of 3

Unlt	Account	Amount	Period	Year	Cost Comp	CC Descr	Journal ID	Line Descr	Long Descr
230	5880000	(906.44)	3	2013	393	Sales & Use Tax Accrual	TXOUA90884	SAW USE REV/ACCR 103 01586858	Vertex Use Tax ReversalAccrual
230	5930000	(108.55)	3	2013	393	Sales & Use Tax Accrual	TXOUA90884	SAW USE REV/ACCR 230 00038426	Vertex Use Tax ReversalAccrual
230	5930000	(67.16)	3	2013	393	Sales & Use Tax Accrual	TXOUA90884	SAW USE REV/ACCR 230 00038428	Vertex Use Tax ReversalAccrual
230	5910000	979.80	2	2013	396	Direct Ship Stores Load Fixed	APACC66817	Accounts Payable Accrual	Accounts Payable Accrual
230	5880000	274.04	2	2013	396	Direct Ship Stores Load Fixed	APACC71111	Accounts Payable Accrual	Accounts Payable Accrual
230	5860000	178.10	1	2013	396	Direct Ship Stores Load Fixed	INTCOM6087	Intercompany Billing	Intercompany Billing
		1,764.23				Materials and Supplies			
230	5930000	19.57	7	2013	413	Fleet Clearing	FLTCLR2142	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	(231.69)	1	2013	413	Fleet Clearing	FLTCLR5359	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	(39.51)	1	2013	413	Fleet Clearing	FLTCLR5359	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	(88.04)	1	2013	413	Fleet Clearing	FLTCLR5359	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	24.34	6	2013	413	Fleet Clearing	FLTCLR7313	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	1,418.08	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	47.61	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	224.81	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	121.19	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	69.40	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	129.65	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	80.05	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	(5.17)	7	2013	413	Fleet Clearing	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	(9.33)	5	2013	413	Fleet Clearing	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	7.29	3	2013	413	Fleet Clearing	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	(1,222.76)	1	2013	413	Fleet Clearing	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	6.53	6	2013	413	Fleet Clearing	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	(10.59)	2	2013	413	Fleet Clearing	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	(1,752.58)	2	2013	413	Fleet Clearing	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	(10.68)	2	2013	413	Fleet Clearing	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	2,277.54	7	2013	510	Busin Exp 100% Deduct Gen	AJERECL03	C/R WO TO O&M CORRECTION	JE RECLASS ENTRY - JULY 2013
230	5930000	889.56	2	2013	510	Busin Exp 100% Deduct Gen	CUMON78865	Non-labor CU allocation	Non-labor CU allocation
230	5930000	79.18	2	2013	510	Busin Exp 100% Deduct Gen	CUMON78865	Non-labor CU allocation	Non-labor CU allocation
230	5930000	23,884.12	2	2013	510	Busin Exp 100% Deduct Gen	CUMON78865	Non-labor CU allocation	Non-labor CU allocation
230	5930000	12.40	2	2013	510	Busin Exp 100% Deduct Gen	CUMON78865	Non-labor CU allocation	Non-labor CU allocation
230	5930000	20.05	3	2013	510	Busin Exp 100% Deduct Gen	CUMON92799	Non-labor CU allocation	Non-labor CU allocation
230	5930000	10,985.81	3	2013	510	Busin Exp 100% Deduct Gen	CUMON92799	Non-labor CU allocation	Non-labor CU allocation
230	5930000	5.10	5	2013	510	Busin Exp 100% Deduct Gen	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	16,252.01	3	2013	510	Busin Exp 100% Deduct Gen	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	(1,415.97)	3	2013	510	Reimb Credit-Foreign Pole Repl	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	604.24	1	2013	510	Busin Exp 100% Deduct Gen	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	3,901.08	4	2013	510	Busin Exp 100% Deduct Gen	INTCOM8373	Intercompany Billing	Intercompany Billing
230	5930000	92,440.66	2	2013	510	Busin Exp 100% Deduct Gen	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	11.20	1	2013	520	Business Exp Part Deduct Gen	CUMON65262	Non-labor CU allocation	Non-labor CU allocation
230	5930000	88.05	2	2013	520	Business Exp Part Deduct Gen	CUMON78865	Non-labor CU allocation	Non-labor CU allocation
230	5930000	30.68	3	2013	520	Business Exp Part Deduct Gen	CUMON92799	Non-labor CU allocation	Non-labor CU allocation
230	5930000	64.29	5	2013	520	Business Exp Part Deduct Gen	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	16.83	3	2013	520	Business Exp Part Deduct Gen	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	1,770.47	1	2013	520	Business Exp Part Deduct Gen	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	107.10	1	2013	520	Business Exp Part Deduct Gen	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	1,320.52	2	2013	520	Business Exp Part Deduct Gen	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	(50.49)	7	2013	620	Overheads	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	43.18	3	2013	620	Overheads	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	574.83	1	2013	620	Overheads	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	56.76	6	2013	620	Overheads	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	1,497.76	2	2013	620	Overheads	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	1.19	2	2013	738	SS Fleet Prod/Svcs	AJEFLTCLR	Maintenance of Overhead Lines	To reverse January 2013 Fleet Loading. No longer needed due to the change in Shared Services.
230	5930000	(2.87)	2	2013	738	SS Fleet Prod/Svcs	AJEFLTCLR	Maintenance of Overhead Lines	To reverse January 2013 Fleet Loading. No longer needed due to the change in Shared Services.
230	5930000	(0.68)	2	2013	738	SS Fleet Prod/Svcs	AJEFLTCLR	Maintenance of Overhead Lines	To reverse January 2013 Fleet Loading. No longer needed due to the change in Shared Services.
230	5930000	169.69	6	2013	738	SS Fleet Prod/Svcs	FLEET36520	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	(298.67)	1	2013	738	SS Fleet Prod/Svcs	FLEET64714	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	712.99	1	2013	738	SS Fleet Prod/Svcs	FLEET64714	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	168.09	1	2013	738	SS Fleet Prod/Svcs	FLEET64714	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	4,942.60	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	177.37	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	266.87	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	984.25	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	1,079.90	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	79.16	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	149.17	5	2013	738	SS Fleet Prod/Svcs	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	21.58	3	2013	738	SS Fleet Prod/Svcs	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	2,389.39	1	2013	738	SS Fleet Prod/Svcs	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	364.80	6	2013	738	SS Fleet Prod/Svcs	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	82.42	2	2013	738	SS Fleet Prod/Svcs	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	15,596.78	2	2013	738	SS Fleet Prod/Svcs	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	100.20	2	2013	738	SS Fleet Prod/Svcs	INTCOM9441	Intercompany Billing	Intercompany Billing

