Kent W. Blake
Director
State Regulation and Rates

LG&E Energy LLC
220 West Main Street
Louisville, Kentucky 40202
502-627-2573
502-217-2442 FAX
kent.blake@lgeenergy.com

November 18, 2005

RECEIVED
NOV 1 8 2005
PUBLIC SERVICE COMMISSION

Elizabeth O'Donnell
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40601

RE: ***Application of Louisville Gas and Electric Company and Kentucky Utilities Company To Transfer Functional Control of Their Transmission System***
Case No. 2005-00471

Dear Ms. O'Donnell:

Enclosed please find an original and ten (10) copies of Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company's ("KU") Joint Application and Testimonies of Paul W. Thompson, Mark S. Johnson, Mathew J. Morey, Kent W. Blake, Susan F. Tierney, Michael S. Beer, Stuart L. Goza and Bruce A. Rew, in the above-referenced docket.

The notarized verification pages of Susan F. Tierney, Ph.D., and Stuart L. Goza will be provided to this Commission next week under separate cover.

Should you have any questions concerning the enclosed, please do not hesitate to contact me.

Sincerely,

Kent W. Blake

Kent W. Blake

cc: Elizabeth E. Blackford
Michael L. Kurtz
Katherine K. Yunker
James C. Holsclaw
Stephen C. Kozey

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

NOV 18 2005

PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR AUTHORITY TO TRANSFER FUNCTIONAL CONTROL OF THEIR TRANSMISSION SYSTEM	)))))	**CASE NO. 2005-00471**

JOINT APPLICATION

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (collectively, the "Companies") respectfully petition by application the Kentucky Public Service Commission ("Commission") pursuant to KRS 278.218 for an order authorizing the transfer of the functional control of their facilities from the Midwest Independent Transmission System Operator, Inc. ("MISO")[1] to the Companies, for the purpose of withdrawing from membership in MISO, and to Tennessee Valley Authority ("TVA") to the extent necessary for TVA to act as the Companies' Reliability Coordinator and to the Southwest Power Pool ("SPP") to the extent necessary for SPP to perform its function as the Companies' Independent Transmission Organization ("ITO").

[1] MISO currently has functional control under the TEMT only over the Companies' transmission facilities exceeding 100kv.

In support of this Application, the Companies state as follows:

Applicants

1. The full name and mailing address of LG&E is: Louisville Gas and Electric Company, Post Office Box 32010, 220 West Main Street, Louisville, Kentucky 40232. The full name and mailing address of KU is: Kentucky Utilities Company c/o Louisville Gas and Electric Company, Post Office Box 32010, 220 West Main Street, Louisville, Kentucky 40232. Both LG&E and KU are Kentucky corporations authorized to do business in the Commonwealth of Kentucky.

2. LG&E is a utility engaged in the electric and gas business. LG&E generates and purchases electricity, and distributes and sells electricity at retail in Jefferson County and portions of Bullitt, Hardin, Henry, Meade, Oldham, Shelby, Spencer and Trimble Counties. LG&E also purchases, stores and transports natural gas and distributes and sells natural gas at retail in Jefferson County and portions of Barren, Bullitt, Green, Hardin, Hart, Henry, Larue, Marion, Meade, Metcalfe, Nelson, Oldham, Shelby, Spencer, Trimble and Washington Counties.

3. KU is a utility engaged in the electric business. KU generates and purchases electricity, and distributes and sells electricity at retail in the following counties in Central, Northern, Southeastern and Western Kentucky:

Adair	Edmonson	Jessamine	Ohio
Anderson	Estill	Knox	Oldham
Ballard	Fayette	Larue	Owen
Barren	Fleming	Laurel	Pendleton
Bath	Franklin	Lee	Pulaski
Bell	Fulton	Lincoln	Robertson
Bourbon	Gallatin	Livingston	Rockcastle
Boyle	Gerrard	Lyon	Rowan
Bracken	Grant	Madison	Russell
Bullitt	Grayson	Marion	Scott
Caldwell	Green	Mason	Shelby

Campbell	Hardin	McCracken	Spencer
Carlisle	Harlan	McCreary	Taylor
Carroll	Harrison	McLean	Trimble
Casey	Hart	Mercer	Union
Christian	Henderson	Montgomery	Washington
Clark	Henry	Muhlenberg	Webster
Clay	Hickman	Nelson	Whitley
Crittenden	Hopkins	Nicholas	Woodford
Daviess			

4. A certified copy of each of the Companies' Articles of Incorporation is attached to this application pursuant to 807 KAR 5:0001 Section 8(3) and are marked collectively as Application Exhibit 1.

5. MISO was created on February 12, 1996 when several transmission owners convened to create an organization charged with the centralized control of the transmission facilities of numerous electric transmission owners in the Midwest. In December 2001, FERC granted MISO Regional Transmission Organization ("RTO") status.[2] MISO began providing transmission service under its Open Access Transmission Tariff ("OATT") on February 1, 2002 and, on April 1, 2005 began operating its Real-Time and Day-Ahead energy markets pursuant to its FERC-approved Open Access Transmission and Energy Markets Tariff ("TEMT").

6. The Southwest Power Pool was created in 1941 when eleven companies joined together to serve national defense needs during World War II. Currently, SPP is a FERC-approved RTO committed to maintaining the reliability of the bulk electric power system.[3] SPP has forty-five members and serves more than 4 million customers. SPP provides independent reliability coordination and tariff administration, regional engineering model development, planning and operating studies, reliability assessment studies, regional transaction scheduling

---

[2] Midwest Transmission System Operator, Inc., 97 FERC ¶ 61,326 (2001).
[3] Southwest Power Pool, Inc., 109 FERC ¶ 61,010 (2004), order on reh'g, 110 FERC ¶ 61,137 (2005).

and operating reserve sharing services to its members. SPP has also served as the reliability coordinator and independent tariff administrator for American Electric Power East, which includes Kentucky Power Co.[4]

7. The Tennessee Valley Authority is the nation's largest public power company. It supplies the electricity needs of 8.6 million people in an area spanning portions of seven states by providing wholesale power to 158 municipal and cooperative power distributors, and by directly serving 62 large industries and government installations in the Tennessee Valley. TVA also provides transmission service on a nondiscriminatory, as available basis to other power providers requiring power transfers out of or through the TVA system. TVA, as a North American Electric Reliability Council ("NERC") certified Reliability Coordinator, monitors and ensures the reliable operation of the bulk transmission system in ten states including Tennessee, and portions of Alabama, Georgia, Illinois, Iowa, Kentucky, Mississippi, Missouri, North Carolina and Virginia. TVA currently serves as reliability coordinator for the East Kentucky Power Cooperative, Inc., serving 16 electric cooperatives and 500,000 customers, and Big Rivers Electric Corporation, serving 3 electric cooperatives and 107,000 customers.

8. Copies of all orders, pleadings and other communications related to this proceeding should be directed to:

Elizabeth L. Cocanougher
Senior Corporate Attorney
LG&E Energy LLC
220 West Main Street
Louisville, Kentucky 40202

---

[4] American Electric Power Company, Central and South West Corporation, 91 F.E.R.C. ¶ 61,208 (2001).

Kent W. Blake
Director of State Regulation and Rates
LG&E Energy LLC
220 West Main Street
Louisville, Kentucky 40202

Kendrick R. Riggs
William Duncan Crosby III
Sarah K. M. Adams
Ogden Newell & Welch PLLC
1700 PNC Plaza
500 West Jefferson Street
Louisville, Kentucky 40202

The Transmission System

9. The Companies' respective transmission systems were built, owned and operated for the purposes of transferring power from their own generators to serve their native load. Over time, the transmission systems became increasingly interconnected with others in the state in an effort to enhance system reliability, engage in off-system sales transactions and reduce facility redundancy. Upon their merger in 1998, the Companies' transmission systems were combined. Currently, the Companies' combined transmission and distribution network covers 27,000 square miles.

10. The Companies were among the earliest participants in MISO, joining in 1998. However, they did not transfer functional control of their transmission assets to MISO until February 2002. MISO was originally designed as an Order No. 888 compliant ISO whose functions were to operate the region's transmission facilities under a single OATT and to allow open access to the regional grid without customers having to pay multiple transmission rates. These functions are commonly referred to as MISO's "Day 1" operations. MISO began selling

regional transmission service under its FERC-approved tariff on February 1, 2002. Subsequently, MISO developed its "Day 2" market design which included the administration of regional energy markets. MISO filed its Open Access Transmission and Energy Markets Tariff on March 31, 2004,[5] which tariff FERC approved on August 6, 2004.[6]

11. On July 17, 2003, the Commission, by order, initiated an investigation of the Companies' membership in MISO.[7] In the order, the Commission indicated its willingness to explore the feasibility of the Companies' leaving MISO and joining a different RTO. In light of the evidence presented during the investigation, the Companies advised the Commission that they would seek to withdraw from MISO and pursue an alternative model that satisfies FERC's non-discriminatory, open access transmission service objectives and other relevant policy goals. When MISO filed its TEMT and Day 2 Market proposals with FERC, the Commission reopened its investigation because of concerns about the impact of Day 2 operations on the Companies and Kentucky ratepayers. This investigation is currently under submission before the Commission for decision.[8]

12. On October 7, 2005, in *LG&E Energy LLC, Louisville Gas & Electric Company et al*, Docket Nos. EC06-4-000 & EC06-20-000, the Companies petitioned FERC for an order authorizing the transfer of the functional control of their facilities from MISO back to themselves and authorizing the Companies to enter into agreements with SPP to serve as the Companies'

---

[5] *Midwest Independent Transmission System Operator, Inc., Open Access Transmission and Energy Markets Tariff,* Docket No. ER04-691-000.

[6] Midwest Indep. Transmission Sys. Operator, Inc., 108 FERC ¶ 61,163 (2004).

[7] In the Matter of: *Investigation into the Membership of the Louisville Gas and Electric Company and Kentucky Utilities Company in the Midwest Independent Transmission System Operator, Inc.,* Case No. 2003-266, Order issued July 17, 2003.

[8] In the Matter of: *Investigation into the Membership of the Louisville Gas and Electric Company and Kentucky Utilities Company in the Midwest Independent Transmission System Operator, Inc.,* Case No. 2003-266, Order Issued June 22, 2004.

OATT administrator and with TVA to serve as the Companies' NERC-certified reliability coordinator. The ITO and reliability coordinator proposal ensures that the Companies will maintain the requisite level of independence in the operation of their transmission system while maintaining a high level of system reliability. FERC approval of this transaction is required because such withdrawal constitutes a change in rates under the Federal Power Act ("FPA") Section 205. A complete electronic copy of the Companies' FERC Application on compact disc accompanies this Application as Application Exhibit 2.

The Proposed Transfer is Governed by KRS 278.218

13. Pursuant to KRS 278.218(1), Commission approval is required for the "transfer of ownership of or control, or the right to control," certain utility assets. Further, KRS 278.218(2) provides that approval is to be granted, "if the transaction is for a proper purpose and is consistent with the public interest."

14. Under the Companies' proposal, they would transfer functional control of their facilities from MISO back to themselves, to TVA for reliability coordination purposes, and to SPP for the purposes of SPP's acting as the Companies' ITO. Because this proposal requires transfer of functional control of the Companies' transmission assets from MISO, the Companies must seek Commission approval under KRS 278.218.