Kingsport Power Company
2013 Storm Damage Expenses
By Cost Component

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Unit	Account	Amount	Period	Year	Cost Comp	CC Descr	Journal ID	Line Descr	Long Descr
230	5930000	(0.01)	2	2013	780	AEPSC Bill	SCBAJEISC	reclass ISC from Jan 2013	Post Bill correction entry related to January 2013 AEPSC billing for Internal Support Costs and the Shared Services Departmental Overheads. Relates to entry SCBAJEDOH (2-28-2013). K. L. Messer
230	5880000	0.25	3	2013	780	AEPSC Bill	SCBBIL3191	AEPSC Bill - Services Rendered	AEPSC Bill - Services Rendered
230	5930000	5.47	3	2013	780	AEPSC Bill	SCBBIL3191	AEPSC Bill - Services Rendered	AEPSC Bill - Services Rendered
230	5930000	2,267.13	1	2013	780	AEPSC Bill	SCBBIL5848	AEPSC Bill - Services Rendered	AEPSC Bill - Services Rendered
230	5880000	455.43	2	2013	780	AEPSC Bill	SCBBIL9070	AEPSC Bill - Services Rendered	AEPSC Bill - Services Rendered
230	5930000	1,874.90	2	2013	780	AEPSC Bill	SCBBIL9070	AEPSC Bill - Services Rendered	AEPSC Bill - Services Rendered
230	5930000	5.27	7	2013	935	Cell phone and Pager Expense	CELPGR1883	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	139.25	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	17.57	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	66.39	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	8.91	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	10.66	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	16.62	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	16.02	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	0.12	2	2013	935	Cell phone and Pager Expense	CELPGR8624	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	42.50	4	2013	935	Cell phone and Pager Expense	CUMON07688	Non-labor CU allocation	Non-labor CU allocation
230	5930000	85.00	5	2013	935	Cell phone and Pager Expense	CUMON22542	Non-labor CU allocation	Non-labor CU allocation
230	5930000	85.00	7	2013	935	Cell phone and Pager Expense	CUMON52107	Non-labor CU allocation	Non-labor CU allocation
230	5930000	42.49	1	2013	935	Cell phone and Pager Expense	CUMON65262	Non-labor CU allocation	Non-labor CU allocation
230	5930000	42.50	2	2013	935	Cell phone and Pager Expense	CUMON78865	Non-labor CU allocation	Non-labor CU allocation
230	5930000	1.78	7	2013	935	Cell phone and Pager Expense	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	19.67	3	2013	935	Cell phone and Pager Expense	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	723.02	3	2013	935	Cell phone and Pager Expense	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	6.29	3	2013	935	Cell phone and Pager Expense	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	0.80	6	2013	935	Cell phone and Pager Expense	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	2.58	4	2013	935	Cell phone and Pager Expense	INTCOM8373	Intercompany Billing	Intercompany Billing
230	5930000	2.10	2	2013	935	Cell phone and Pager Expense	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	968,395.00	1	2013	9AA	Accounts Payable Accruals	AP0152I	R HESLEP	To record the 2nd Late Unvouchered Liability Entry for January 2013
230	5930000	31,626.00	2	2013	9AA	Accounts Payable Accruals	AP0152I	R HESLEP	To record the 2nd Late Unvouchered Liability entry for February 2013.
230	5930000	(968,395.00)	2	2013	9AB	Accts Payable Accrual Reversal	AP0152IR	R HESLEP	To reverse January 2013 Unvouchered Liability Accruals.
230	5930000	(31,626.00)	3	2013	9AB	Accts Payable Accrual Reversal	AP0152IR	R HESLEP	To reverse February 2013 Unvouchered Liability Accruals.
		187,167.07			Other				
230	5890001	(1,990.38) (1,990.38)	3	2013	978	Reimb Credit-Foreign Pole Repl Billings to Others	BI01692646	Billing Jmls	Billing Jmls
		<u>1,949,062.00</u>			Total				