15. In *In the Matter of: Application of Kentucky Power Company D/B/A American Electric Power for Approval, to the extent necessary, to Transfer Functional Control of Transmission Facilities Located in Kentucky to PJM InterConnection L.L.C. Pursuant to KRS 278.218*, Case No. 2002-00475, Order issued July 17, 2003, the Kentucky Power Company sought Commission approval to transfer control of certain transmission facilities to PJM

Interconnection L.L.C. In finding that the proposed transfer fell within the purview of KRS 278.218, the Commission clarified that the statute's "public interest" standard requires a showing that the transfer produces some benefits for the public and does not adversely affect service or rates.[9]

16. The information submitted in connection with this application will show that the Companies' proposal to transfer functional control will not result in adverse effects on service or rates and will, in fact, provide potential benefits. It is estimated that the Companies' proposal to exit MISO and enter into agreements with an ITO and a reliability coordinator will save $10 to $12 million per year. Thus, the savings from the proposal will exceed the estimated $41 million MISO exit fee in approximately four years. Further, the proposal will ensure that Kentucky retail electricity customers continue to receive reliable service at the lowest reasonable cost. Therefore, the transfer of operational control of the Companies' transmission assets should be approved by the Commission pursuant to KRS 278.218.

Testimony in Support of the Application

17. LG&E and KU support their request for authority to transfer functional control of their transmission systems from MISO with the following testimony:

- The testimony of Paul W. Thompson, Senior Vice President, Energy Services, LG&E Energy Services, Inc., will provide a brief overview of the application and the evidence supporting it. His testimony will also demonstrate the Companies' business reasons for becoming charter members of MISO and why they now seek to exit it.

---

[9] *Id.*

- The testimony of Mark S. Johnson, Director of Transmission, LG&E Energy Services, Inc., describes the functions of the ITO and Reliability Coordinator and the Request For Proposal processes that led to the selection of SPP and TVA to serve in those roles.

- The testimony of Dr. Mathew J. Morey, Sr. Consultant, Laurits R. Christenson Associates, Inc., explains why the Companies' ITO and Reliability Coordinator proposal is economically superior to, and therefore more prudent than, the Companies continuing MISO membership.

- The testimony of Kent W. Blake, Director of State Regulation and Rates, LG&E Energy Service, Inc., will explain why the Companies' ITO and Reliability Coordinator proposal satisfies the requirements of 278.218.

- The testimony of Susan F. Tierney, Ph.D., Managing Principal, Analysis Group, Inc., explains why the Companies' ITO and reliability coordinator proposal meets the "proper purpose" and "public interest" standards set out in KRS 278.218 as governing transfers of functional control of utility assets.

- The testimony of Michael S. Beer, Vice President, Federal Regulation and Policy, LG&E Energy Services, Inc., explains how the Companies' application today fits in the context of the current Commission proceeding investigating the Companies' ongoing membership in MISO and the Companies' currently pending application before FERC for approval of the same transaction that is the subject matter of this application.

LG&E and KU also support their application with the following testimony submitted by the Tennessee Valley Authority and the Southwest Power Pool, as the prospective third-party vendors of reliability coordination and independent transmission operation, respectively, regarding their qualifications and interests:

- The testimony of Stuart L. Goza, Reliability Coordinator for TVA, provides background regarding how TVA acts as reliability coordinator for other electric systems and how TVA proposes to provide such service to the Companies.
- The testimony of Bruce A. Rew, Executive Director of Contract Services, Southwest Power Pool, will provide information on the capabilities of SPP to perform the functions of an ITO for the Companies.

WHEREFORE, Louisville Gas and Electric Company and Kentucky Utilities Company respectfully request that the Commission:

1. Issue an order, pursuant to KRS 278.218, approving the transfer of the functional control of their facilities from the Midwest Independent Transmission System Operator, Inc. to the Companies, for the purpose of affecting the withdrawal of their membership from the Midwest Transmission System Operator, Inc., and to Tennessee Valley Authority ("TVA") to the extent necessary for TVA to act as the Companies' reliability coordinator and to the Southwest Power Pool ("SPP") to the extent necessary for SPP to perform its function as the Companies' Independent Transmission Organization;

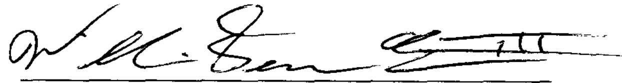
2. Allow the Companies to establish a regulatory asset in the amount of the MISO exit fee;

3. Deem the MISO exit fee prudently incurred because incurring it will result in recurring savings and ultimately lower base rates; and

4. Issue the requested order by March 31, 2006.

Dated: November 18, 2005

Respectfully submitted,



Kendrick R. Riggs
William Duncan Crosby III
Sarah K. M. Adams
Ogden Newell & Welch PLLC
1700 PNC Plaza
500 West Jefferson Street
Louisville, Kentucky 40202
Telephone: (502) 582-1601

Elizabeth L. Cocanougher
Senior Regulatory Counsel
Louisville Gas and Electric Company
220 West Main Street
Post Office Box 32010
Louisville, Kentucky 40232
Telephone: (502) 627-4850

Application – Exhibit 1

Kentucky Utilities Company - Articles of Incorporation

As filed October 28, 1992, as Amended December 14, 1993, and April 8, 2004

Trey Grayson
SECRETARY OF STATE

CERTIFICATE

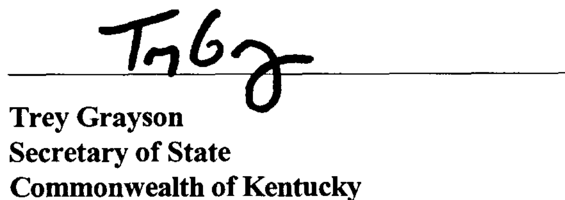
I, Trey Grayson, Secretary of State for the Commonwealth of Kentucky, do hereby certify that the foregoing writing has been carefully compared by me with the original thereof, now in my official custody as Secretary of State and remaining on file in my office, and found to be a true and correct copy of **AMENDED AND RESTATED ARTICLES OF INCORPORATION OF**

KENTUCKY UTILITIES COMPANY FILED OCTOBER 28, 1992,

ARTICLES OF AMENDMENT FILED DECEMBER 14, 1993,

ARTICLES OF AMENDMENT FILED APRIL 8, 2004.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my offical seal at Frankfort, Kentucky this 14th day of November, 2005.



Trey Grayson
Secretary of State
Commonwealth of Kentucky

(Printed By: BWeber - Certificate ID: 22599)

28494-A

RECEIVED & FILED

Ck $80.00

OCT 28 3 00 PM '92

BOB BABBAGE
SECRETARY OF STATE
COMM. OF KENTUCKY
BY

AMENDED AND RESTATED ARTICLES OF INCORPORATION

OF

KENTUCKY UTILITIES COMPANY

691881

28494 - qdst.

October, 1992

AMENDED AND RESTATED ARTICLES OF INCORPORATION
OF
Kentucky Utilities Company

The undersigned, KENTUCKY UTILITIES COMPANY, a Kentucky corporation and a Virginia corporation (the "corporation"), by John T. Newton, its Chairman and President, hereby certifies as follows:

1. The name of the corporation is Kentucky Utilities Company.

2. The following restatement contains no amendment requiring shareholder approval. By resolution duly adopted by the Board of Directors of the corporation at a meeting thereof duly held on October 26, 1992, the following restatement of the Amended and Restated Articles of Incorporation of the corporation, as theretofore amended, was adopted.

3. The following Amended and Restated Articles of Incorporation of the corporation (a) set forth all of the operative provisions of the Articles of Incorporation of the corporation, as amended through the date of said meeting of the Board of Directors of the corporation, (b) correctly set forth without change the corresponding provisions of the Articles of Incorporation of the corporation, as so amended, and (c) supersede the original Articles of Incorporation of the corporation and all amendments thereto and restatements thereof through the date of said meeting of the Board of Directors of the corporation.

4. The Amended and Restated Articles of Incorporation of the corporation shall read as follows:

Amended and Restated Articles of Incorporation

FIRST: The name of the corporation is KENTUCKY UTILITIES COMPANY.

SECOND: The address of the registered office of the corporation in Kentucky and the name of the resident agent of the corporation at that address are on file with the Kentucky Secretary of State. The address of the registered office of the corporation in Virginia is 5511 Staples Mill Road, Richmond, Virginia 23228. The name of the initial registered agent at that address is Edward R. Parker, who is a resident of Virginia and a member of the Virginia State Bar.

THIRD: The purpose for which the corporation is organized is to engage, directly or through ownership of other corporations, partnerships, joint ventures or other entities, in the transaction of any and all lawful business for which corporations may be incorporated under the Kentucky Business Corporation Act, and except as modified by Article Fourth hereof, the Virginia Stock Corporation Act.

FOURTH: In limitation of the foregoing Article Third, the corporation shall, in Virginia, conduct the business of an electric utility as a public service company and it shall have power to conduct, in Virginia, other public service business or non-public service business so far as may be related to or incidental to its stated business as a public service company and in any other state such business as may be authorized or permitted by the laws thereof. Nothing in this Article Fourth shall limit the power of the corporation in respect of the securities of other corporations.

FIFTH: The aggregate number of shares of stock which the corporation shall have authority to issue is Eighty-seven Million Three Hundred Thousand (87,300,000) shares, divided into and consisting of (A) Five Million Three Hundred Thousand (5,300,000) shares of Preferred Stock without par value but with a maximum aggregate stated value of $200,000,000, issuable in one or more series as hereinafter provided, (B) Two Million (2,000,000) shares of Preference Stock without par value issuable in one or more series as hereinafter provided, and (C) Eighty Million (80,000,000) shares of Common Stock without par value. The 5,300,000 shares of authorized Preferred Stock are hereinafter referred to as the "Preferred Stock" and shall include the 200,000 shares of "4¾% Preferred Stock" and the 200,000 shares of "7.84% Preferred Stock" of the corporation now outstanding.

A description of the respective classes of shares of the corporation, and a statement of the designations, powers, preferences and rights and the qualifications, limitations and restrictions granted to or imposed upon the shares of each class, are as follows:

I. Provisions Relating to the Preferred Stock

(1) The authorized Preferred Stock may be issued in one or more series as hereinafter provided; and the 200,000 shares of 4¼% Preferred Stock now outstanding shall constitute a series of the Preferred Stock and shall be known as the "4¼% Preferred Stock (stated value $100 per share)", the 200,000 shares of 7.84% Preferred Stock now outstanding shall constitute a series of the Preferred Stock and shall be known as the "7.84% Preferred Stock (stated value $100 per share)". The remainder of the shares of the authorized Preferred Stock, and all shares of the Preferred Stock at any time having the status of authorized and unissued shares of Preferred Stock, may be issued as shares of any series now outstanding or may be issued in one or more other series with such stated values, such rates of dividend (which shall be stated in the designation of the shares of each such series), such redemption price or prices and terms and conditions, and such sinking fund provisions, if any, for the redemption or purchase of shares, determined and fixed by the Board of Directors of the corporation in the manner provided by law, as the Board of Directors shall from time to time authorize. Authority is hereby expressly granted to and vested in the Board of Directors of the corporation, by resolution, to divide any of the authorized and unissued shares of the Preferred Stock into one or more series and to determine and fix the relative rights and preferences of the shares of any such series, the number of shares and the rate of dividend to be borne by the shares of each such series, the price or prices at which, and the terms and conditions on which, shares of each such series may be redeemed, and the sinking fund provisions, if any, for the redemption or purchase of shares of each such series, and to change redeemed or re-acquired shares of any such series into shares of another series, *subject, however,* to such restrictions and limitations as are, or may be, from time to time provided by law or contained in the Articles of Incorporation of the corporation or amendments thereto. The stated value of the share of each series of Preferred Stock shall be fixed by the Board of Directors of the corporation in the resolution establishing such series. Shares of any series of Preferred Stock may not be issued for a consideration less than the aggregate stated value thereof.