Kingsport Power Company
2013 Major Storm Damage Expenses
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Unit	Account	Amount	Period	Year	Cost Comp	CC Descr	Journal ID	Line Descr	Long Descr
230	5930000	1.19	2	2013	738	SS Fleet Prod/Svcs	AJEFLTCLR	Maintenance of Overhead Lines	To reverse January 2013 Fleet Loading. No longer needed due to the change in Shared Services.
230	5930000	(2.87)	2	2013	738	SS Fleet Prod/Svcs	AJEFLTCLR	Maintenance of Overhead Lines	To reverse January 2013 Fleet Loading. No longer needed due to the change in Shared Services.
230	5930000	(0.68)	2	2013	738	SS Fleet Prod/Svcs	AJEFLTCLR	Maintenance of Overhead Lines	To reverse January 2013 Fleet Loading. No longer needed due to the change in Shared Services.
230	5930000	12,807.68	7	2013	210	Contract Labor (General)	AJERECL03	C/R WO TO O&M CORRECTION	JE RECLASS ENTRY - JULY 2013
230	5930000	83.88	7	2013	260	Professional Services	AJERECL03	C/R WO TO O&M CORRECTION	JE RECLASS ENTRY - JULY 2013
230	5930000	69.31	7	2013	290	Other Outside Services General	AJERECL03	C/R WO TO O&M CORRECTION	JE RECLASS ENTRY - JULY 2013
230	5930000	199,583.48	7	2013	290	Other Outside Services General	AJERECL03	C/R WO TO O&M CORRECTION	JE RECLASS ENTRY - JULY 2013
230	5930000	2,277.54	7	2013	510	Busin Exp 100% Deduct Gen	AJERECL03	C/R WO TO O&M CORRECTION	JE RECLASS ENTRY - JULY 2013
230	5930000	968,395.00	1	2013	9AA	Accounts Payable Accruals	AP0152I	R HESLEP	To record the 2nd Late Unvouchered Liability Entry for January 2013
230	5930000	31,626.00	2	2013	9AA	Accounts Payable Accruals	AP0152I	R HESLEP	To record the 2nd Late Unvouchered Liability entry for February 2013.
230	5930000	(968,395.00)	2	2013	9AB	Accts Payable Accrual Reversal	AP0152IR	R HESLEP	To reverse January 2013 Unvouchered Liability Accruals.
230	5930000	(31,626.00)	3	2013	9AB	Accts Payable Accrual Reversal	AP0152IR	R HESLEP	To reverse February 2013 Unvouchered Liability Accruals.
230	5930000	7,650.00	1	2013	210	Contract Labor (General)	APACC62041	Accounts Payable Accrual	Accounts Payable Entries. See Staff 1-3 Attachment 3 for invoice details supporting \$117,621.19
230	5910000	16,076.01	1	2013	290	Other Outside Services General	APACC64266	Accounts Payable Accrual	
230	5910000	840.00	2	2013	290	Other Outside Services General	APACC66817	Accounts Payable Accrual	
230	5910000	979.80	2	2013	396	Direct Ship Stores Load Fixed	APACC66817	Accounts Payable Accrual	
230	5880000	274.04	2	2013	396	Direct Ship Stores Load Fixed	APACC71111	Accounts Payable Accrual	
230	5930000	20,854.94	2	2013	210	Contract Labor (General)	APACC73100	Accounts Payable Accrual	
230	5930000	35,418.05	2	2013	210	Contract Labor (General)	APACC75677	Accounts Payable Accrual	
230	5930000	175.71	2	2013	393	Sales & Use Tax Accrual	APACC75677	Accounts Payable Accrual	
230	5880000	13,428.74	2	2013	290	Other Outside Services General	APACC76395	Accounts Payable Accrual	
230	5880000	906.44	2	2013	393	Sales & Use Tax Accrual	APACC76395	Accounts Payable Accrual	
230	5880000	836.81	2	2013	290	Other Outside Services General	APACC77103	Accounts Payable Accrual	
230	5930000	396.02	3	2013	210	Contract Labor (General)	APACC80058	Accounts Payable Accrual	
230	5930000	19,784.63	3	2013	210	Contract Labor (General)	APACC84618	Accounts Payable Accrual	
230	5890001	(1,990.38)	3	2013	978	Reimb Credit-Foreign Pole Repl	BI01692646	Billing Jmls	Billing Jmls
230	5930000	5.27	7	2013	935	Cell phone and Pager Expense	CELPGR1883	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	139.25	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	17.57	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	66.39	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	8.91	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	10.66	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	16.62	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	16.02	3	2013	935	Cell phone and Pager Expense	CELPGR2782	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	0.12	2	2013	935	Cell phone and Pager Expense	CELPGR8624	Alloc cell phone & pager exp	Alloc cell phone & pager exp
230	5930000	1,309.72	1	2013	13N	Non Exempt OT Labor	CUA1661703	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	244.88	1	2013	13N	Non Exempt OT Labor	CUA1661703	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	1,290.26	1	2013	13S	Non Exempt OT Salaried Labor	CUA1661703	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	302.07	2	2013	13E	Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	772.36	2	2013	13E	Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	512.98	2	2013	13E	Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	14,753.41	2	2013	13N	Non Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	2,329.96	2	2013	13N	Non Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	1,856.99	2	2013	13N	Non Exempt OT Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	8,556.59	2	2013	13S	Non Exempt OT Salaried Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	1,541.12	2	2013	13S	Non Exempt OT Salaried Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	1,091.74	2	2013	13S	Non Exempt OT Salaried Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	1,035.39	2	2013	13S	Non Exempt OT Salaried Labor	CUA1668842	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	500.90	6	2013	13N	Non Exempt OT Labor	CUA1735617	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	(500.90)	7	2013	13N	Non Exempt OT Labor	CUA1743379	Compatible Unit Allocations	Compatible Unit Allocations
230	5930000	1,323,510.37		2013			CUMON...	Non-labor Compatible Unit Allocations	See Details: Staff 1-3 Attachment 4
230	5930000	169.69	6	2013	738	SS Fleet Prod/Svcs	FLEET36520	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	(298.67)	1	2013	738	SS Fleet Prod/Svcs	FLEET64714	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	712.99	1	2013	738	SS Fleet Prod/Svcs	FLEET64714	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	168.09	1	2013	738	SS Fleet Prod/Svcs	FLEET64714	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	4,942.60	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	177.37	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	266.87	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	984.25	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	1,079.90	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	79.16	2	2013	738	SS Fleet Prod/Svcs	FLEET78080	Fleet Vehicle Allocations	Fleet Vehicle Allocations
230	5930000	19.57	7	2013	413	Fleet Clearing	FLTCLR2142	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	(231.69)	1	2013	413	Fleet Clearing	FLTCLR5359	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	(39.51)	1	2013	413	Fleet Clearing	FLTCLR5359	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	(88.04)	1	2013	413	Fleet Clearing	FLTCLR5359	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts

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2013 Major Storm Damage Expenses
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Unit	Account	Amount	Period	Year	Cost Comp	CC Descr	Journal ID	Line Descr	Long Descr
230	5930000	24.34	6	2013	413	Fleet Clearing	FLTCLR7313	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	1,418.08	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	47.61	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	224.81	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	121.19	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	69.40	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	129.65	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	80.05	2	2013	413	Fleet Clearing	FLTCLR8958	Clear misc chgs in Fleet accts	Clear misc chgs in Fleet accts
230	5930000	407.88	1	2013	310	MMS From Stock General	INDUS59954	Indus Work Management	Indus Work Management
230	5930000	47.96	1	2013	310	MMS From Stock General	INDUS61549	Indus Work Management	Indus Work Management
230	5930000	(47.96)	1	2013	310	MMS From Stock General	INDUS62150	Indus Work Management	Indus Work Management
230	5930000	(251.62)	2	2013	310	MMS From Stock General	INDUS67714	Indus Work Management	Indus Work Management
230	5930000	(58.19)	7	2013	121	Labor Fringes (Overtime)	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	(510.37)	7	2013	13N	Non Exempt OT Labor	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	126.59	7	2013	210	Contract Labor (General)	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	0.34	7	2013	220	Supply Chain Clearing	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	230.18	7	2013	260	Professional Services	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	(5.17)	7	2013	413	Fleet Clearing	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	(50.49)	7	2013	620	Overheads	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	1.78	7	2013	935	Cell phone and Pager Expense	INTCOM2704	Intercompany Billing	Intercompany Billing
230	5930000	67.61	5	2013	121	Labor Fringes (Overtime)	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	590.48	5	2013	13E	Exempt OT Labor	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	(9.33)	5	2013	413	Fleet Clearing	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	5.10	5	2013	510	Busin Exp 100% Deduct Gen	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	64.29	5	2013	520	Business Exp Part Deduct Gen	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	149.17	5	2013	738	SS Fleet Prod/Svcs	INTCOM3218	Intercompany Billing	Intercompany Billing
230	5930000	7.29	3	2013	413	Fleet Clearing	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	16,252.01	3	2013	510	Busin Exp 100% Deduct Gen	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	16.83	3	2013	520	Business Exp Part Deduct Gen	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	43.18	3	2013	620	Overheads	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	21.58	3	2013	738	SS Fleet Prod/Svcs	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	19.67	3	2013	935	Cell phone and Pager Expense	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	723.02	3	2013	935	Cell phone and Pager Expense	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	6.29	3	2013	935	Cell phone and Pager Expense	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	(1,415.97)	3	2013	978	Reimb Credit-Foreign Pole Repl	INTCOM3535	Intercompany Billing	Intercompany Billing
230	5930000	1,837.78	1	2013	121	Labor Fringes (Overtime)	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	3,408.97	1	2013	13E	Exempt OT Labor	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	2,052.96	1	2013	13N	Non Exempt OT Labor	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	10,658.87	1	2013	13S	Non Exempt OT Salaried Labor	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5910000	5.01	1	2013	220	Supply Chain Clearing	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5910000	2,627.30	1	2013	290	Other Outside Services General	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5860000	178.10	1	2013	396	Direct Ship Stores Load Fixed	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	(1,222.76)	1	2013	413	Fleet Clearing	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	604.24	1	2013	510	Busin Exp 100% Deduct Gen	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	1,770.47	1	2013	520	Business Exp Part Deduct Gen	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	107.10	1	2013	520	Business Exp Part Deduct Gen	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	574.83	1	2013	620	Overheads	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	2,389.39	1	2013	738	SS Fleet Prod/Svcs	INTCOM6087	Intercompany Billing	Intercompany Billing
230	5930000	58.44	6	2013	121	Labor Fringes (Overtime)	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	510.37	6	2013	13N	Non Exempt OT Labor	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	6.53	6	2013	413	Fleet Clearing	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	56.76	6	2013	620	Overheads	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	364.80	6	2013	738	SS Fleet Prod/Svcs	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	0.80	6	2013	935	Cell phone and Pager Expense	INTCOM7900	Intercompany Billing	Intercompany Billing
230	5930000	3,901.08	4	2013	510	Busin Exp 100% Deduct Gen	INTCOM8373	Intercompany Billing	Intercompany Billing
230	5930000	2.58	4	2013	935	Cell phone and Pager Expense	INTCOM8373	Intercompany Billing	Intercompany Billing
230	5930000	159.57	2	2013	121	Labor Fringes (Overtime)	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	8,072.34	2	2013	121	Labor Fringes (Overtime)	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	59.78	2	2013	121	Labor Fringes (Overtime)	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	13,674.96	2	2013	13E	Exempt OT Labor	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	1,399.68	2	2013	13N	Non Exempt OT Labor	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	26,090.63	2	2013	13N	Non Exempt OT Labor	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	31,357.66	2	2013	13S	Non Exempt OT Salaried Labor	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	524.35	2	2013	13S	Non Exempt OT Salaried Labor	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	2,152.00	2	2013	210	Contract Labor (General)	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	5.82	2	2013	220	Supply Chain Clearing	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	3,912.98	2	2013	260	Professional Services	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	(10.59)	2	2013	413	Fleet Clearing	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	(1,752.58)	2	2013	413	Fleet Clearing	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	(10.68)	2	2013	413	Fleet Clearing	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	92,440.66	2	2013	510	Busin Exp 100% Deduct Gen	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	1,320.52	2	2013	520	Business Exp Part Deduct Gen	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	1,497.76	2	2013	620	Overheads	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	82.42	2	2013	738	SS Fleet Prod/Svcs	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	15,596.78	2	2013	738	SS Fleet Prod/Svcs	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	100.20	2	2013	738	SS Fleet Prod/Svcs	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	2.10	2	2013	935	Cell phone and Pager Expense	INTCOM9441	Intercompany Billing	Intercompany Billing
230	5930000	2,466.12	2	2013	13S	Non Exempt OT Salaried Labor	PAY1669059	Time and Labor-BalancedActuals	Time and Labor-Balanced Actuals

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Unit	Account	Amount	Period	Year	Cost Comp	CC Descr	Journal ID	Line Descr	Long Descr
230	5930000	(0.01)	2	2013	780	AEPSC Bill	SCBAJEISC	reclass ISC from Jan 2013	Post Bill correction entry related to January 2013 AEPSC billing for Internal Support Costs and the Shared Services Departmental Overheads. Relates to entry SCBAJEDOH (2-28-2013). K. L. Messer
230	5880000	0.25	3	2013	780	AEPSC Bill	SCBBIL3191	AEPSC Bill - Services Rendered	AEPSC Bill - Services Rendered
230	5930000	5.47	3	2013	780	AEPSC Bill	SCBBIL3191	AEPSC Bill - Services Rendered	AEPSC Bill - Services Rendered
230	5930000	2,267.13	1	2013	780	AEPSC Bill	SCBBIL5848	AEPSC Bill - Services Rendered	AEPSC Bill - Services Rendered
230	5880000	455.43	2	2013	780	AEPSC Bill	SCBBIL9070	AEPSC Bill - Services Rendered	AEPSC Bill - Services Rendered
230	5930000	1,874.90	2	2013	780	AEPSC Bill	SCBBIL9070	AEPSC Bill - Services Rendered	AEPSC Bill - Services Rendered
230	5930000	134.75	1	2013	310	MMS From Stock General	STREXP6192	Stores Expense Clearing	Stores Expense Clearing
230	5930000	1.35	1	2013	320	Stores Clearing Charges Gen	STREXP6192	Stores Expense Clearing	Stores Expense Clearing
230	5880000	5.48	2	2013	324	Stores Clearing Fixed Percent	STREXP9545	Stores Expense Clearing	Stores Expense Clearing
230	5910000	19.60	2	2013	324	Stores Clearing Fixed Percent	STREXP9545	Stores Expense Clearing	Stores Expense Clearing
230	5930000	38.75	1	2013	393	Sales & Use Tax Accrual	TXIMX59985	Vertex Use Tax Accrual	Vertex Use Tax Accrual
230	5930000	4.56	1	2013	393	Sales & Use Tax Accrual	TXIMX61581	Vertex Use Tax Accrual	Vertex Use Tax Accrual
230	5930000	(4.56)	1	2013	393	Sales & Use Tax Accrual	TXIMX62182	Vertex Use Tax Accrual	Vertex Use Tax Accrual
230	5930000	(23.90)	2	2013	393	Sales & Use Tax Accrual	TXIMX67745	Vertex Use Tax Accrual	Vertex Use Tax Accrual
230	5880000	(906.44)	3	2013	393	Sales & Use Tax Accrual	TXOUA90884	SAW USE REVI/ACCR	Vertex Use Tax ReversalAccrual
230	5930000	(108.55)	3	2013	393	Sales & Use Tax Accrual	TXOUA90884	SAW USE REVI/ACCR	Vertex Use Tax ReversalAccrual
230	5930000	(67.16)	3	2013	393	Sales & Use Tax Accrual	TXOUA90884	SAW USE REVI/ACCR	Vertex Use Tax ReversalAccrual
		1,949,062.00		Total					