All shares of the Preferred Stock, regardless of designation, shall constitute one class of stock, shall be of equal rank and shall confer equal rights on the holders thereof, except only as to the stated values thereof, the rates of dividends thereon, the redemption prices and terms and conditions thereof, and the sinking fund provisions, if any, for the redemption or purchase thereof and except also, but only in respect of the 4¼% Preferred Stock, as otherwise provided in paragraph (11) of this Division I. All shares of the Preferred Stock of the same stated value per share at any time outstanding which bear the same dividend rate shall constitute one series of the Preferred Stock; and all shares of any one series of Preferred Stock shall be alike in all respects.

(2) The holders of the Preferred Stock shall be entitled to receive, in respect of each share held, dividends upon the stated value thereof at the annual rate specified in the designation of such share, and no more, payable quarter-yearly on March 1, June 1, September 1 and December 1 in each year, or on such other dates in each year as may be fixed by the Board of Directors of the corporation, but only when and as declared by the Board of Directors out of the surplus or net profits of the corporation available for the payment of dividends. Dividends on shares of the Preferred Stock shall be cumulative from and including the date of issue thereof, and shall be paid, or declared and set apart for payment, before any dividends shall be declared or paid on or set apart for the Preference Stock or the Common Stock; so that if for any past dividend period or the then current dividend period dividends on the Preferred Stock shall not have been paid, or declared and set apart for payment, the deficiency shall be fully paid or declared and funds set apart for the payment thereof before any dividends shall be declared or paid on or set apart for the Preference Stock or the Common Stock. No dividend shall at any time be paid on or set apart for any share of the Preferred Stock unless at the same time there shall be paid on

or set apart for all shares of the Preferred Stock then outstanding dividends in such amount that the holders of all shares of the Preferred Stock then outstanding shall receive or have set apart for them a uniform percentage of the full annual dividend to which they are, respectively, entitled. The term "dividend period," as used herein, refers to each period of three consecutive calendar months ending on the day next preceding each date on which dividends, if declared, shall be payable. When full cumulative dividends as aforesaid upon the Preferred Stock then outstanding for all past dividend periods and for the then current dividend period shall have been paid or declared and set apart for payment, the Board of Directors may declare dividends on the Preference Stock and the Common Stock of the corporation, subject to any other restrictions contained in the Articles of Incorporation.

In addition to the provisions of the second and fifth sentences of the preceding paragraph of this paragraph (2) with respect to the declaration by the Board of Directors of dividends on the Preference Stock and the Common Stock and the payment of any such dividends, it shall also be a condition precedent to the declaration by the Board of Directors of dividends on the Preference Stock or the Common Stock and the payment of any such dividends that all amounts required to be paid or set aside for any sinking fund for the redemption or purchase of shares of Preferred Stock of any series, with respect to all preceding sinking fund dates or periods, shall have been paid or set aside in accordance with the terms of the shares of such series. No funds shall be paid into or set aside for any sinking fund for the redemption or purchase of shares of Preferred Stock of any series unless all dividends on the Preferred Stock, for all past dividend periods, shall have been fully paid or declared and funds set apart for the payment thereof.

(3) Upon the dissolution, liquidation or winding up of the corporation, the holders of shares of the Preferred Stock shall be entitled, before any amount shall be paid to the holders of shares of the Preference Stock or the Common Stock, to be paid in full out of the net assets of the corporation, (i) the stated value of their shares of Preferred Stock plus an amount equal to the accrued dividends on such shares, if such dissolution, liquidation or winding up shall be involuntary, and (ii) the then current redemption price of their shares of Preferred Stock (accrued dividends thereon to be computed to the date of distribution) if such dissolution, liquidation or winding up shall be voluntary. After such payment in full to the holders of shares of the Preferred Stock, the remaining assets and profits shall be divided among and paid to the holders of shares of the Preference Stock and to the holders of shares of the Common Stock, as hereinafter provided.

(4) The corporation, on the sole authority of its Board of Directors, shall have the right at any time or from time to time to redeem and retire all or any part of the shares of Preferred Stock, or all or any part of the shares of any one or more series of the Preferred Stock, upon and by the payment to the holders of the shares to be redeemed or upon and by depositing as hereinafter provided for the benefit of such holders, the then applicable redemption price of the shares to be redeemed, which (a) in case of the shares of the 4¾% Preferred Stock shall be $101 per share plus accrued dividends to the date of redemption, (b) in case of the shares of the 7.84% Preferred Stock shall be $107.38 per share plus accrued dividends to the date of redemption if such date of redemption is on or subsequent to September 1, 1977, and prior to September 1, 1982, $105.42 per share plus accrued dividends to the date of redemption if such date of redemption is on or subsequent to September 1, 1982, and prior to September 1, 1987, and $101.50 per share plus accrued dividends to the date of redemption if such date of redemption is on or subsequent to September 1, 1987. It shall be a condition of any redemption pursuant to this paragraph (4) that the corporation shall, not less than thirty (30) days previous to the date fixed for redemption, give notice of the intention of the corporation to redeem such shares, specifying the shares to be redeemed and the date and place of redemption, which notice shall be deposited in a United States post office or mail box at any place in the United States addressed to each holder of record of the shares to be redeemed at his address as the same appears upon the records of the corporation; but in mailing such notice of redemption unintentional omissions or errors in names or addresses shall not impair the validity of such notice. In every case of the redemption of less than all of the outstanding shares of any series of the Preferred Stock, the shares of such series to be redeemed shall be chosen by proration (so far as may be