Kingsport Power Company
2013 Major Storm Damage Expenses
Accounts Payable Invoice Information

GL	Journal ID	BU	Yr	Mo	Account	CC	Voucher	Vendor	Vendor Name	Invoice Date	Invoice	Amount	Descr	Project
	APACC71111	230	2013	2	5880000	396	00038331	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	2013-02-11	0000031488ER70	274.04	Purchased material- tax paid	DMS13KT01
	APACC76395	230	2013	2	5880000	290	01586858	0000061156	TWENTY FIRST CENTURY COMMUNICATIONS INC	2013-02-01	112161KINGSPORT	13,428.74	Expense Distribution	DMS13KT01
	APACC76395	230	2013	2	5880000	393	01586858	0000061156	TWENTY FIRST CENTURY COMMUNICATIONS INC	2013-02-01	112161KINGSPORT	906.44	VERTEX	DMS13KT01
	APACC77103	230	2013	2	5880000	290	01587176	0000102635	AT&T	2013-02-11	1717907073089APPA	836.81	Expense Distribution	DMS13KT01
	APACC64266	230	2013	1	5910000	290	00038242	0000078074	KATHYS KUSTOM KATERING	2013-01-19	E20521	5,986.57	Expense Distribution	DMS13KT01
	APACC64266	230	2013	1	5910000	290	00038243	0000078074	KATHYS KUSTOM KATERING	2013-01-20	E20534	6,614.47	Expense Distribution	DMS13KT01
	APACC64266	230	2013	1	5910000	290	00038244	0000078074	KATHYS KUSTOM KATERING	2013-01-21	E20543	3,474.97	Expense Distribution	DMS13KT01
	APACC66817	230	2013	2	5910000	290	00038267	0000005853	RANDYS LAWN SERVICE	2013-01-17	KS011713	480.00	Expense Distribution	DMS13KT01
	APACC66817	230	2013	2	5910000	290	00038268	0000005853	RANDYS LAWN SERVICE	2013-01-18	KS011813	200.00	Expense Distribution	DMS13KT01
	APACC66817	230	2013	2	5910000	290	00038269	0000005853	RANDYS LAWN SERVICE	2013-01-19	KS011913	160.00	Expense Distribution	DMS13KT01
	APACC66817	230	2013	2	5910000	396	00038270	0000005853	RANDYS LAWN SERVICE	2013-01-22	KS012213ICEMELT	979.80	Expense Distribution	DMS13KT01
	APACC62041	230	2013	1	5930000	210	00038217	0000274341	TUCK MAPPING SOLUTIONS INC	2013-01-21	32606	7,650.00	Expense Distribution	DMS13KT01
	APACC73100	230	2013	2	5930000	210	00038368	0000111108	ASPLUNDH TREE EXPERT	2013-02-12	296001	20,854.94	Expense Distribution	DMS13KT01
	APACC75677	230	2013	2	5930000	210	00038426	0000008476	ACRT INC	2013-01-28	294839	35,418.05	Expense Distribution	DMS13KT01
	APACC75677	230	2013	2	5930000	393	00038426	0000008476	ACRT INC	2013-01-28	294839	175.71	VERTEX	DMS13KT01
	APACC80058	230	2013	3	5930000	210	00038519	0000011108	ASPLUNDH TREE EXPERT	2013-02-18	296376	396.02	Expense Distribution	DMS13KT01
	APACC84618	230	2013	3	5930000	210	00038597	0000011108	ASPLUNDH TREE EXPERT	2013-02-18	296360	19,784.63	Expense Distribution	DMS13KT01
Total												117,621.19		

Kingsport Power Company
2013 Major Storm Damage Expenses
Accounts Payable Invoice Information