without resulting in the issuance of fractional shares), by lot or in such other equitable manner as may be prescribed by resolution of the Board of Directors. The corporation may deposit with a bank or trust company, which shall be named in the notice of redemption, shall be located in New York, New York, or in Chicago, Illinois or in Louisville, Kentucky, and shall then have capital, surplus and undivided profits of at least $1,000,000, the aggregate redemption price of the shares to be redeemed, in trust for the payment on or before the redemption date to or upon the order of the holders of such shares, upon surrender of the certificates for such shares. Such deposit in trust may, at the option of the corporation, be upon terms whereby in case the holder of any of the shares called for redemption shall not, within ten (10) years after the date fixed for the redemption of such shares, claim the amount on deposit with any such bank or trust company for the payment of the redemption price of said shares, such bank or trust company shall on demand pay to or upon the written order of the corporation or its successors the amount so deposited, and thereupon such bank or trust company shall be released from any and all further liability with respect to the payment of such redemption price and the holder of said shares shall be entitled to look only to the corporation or its successor for the payment thereof. Upon the giving of notice of redemption and upon the deposit of the redemption price, as aforesaid, or if no such deposit is made, upon the redemption date (unless the corporation defaults in making payment of the redemption price as set forth in such notice), such holders shall cease to be stockholders of the corporation with respect to said shares, and from and after the making of said deposit and the giving of said notice, or, if no such deposit is made, after the redemption date (the corporation not having defaulted in making payment of the redemption price as set forth in said notice), said shares shall no longer be transferable on the books of the corporation, and said holders shall have no interest in or claim against the corporation with respect to said shares, but shall be entitled only to receive said moneys on the date fixed for redemption, as aforesaid, from such bank or trust company, or from the corporation, without interest thereon, upon surrender of the certificates therefor as aforesaid.

The term "accrued dividends," as used herein, shall be deemed to mean, in respect of any share of the Preferred Stock as of any given date, the amount of dividends payable on such shares, computed, at the annual dividend rate fixed for such share, from the date on which dividends thereon became cumulative to and including such given date, less the aggregate amount of all dividends which have been paid or which have been declared and set apart for payment on such share. Accumulations of dividends shall not bear interest.

Nothing herein contained shall limit any legal right of the corporation to purchase any shares of the Preferred Stock.

(5) So long as any shares of the Preferred Stock of any series are outstanding, the corporation [except as otherwise provided in the last sentence of this paragraph (5)] shall not, without the affirmative vote of the record holders of shares of the Preferred Stock of all series at the time outstanding having in the aggregate a number of votes, calculated as provided in paragraph (2) of Division IV, at least equal to two-thirds of the total number of votes, as so calculated, possessed by all such holders:

(a) Amend the provisions of the Articles of Incorporation so as to create or authorize any stock ranking prior in any respect to the Preferred Stock or any security convertible into shares of such stock; or issue any such stock or convertible security; or

(b) Change, by amendment to the Articles of Incorporation, or otherwise, the terms and provisions of the Preferred Stock so as to affect adversely the rights and preferences of the holders thereof; *provided, however,* that if any such change will affect adversely the holders of one or more, but less than all, of the series of Preferred Stock at the time outstanding, there shall be required the vote only of the holders of shares of the series so adversely affected at the time outstanding having in the aggregate a number of votes, calculated as provided in paragraph (2) of Division IV, at least equal to two-thirds of the total number of votes, as so calculated, possessed by all such holders of such series; or

(c) Issue any shares of Preferred Stock, or shares of any stock ranking on a parity with the Preferred Stock, or any securities convertible into shares of such stock, *other than* in exchange for, or for the purpose of effecting the redemption or other retirement of, shares of Preferred Stock, or of any stock ranking prior thereto or on a parity therewith, or both, at the time outstanding having an aggregate amount of par or stated value of not less than the aggregate amount of par or stated value of the shares to be issued, unless

(i) the net income of the corporation (determined in accordance with generally accepted accounting principles) plus all amounts representing interest charges and all amounts for or in respect of taxes based on or measured by income shall, for a period of twelve consecutive calendar months within the fifteen calendar months next preceding the issue of such shares, have been at least one and one-half (1½) times the sum of (x) the interest for one year, adjusted by provision for amortization of debt discount and expense or of premium, as the case may be, on all funded indebtedness and notes payable of the corporation maturing more than twelve months after the date of issue of such shares or convertible securities which shall be outstanding at the date of the issue of said shares or convertible securities, and (y) an amount equal to the dividend requirement for one year on all shares of the Preferred Stock of all series and on all other shares of stock, if any, ranking prior to or on a parity with the Preferred Stock, which shall be outstanding after the issue of the shares or convertible securities proposed to be issued; and

(ii) the capital represented by the Common Stock plus the surplus accounts of the corporation shall be not less than the aggregate amount payable on the involuntary dissolution, liquidation or winding up of the corporation, in respect of all shares of the Preferred Stock of all series and all shares of stock, if any, ranking prior thereto, or on a parity therewith, which shall be outstanding after the issue of the shares or convertible securities proposed to be issued.

No consent of the holders of the Preferred Stock shall be required in respect of any transaction enumerated in this paragraph (5) if, at or prior to the time when such transaction is to take effect, provision is made for the redemption or other retirement of all shares of the Preferred Stock at the time outstanding, the affirmative vote of which would otherwise be required hereunder.

(6) So long as any shares of the Preferred Stock of any series are outstanding, the corporation [except as otherwise provided in the last sentence of this paragraph (6)] shall not, without the affirmative vote of the record holders of shares of the Preferred Stock of all series at the time outstanding having in the aggregate a number of votes, calculated as provided in paragraph (2) of Division IV, at least equal to a majority of the total number of votes, as so calculated, possessed by all such holders:

(a) Issue or assume any unsecured indebtedness (as hereinafter defined) for any purpose, *other than* the refunding of secured or unsecured indebtedness theretofore created or assumed by the corporation and then outstanding or the retiring, by redemption or otherwise, of shares of the Preferred Stock or shares of any stock ranking prior thereto or on a parity therewith, if immediately after such issue or assumption the total principal amount of all unsecured indebtedness issued or assumed by the corporation and then outstanding would exceed twenty-five per centum (25%) of the aggregate of (i) the total principal amount of all bonds or other securities representing secured indebtedness issued or assumed by the corporation and then outstanding and (ii) the total of the capital and surplus of the corporation, as then recorded on its books; or

(b) Merge or consolidate with any other corporation or corporations, or sell or lease all or substantially all of the assets of the corporation, unless such merger, consolidation or sale or lease or the issue or assumption of all securities to be issued or assumed in connection therewith shall have been ordered, approved or permitted by all regulatory bodies, federal and state, then having jurisdiction in the premises.

"Unsecured indebtedness" as the term is used in this paragraph (6) shall mean all unsecured notes, debentures or other securities representing unsecured indebtedness (whether having a single maturity,

serial maturities or sinking fund or other similar periodic principal or debt retirement payment provisions) which have a final maturity date, determined as of the date of issuance or assumption thereof by the corporation, of less than three years. No consent of the holders of the Preferred Stock shall be required in respect to any transaction enumerated in this paragraph (6) if, at or prior to the time when such transaction is to take effect, provision is made for the redemption or other retirement of all shares of the Preferred Stock at the time outstanding, the affirmative vote of which would otherwise be required hereunder.

(7) No provision contained in the foregoing paragraphs (5) and (6) is intended or shall be construed to relieve the corporation from compliance with any applicable statutory provision requiring the vote or consent of a greater number of the holders of the outstanding shares of the Preferred Stock.

(8) So long as any shares of the Preferred Stock are outstanding, the corporation shall not pay any dividends on its Common Stock (other than dividends payable in Common Stock) or make any distribution on or purchase or otherwise acquire for value any of its Common Stock (each such payment, distribution, purchase and/or acquisition being herein referred to as a "Common Stock dividend"), except to the extent permitted by the following provisions of this paragraph (8):

(a) No Common Stock dividend shall be declared or paid in an amount which, together with all other Common Stock dividends declared in the year ending on (and including) the date of the declaration of such Common Stock dividend, would in the aggregate exceed fifty per centum (50%) of the net income of the corporation available for dividends on its Common Stock for the twelve consecutive calendar months ending on the last day of the calendar month next preceding the declaration of such Common Stock dividend, if at the end of such calendar month the ratio (herein referred to as the "capitalization ratio") of the Common Stock equity (as hereinafter defined) of the corporation, to the total capital (as hereinafter defined) of the corporation shall be less than twenty per centum (20%).

(b) If such capitalization ratio, determined as aforesaid, shall be twenty per centum (20%) or more, but less than twenty-five per centum (25%), no Common Stock dividend shall be declared or paid in an amount which, together with all other Common Stock dividends declared in the year ending on (and including) the date of the declaration such Common Stock dividend, would exceed seventy-five per centum (75%) of the net income of the corporation available for dividends on its Common Stock for the twelve consecutive calendar months ending on the last day of the calendar month next preceding the declaration of such Common Stock dividend.

(c) If such capitalization ratio, determined as aforesaid, shall be twenty-five per centum (25%) or more, no Common Stock dividend shall be declared or paid which would reduce such capitalization ratio to less than twenty-five per centum (25%), except to the extent permitted by the next preceding paragraphs (a) and (b) hereof.

"Common Stock equity," as that term is used in this paragraph, shall consist of the sum of (1) the capital represented by the issued and outstanding shares of Common Stock (including premiums on Common Stock) and (2) the surplus accounts of the corporation, less (i) any known, or estimated if not known, excess of the value, as recorded on the corporation's books, over the original cost, of used and useful utility plant and other property, unless (a) such excess is being amortized or provided for by reserves, or (b) such excess has been held, by final order of a court having jurisdiction or of the regulatory bodies having jurisdiction, to constitute an asset which need not be amortized or provided for by reserves, and (ii) any excess of the aggregate amount payable on the involuntary dissolution, liquidation, or winding up of the corporation, in respect of its outstanding shares of preference stocks of all classes over the aggregate par value of, or if without par value over the capital represented by, such preference stocks unless such excess is being amortized or provided for by reserves, and (iii) any items such as debt discount, premium and expense, capital stock discount and expense and similar items, classified as assets on the balance sheet of the corporation, unless such items are being amortized or provided for by reserves. The "total capital of the corporation" shall consist of the sum of (i) the principal amount of all

outstanding indebtedness of the corporation maturing one year or more after the date of the issue thereof and (ii) the par value of, or if without par value the capital represented by, all outstanding shares of capital stock (including premiums on capital stock) of all classes of the corporation, and (iii) the surplus accounts of the corporation. The term "net income of the corporation available for dividends on its Common Stock" for any period shall be determined by deducting from the sum of the operating revenues and income from investments and other miscellaneous income for such period, all operating expenses for such period, including maintenance and provision for depreciation as recorded on the books of the corporation (but not less than an amount equal to fifteen per centum (15%) of the gross operating revenues of the corporation less the cost of electric energy, gas and ice purchased for resale, during such period), income and excess profits and other taxes, all proper accruals, interest charges, amortization charges, other proper income deductions and all dividends paid or accrued on all outstanding shares of stock of the corporation having a preference as to dividends over the Common Stock for such period, all as shall be determined in accordance with such system of accounts as may be prescribed by regulatory authorities having jurisdiction in the premises or, in the absence thereof, in accordance with sound accounting practices. All indebtedness and capital stock of the corporation owned by the corporation shall be excluded in determining total capital. Purchases or other acquisition of Common Stock shall be deemed, for the purposes of this paragraph (8), to constitute a Common Stock dividend declared as of the date on which such purchases or acquisitions are consummated.