GL Unit	Acctg Date	Account	Journal ID	Date	Voucher	Vendor	Name	Invoice	Comp	Cost	Descr	Amount	10/70001 10%	1080005 5%	5930000 85%
230	2013-01-31	1860092	APACCB4973	2013-01-31	00038256	0000067390	WALKER, HAROLD GRAY	0000252158ER8	935		Cell Phone & Pager Expense	50.00	5.00	2.50	42.50
230	2013-01-31	1860092	APACCB4973	2013-01-31	00038257	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000252158ER8	520		Meal - Self (travel req'd)	6.23	0.62	0.31	5.30
230	2013-01-31	1860092	APACCB4973	2013-01-31	00038257	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000252158ER8	520		Meal - Self (travel req'd)	6.94	0.69	0.35	5.90
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038288	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000005280ER17	520		Meal - Self (travel req'd)	103.59	10.36	5.18	88.05
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038288	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000005280ER17	510		Meal - Overtime	14.59	1.46	0.73	12.40
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038291	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000073285ER77	510		Room Rate	79.95	8.00	4.00	67.96
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038291	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000073285ER77	510		Other Room Tax	5.60	0.56	0.28	4.76
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038291	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000073285ER77	510		Room Tax 1	7.60	0.76	0.38	6.46
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038293	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000078517ER28	510		Meal - Overtime	106.78	10.68	5.34	90.76
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038293	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000078517ER28	510		Meal - Overtime	106.28	10.93	5.46	92.89
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038296	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000164866ER50	510		Meal - Overtime	70.49	7.05	3.52	59.92
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038296	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000164866ER50	510		Meal - Overtime	14.21	1.42	0.71	12.08
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038296	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000164866ER50	510		Meal - Overtime	71.05	7.11	3.55	60.38
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038296	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000164866ER50	510		Meal - Overtime	69.84	6.98	3.49	59.36
230	2013-02-06	1860092	APACCB8278	2013-02-06	00038296	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000164866ER50	510		Meal - Overtime	16.55	1.66	0.83	14.07
230	2013-02-11	1860092	APACCB7111	2013-02-11	00038317	0000048332	PIKE ELECTRIC INC	371944	210		Expense Distribution	4,652.64	465.29	232.64	3,954.84
230	2013-02-11	1860092	APACCB7111	2013-02-11	00038325	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000036545ER52	510		Meal - Overtime	125.47	12.55	6.27	106.65
230	2013-02-11	1860092	APACCB7111	2013-02-11	00038325	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000036545ER52	510		Meal - Overtime	32.88	3.29	1.64	27.95
230	2013-02-11	1860092	APACCB7111	2013-02-11	00038325	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000036545ER52	510		Meal - Overtime	58.47	5.85	2.92	49.70
230	2013-02-11	1860092	APACCB7111	2013-02-11	00038332	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000080171ER130	510		Meal - Overtime	54.59	5.46	2.73	46.40
230	2013-02-11	1860092	APACCB7111	2013-02-11	00038332	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000080171ER130	510		Telephone	28.21	2.82	1.41	23.98
230	2013-02-11	1860092	APACCB7111	2013-02-11	00038332	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000080171ER130	510		Meal - Overtime	3.26	0.33	0.16	2.77
230	2013-02-11	1860092	APACCB7111	2013-02-11	00038332	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000080171ER130	510		Meal - Overtime	43.51	4.35	2.18	36.98
230	2013-02-11	1860092	APACCB7111	2013-02-11	00038332	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000080171ER130	510		Meal - Overtime	56.79	5.68	2.84	48.27
230	2013-02-11	1860092	APACCB7111	2013-02-11	00038332	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000080171ER130	510		Meal - Overtime	14.42	1.44	0.72	12.27
230	2013-02-14	1860092	APACCB72843	2013-02-14	00038354	0000118460	DIVERSIFIED SERVICES	21182	290		Expense Distribution	35,902.92	3,590.29	1,795.15	30,517.48
230	2013-02-14	1860092	APACCB72843	2013-02-14	00038355	0000118460	DIVERSIFIED SERVICES	21182	290		Expense Distribution	35,317.55	3,531.76	1,765.88	30,019.92
230	2013-02-14	1860092	APACCB72843	2013-02-14	00038356	0000118460	DIVERSIFIED SERVICES	21258	290		Expense Distribution	7,790.30	779.03	389.52	6,621.76
230	2013-02-14	1860092	APACCB72843	2013-02-14	00038357	0000118460	DIVERSIFIED SERVICES	21258	290		Expense Distribution	7,884.48	788.45	394.22	6,701.81
230	2013-02-14	1860092	APACCB72843	2013-02-14	00038361	0000118944	CONTRACTING ENTERPRISES INC	373357	210		Expense Distribution	4,833.28	483.33	241.66	4,108.29
230	2013-02-14	1860092	APACCB72843	2013-02-14	00038362	0000118944	CONTRACTING ENTERPRISES INC	373358	210		Expense Distribution	2,671.04	267.10	133.55	2,270.38
230	2013-02-14	1860092	APACCB72843	2013-02-14	00038363	0000118944	CONTRACTING ENTERPRISES INC	373359	210		Expense Distribution	3,679.04	367.90	183.95	3,127.18
230	2013-02-14	1860092	APACCB72843	2013-02-14	00038375	0000180020	AMERICAN ENVIRONMENTAL LLC	34828	260		Expense Distribution	1,677.60	167.76	83.88	1,425.96
230	2013-02-18	1860092	APACCB73487	2013-02-18	00038383	0000010781	AREA WIDE PROTECTIVE	373768	210		Expense Distribution	6,600.12	660.01	330.01	5,610.10
230	2013-02-18	1860092	APACCB73487	2013-02-18	00038383	0000010781	AREA WIDE PROTECTIVE	373768	210		Expense Distribution	14,843.36	1,484.36	742.18	12,617.02
230	2013-02-21	1860092	APACCB75161	2013-02-21	00038404	0000010781	AREA WIDE PROTECTIVE	373320	210		Expense Distribution	3,600.67	360.07	180.03	3,060.57
230	2013-02-21	1860092	APACCB75161	2013-02-21	00038404	0000010781	AREA WIDE PROTECTIVE	373320	210		Expense Distribution	2,518.07	251.81	125.90	2,140.36
230	2013-02-21	1860092	APACCB75161	2013-02-21	00038404	0000010781	AREA WIDE PROTECTIVE	373320	210		Expense Distribution	479.35	47.93	23.98	4,074.50
230	2013-02-25	1860092	APACCB76985	2013-02-25	00038455	0000197629	SUMTER UTILITIES	113263	290		Expense Distribution	499,561.40	49,956.14	24,978.07	424,627.19
230	2013-02-26	1860092	APACCB77103	2013-02-26	00038468	0000034324	IRBY CONSTRUCTION COMPANY	1682001	290		Expense Distribution	385,103.98	38,510.40	19,255.20	327,338.38
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038476	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	374856	210		Expense Distribution	182.78	18.28	9.14	155.36
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038476	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000072880ER101	510		Meal - Overtime	54.73	5.47	2.74	46.52
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038476	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000072880ER101	510		Meal - Overtime	53.00	5.30	2.65	45.05
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038476	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000072880ER101	510		Room Rate	63.00	6.30	3.15	53.55
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510		Room Rate	288.07	28.91	13.45	228.71
230	2013-02-27	1860092	APACCB77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY								

Kingsport Power Company
2013 Major Storm Damage Expenses
Accounts Payable Invoice Information

GL Unit	Acctg Date	Account	Journal ID	Date	Voucher	Vendor	Name	Invoice	Cost Comp	Descr	Amount	1070001 10%	1080005 5%	5330000 85%
230	2013-02-27	1860092	APACC77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510	Room Rate	136.79	13.98	6.99	118.82
230	2013-02-27	1860092	APACC77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510	Room Rate	269.07	26.91	13.45	228.71
230	2013-02-27	1860092	APACC77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510	Room Rate	269.07	26.91	13.45	228.71
230	2013-02-27	1860092	APACC77575	2013-02-27	00038477	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER253	510	Room Rate	5,184.50	518.45	259.23	4,406.83
230	2013-02-27	1860092	APACC77575	2013-02-27	00038478	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER254	510	Room Rate	18,042.06	1,804.21	902.10	15,335.75
230	2013-02-27	1860092	APACC77575	2013-02-27	00038480	0000067390	WALKER, HAROLD GRAY	0000067390ER109	935	Cell Phone & Pager Expense	50.00	5.00	2.50	42.50
230	2013-02-28	1860092	APACC78378	2013-02-28	00038491	0000019844	CONTRACTING ENTERPRISES INC	375207	210	Expense Distribution	1,948.47	194.65	97.32	1,654.50
230	2013-03-01	1860092	APACC79191	2013-03-01	00038514	0000010781	AREA WIDE PROTECTIVE	375433	210	Expense Distribution	7,530.19	753.02	376.51	6,400.66
230	2013-03-01	1860092	APACC79191	2013-03-01	00038515	0000010781	AREA WIDE PROTECTIVE	375435	210	Expense Distribution	8,692.95	869.30	434.65	7,389.01
230	2013-03-01	1860092	APACC79191	2013-03-01	00038516	0000010781	AREA WIDE PROTECTIVE	375439	210	Expense Distribution	9,866.32	986.63	494.82	8,411.87
230	2013-03-01	1860092	APACC79191	2013-03-01	00038517	0000010781	AREA WIDE PROTECTIVE	375440	210	Expense Distribution	9,600.31	960.03	480.02	8,160.26
230	2013-03-04	1860092	APACC80058	2013-03-04	00038520	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER255	510	Telephone	1.10	0.11	0.06	0.94
230	2013-03-04	1860092	APACC80058	2013-03-04	00038520	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER255	510	Telephone	2.20	0.22	0.11	1.87
230	2013-03-04	1860092	APACC80058	2013-03-04	00038520	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER255	510	Telephone	31.70	3.17	1.59	26.95
230	2013-03-04	1860092	APACC80058	2013-03-04	00038520	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER255	520	Business Entertainment	11.83	1.18	0.59	10.06
230	2013-03-04	1860092	APACC80058	2013-03-04	00038520	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER255	510	Room Rate	12,889.48	1,288.95	644.47	10,956.06
230	2013-03-04	1860092	APACC80058	2013-03-04	00038520	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER255	520	Business Entertainment	24.28	2.43	1.21	20.62
230	2013-03-04	1860092	APACC80058	2013-03-04	00038521	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER256	510	Room Rate	124.66	12.47	6.23	105.96
230	2013-03-04	1860092	APACC80058	2013-03-04	00038521	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000144412ER256	510	Room Rate	(124.66)	(12.47)	(6.23)	(105.96)
230	2013-03-06	1860092	APACC81718	2013-03-06	00038530	0000191260	SOUTHERN ELECTRIC CORPORATION	39557	280	Expense Distribution	187,963.02	18,796.30	9,898.15	168,268.57
230	2013-03-06	1860092	APACC81718	2013-03-06	00038531	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000205940ER33	510	Meal - Overtime	12.88	1.29	0.64	10.95
230	2013-03-06	1860092	APACC81718	2013-03-06	00038531	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000205940ER33	510	Meal - Overtime	6.12	0.61	0.31	5.20
230	2013-03-06	1860092	APACC81718	2013-03-06	00038531	0000146747	JP MORGAN CHASE CORPORATE CARD ACTIVITY	0000205940ER33	510	Meal - Overtime	4.59	0.46	0.23	3.90
230	2013-03-07	1860092	APACC82658	2013-03-07	00038547	0000019844	CONTRACTING ENTERPRISES INC	376142	210	Expense Distribution	512.37	51.24	25.62	435.51
230	2013-03-21	1860092	APACC89058	2013-03-21	00038705	0000246753	LAKE POINTE ADVERTISING	040557	290	Expense Distribution	1,386.20	138.62	69.31	1,178.27
230	2013-03-22	1860092	APACC89714	2013-03-22	00038713	0000191260	SOUTHERN ELECTRIC CORPORATION	39551	290	Expense Distribution	249,825.77	24,982.58	12,491.29	212,351.90
230	2013-03-22	1860092	APACC89714	2013-03-22	00038718	0000019844	CONTRACTING ENTERPRISES INC	378356	210	Expense Distribution	3,855.44	385.54	192.77	3,277.12
230	2013-03-22	1860092	APACC89714	2013-03-22	00038718	0000019844	CONTRACTING ENTERPRISES INC	378357	210	Expense Distribution	1,544.64	154.46	77.23	1,312.94
230	2013-04-01	1860092	APACC83409	2013-04-01	00038753	0000067390	WALKER, HAROLD GRAY	0000067390ER110	935	Cell Phone & Pager Expense	50.00	5.00	2.50	42.50
230	2013-05-01	1860092	APACC08568	2013-05-01	00039082	0000067390	WALKER, HAROLD GRAY	0000067390ER111	935	Cell Phone & Pager Expense	50.00	5.00	2.50	42.50
230	2013-05-31	1860092	APACC21941	2013-05-31	00039381	0000067390	WALKER, HAROLD GRAY	0000067390ER112	935	Cell Phone & Pager Expense	50.00	5.00	2.50	42.50
230	2013-07-08	1860092	APACC42543	2013-07-08	00039709	0000067390	WALKER, HAROLD GRAY	0000067390ER113	935	Cell Phone & Pager Expense	50.00	5.00	2.50	42.50
230	2013-07-30	1860092	APACC50985	2013-07-30	00039855	0000067390	WALKER, HAROLD GRAY	0000067390ER115	935	Cell Phone & Pager Expense	50.00	5.00	2.50	42.50
230	2013-08-28	1860092	APACC85039	2013-08-28	00040127	0000067390	WALKER, HAROLD GRAY	0000067390ER116	935	Cell Phone & Pager Expense	50.00	5.00	2.50	42.50
230	2013-10-29	1860092	APACC02690	2013-10-29	00040598	0000067390	WALKER, HAROLD GRAY	0000067390ER117	935	Cell Phone & Pager Expense	50.00	5.00	2.50	42.50
Subtotal											1,323,585.41			
Rounding											(85.04)			
Total											1,323,500.37			

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSFORT POWER COMPANY
DOCKET NO. 15-00024**

**Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-004:

Please attest that the Company did not include any items that should be capitalized.

Response Staff 1-004:

To the best of management's knowledge, the Company did not include any costs in the requested \$2,039,395 of storm damage costs recovery that are considered capitalizable costs under the Federal Energy Regulatory Commission's Uniform System of Accounts guidelines that Kingsport Power follows to determine when expenditures should be classified as capital.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-005:

Please attest that the Company is not seeking recovery of any legal fees as part of this rider.

Response Staff 1-005:

The \$2,039,395 of storm damage costs that the Company is requesting for recovery in this petition does not include any legal fees.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
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Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-006:

Did Kingsport allocate a portion of labor expense associated with the storm damage to capital accounts?

Response Staff 1-006:

Yes.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-007:

Does the Company have an insurance plan to cover expense incurred from a storm? If not, please explain why.

Response Staff 1-007:

Generally assets are insured for all risks of loss subject to insurance policy conditions and exclusions. However, distribution and transmission lines and their accompanying structures, ie poles and towers are not covered by our property insurance for any peril, storm related or not, unless they are situated within 1000 feet of an owned substation or power plant.

Insurance markets, both domestically and internationally, do not support insuring power lines and line structures for storm or any other damage perils due to the high damage potential and frequency of storm events.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
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Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-008:

Provide the source and amount of any offsets that the Company received to reduce storm costs expenses (i.e. insurance, loans, etc.).

Response Staff 1-008:

The Company has received no offsets to reduce storm cost expenses from insurance or loans. Refer to the Company's response to Staff 1-07.

The Company was reimbursed \$1,990 for replacement of assets belonging to a third party during the storm restoration. See the Company's response to Staff 1-3, Attachment 1.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-009:

Provide the Company's current vegetation management plan in this docket.

Response Staff 1-009:

The Company's vegetation management program is a comprehensive program for pruning and clearing vegetation along the Company's distribution circuits to protect its lines in an environmentally sound and cost-effective manner. The Company uses various practices to control vegetation such as aerial sawing, mechanized trimming, manual trimming (roping, hand climbing), mechanized clearing, manual clearing and herbicide applications. These practices are conducted in accordance with standards established by the American National Standards Institute (ANSI), the Occupational Safety and Health Administration (OSHA), and the National Electrical Safety Code (NESC), as they relate to, among other things, the pruning and removal of trees (arboriculture), safety and worker protection, work clearances and training requirements, and safety clearance guidelines. The Company's current vegetation management program uses a performance-based approach to allocate resources to particular circuits, or portions of circuits.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-010:

Discuss any changes the Company has made to its vegetation management plan as a result of the 2009 and 2013 storms.

Response Staff 1-010:

No changes have been made to the Company's current vegetation management plan as a result of the 2009 and 2013 storms. However, the Company is investigating possible changes to its plan.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-011:

Please provide the Company's budgeted amount for its Vegetation Management (tree trimming) and the actual amount that the Company spent on Vegetation Management for the last for 2008-2014.

Response Staff 1-011:

Refer to Staff 1-11 Attachment 1 for the requested information.

Kingsport Vegetation Management (Foresstry) Budget versus Actuals¹
2008-2014

	2008		2009		2010		2011		2012		2013		2014	
	Actual	Control Budget	Actual	Control Budget	Actual	Control Budget	Actual	Control Budget	Actual	Control Budget	Actual	Control Budget	Actual	Control Budget
O&M	\$1,202,075	\$952,497	\$936,754	\$980,571	\$935,368	\$991,804	\$1,013,500	\$1,013,717	\$792,781	\$409,010	\$867,851	\$847,994	\$841,433	\$835,466
Capital	\$288,652	\$100,441	\$200,525	\$175,764	\$230,863	\$272,465	\$377,127	\$274,797	\$539,478	\$539,496	\$395,020	\$278,479	\$481,869	\$408,443
Total:	\$1,490,727	\$1,052,938	\$1,137,279	\$1,156,335	\$1,166,231	\$1,264,270	\$1,390,626	\$1,288,513	\$1,332,259	\$1,348,506	\$1,266,871	\$1,126,473	\$1,323,302	\$1,243,909

¹ Total Cost

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-012:

Discuss whether Kingsport's current Vegetation Management Plan has alleviated any storm damage costs.

Response Staff 1-012:

By definition any vegetation management plan that removes growth from ROW lessens storm damage. However, the Company does not have data to quantify the impacts of the current Vegetation Management Plan on storm damage costs.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-013:

Provide support in the current docket for the remaining \$90,333 uncollected from Docket No. 12-00051. Please provide this support in electronic format with working formulas.

Response Staff 1-013:

Please see Staff 1-013, attachments 1 & 2 for the requested information on the enclosed CD. These attachments are the same reconciliations previously submitted to the TRA on April 14, 2014 and May 27, 2014, respectively.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-014:

In Docket No. 12-00051 and the Company's PPAR filings, the Company has used a loss factor of 1.06266 for all classes except the IP-Primary rate class. Please explain the Company's rationale for using a different loss factor for this filing.

Response Staff 1-014:

The loss factors in Docket No. 12-00051 were based on a 2009 loss factor study. In this filing, the Company used its most current loss factor information (2014 study based on 2012 analysis). Please see Staff 1-002 Attachment 3.

**TENNESSEE REGULATORY AUTHORITY
PETITION OF KINGSPORT POWER COMPANY
DOCKET NO. 15-00024
Data Requests and Requests for the Production
of Documents by the TRA Staff of the
Tennessee Regulatory Authority (First Set)
To Kingsport Power Company**

Data Request Staff 1-015:

Please explain Kingsport's rationale for using different allocation factors to calculate the SDR surcharge and the PPAR surcharge.

Response Staff 1-015:

In the PPAR, the demand allocation factors include IP-Transmission customers. Because the storm damage only impacted distribution level customers, this class was excluded from the demand allocator calculations in this filing. In addition, this filing uses the 2013 12 NCP average peak loads to calculate the demand allocator rather than the 12 CP average peak loads used in the PPAR filing. All of the storm expenses are distribution related which are more appropriately allocated on an NCP basis. A CP demand allocator is not used to allocate distribution related expenses. The PPAR is primarily related to generation expenses, which are more appropriately allocated on a CP basis.

**Kingsport Power Company
Calculation of Demand Allocation Factors
Storm Damage Rider**

KgPCo Exhibit No.1
Witness: GHS
Page 1 of 2

Recovery Amount = \$2,039,395

Demand Allocation Factors

Class	2013 12 NCP Average Peak Load (MW)	2012 Loss Factor	Loss Adjusted Load (to Transmission)	2013 Allocation	Demand Allocation \$
Residential	306	1.05597	323	71.71%	\$1,462,361
SGS	6	1.05597	6	1.41%	\$28,674
MGS	32	1.05597	34	7.50%	\$152,927
LGS	48	1.05597	51	11.25%	\$229,390
IP - Pri	9	1.02602	9	2.05%	\$41,791
EHG	8	1.05597	8	1.87%	\$38,232
CS	5	1.05597	5	1.17%	\$23,895
PS	10	1.05597	11	2.34%	\$47,790
OL	3	1.05597	3	0.70%	\$14,337
Total	427		451	100%	\$2,039,395

Kingsport Power Company
Calculation of Storm Damage Rider (SDR) Factors
Storm Damage Rider

KgPCo Exhibit No.1
Witness: GHS
Page 2 of 2

Recovery Amount = \$2,039,395

Determination of SDR Factors

Class	Demand Allocation \$	Metered kWH 2013	SDR Factor (\$/kWH)	Number of Lamps	2013 Billing Demand kW	SDR Factor (\$/kW) (or \$/Lamp)
Residential	\$1,462,361	691,036,589	0.00212			
SGS	\$28,674	21,193,777	0.00135			
MGS	\$152,927	107,693,050	0.00142			
LGS	\$229,390				700,753	0.3273
IP - Pri	\$41,791				175,813	0.2377
EHG	\$38,232	26,480,603	0.00144			
CS	\$23,895	9,831,595	0.00243			
PS	\$47,790	28,611,892	0.00167			
OL	\$14,337			5,439		0.2197
Total	\$2,039,395					