(9) No shares of preference stocks or evidence of indebtedness shall be deemed to be "outstanding", as that term is used in the preceding paragraphs (5), (6) and (8) of this Division I, if, prior to or concurrently with the event in reference to which a determination as to the amount thereof outstanding is to be made, the requisite funds for the redemption thereof shall be deposited in trust for that purpose and the requisite notice for the redemption thereof shall be given or the depositary of such funds shall be irrevocably authorized and directed to give or complete such notice of redemption.

(10) No holder of the Preferred Stock, as such, shall have any preemptive right to subscribe to stock or other securities of the corporation, of any class, whether now or hereafter authorized.

(11) Notwithstanding anything to the contrary contained in paragraph (2), each holder of shares of the 4¾% Preferred Stock shall be entitled to reimbursement by the corporation for the amount of any personal property tax, not exceeding in the aggregate four mills per annum on each dollar of taxable value of each share of such stock owned by such holder, which may be legally assessed by the Commonwealth of Pennsylvania or any taxing authority therein upon each share of such stock held of record at the time of assessment of such tax thereon, or upon such holder by reason of his ownership thereof, and actually paid by such holder; provided that application for such reimbursement shall be made by such holder to the corporation at its office or agency in the City of Lexington, Kentucky, not later than 120 days after such tax shall have been paid, and that such application shall set forth the record ownership, at the time of such assessment of such shares of stock with respect to which such tax has been paid, the amount (exclusive of penalty and interest) of such tax actually paid by such holder, the due date thereof, and the tax year for which paid, together with the number or numbers of the certificate or certificates representing such stock, the residence of the applicant at the time such tax was assessed, and that such tax was assessed and was paid by him because of his ownership of such stock, and such further facts with respect to the legal liability of such holder to pay such tax as the corporation may reasonably require. The corporation shall in no event be liable to reimburse such holder for any interest or penalty assessed or accrued upon or paid by him in addition to the amount of such tax as originally assessed. No deduction from any dividend or other distribution declared or paid upon any such shares of such stock shall be made on account of such reimbursement made by the corporation with respect to any such tax.

II. Provisions Relating To The Preference Stock

(1) The shares of the authorized Preference Stock, and all shares of the Preference Stock at any time having the status of authorized and unissued shares of Preference Stock, may be issued in one or

more series with (a) such stated values, (b) such rates of dividend (which shall be stated in the designation of the shares of each such series), (c) such redemption price or prices and terms and conditions, (d) such sinking fund provisions, if any, for the redemption or purchase of shares, (e) such amounts payable upon the voluntary or involuntary dissolution, liquidation or winding up of the corporation and (f) such terms and conditions, if any, regarding the conversion of shares into shares of Common Stock, determined and fixed by the Board of Directors of the corporation in the manner provided by law, as the Board of Directors shall from time to time authorize. Authority is hereby expressly granted to and vested in the Board of Directors of the corporation, by resolution, to divide any authorized and unissued shares of the Preference Stock into one or more series and to determine and fix by resolution the relative rights and preferences of the shares of any such series, the number of shares of each such series and the provisions with respect to the shares of such series referred to in items (a) through (f) above and to change redeemed or re-acquired shares of any such series into shares of another series, *subject, however,* to such restrictions and limitations as are, or may be, from time to time provided by law or contained in the Articles of Incorporation of the corporation or amendments thereto. The stated value of the shares of each series of Preference Stock shall be fixed by the Board of Directors of the corporation in the resolution establishing each series. Shares of any series of Preference Stock may not be issued for a consideration less than the aggregate stated value thereof.

All shares of the Preference Stock, regardless of designation, shall constitute one class of stock, shall be of equal rank and shall confer equal rights on the holders thereof, except only as to those provisions which the Articles of Incorporation authorize the Board of Directors of the corporation to fix by resolution. All shares of any one series of Preference Stock shall be alike in all respects.

(2) Subject to the preferential rights of the holders of the Preferred Stock with respect to the declaration and payment of dividends as set forth in paragraph (2) of Division I, subject to the provisions of the second grammatical paragraph of paragraph (2) of Division I and subject to the provisions of paragraph (8) of Division I, holders of the Preference Stock shall be entitled to receive, in respect of each share held, dividends upon the stated value thereof at the annual rate specified in the designation of such share, and no more, payable quarter-yearly on March 1, June 1, September 1 and December 1 in each year, or on such other dates in each year as may be fixed by the Board of Directors of the corporation, but only when and as declared by the Board of Directors out of the surplus or net profits of the corporation available for the payment of dividends. Dividends on shares of the Preference Stock shall be cumulative from and including the date of issue thereof, and shall be paid, or declared and set apart for payment, before any dividends shall be declared or paid on or set apart for the Common Stock; so that if for any past dividend period or the then current dividend period dividends on the Preference Stock shall not have been paid, or declared and set apart for payment, the deficiency shall be fully paid or declared and funds set apart for the payment thereof before any dividends shall be declared or paid on or set apart for the Common Stock. No dividend shall at any time be paid on or set apart for any share of the Preference Stock unless at the same time there shall be paid on or set apart for all shares of the Preference Stock then outstanding dividends in such amount that the holders of all shares of Preference Stock then outstanding shall receive or have set apart for them a uniform percentage of the full annual dividend to which they are, respectively, entitled. The term "dividend period", as used herein, refers to each period of three consecutive calendar months ending on the day next preceding each date on which dividends, if declared, shall be payable. When full cumulative dividends as aforesaid upon the Preference Stock then outstanding for all past dividend periods and for the then current dividend period shall have been paid or declared and set apart for payment, the Board of Directors may declare dividends on the Common Stock of the corporation, subject to any other restrictions contained in the Articles of Incorporation.

In addition to the provisions of the second and fifth sentences of the preceding paragraph of this paragraph (2) with respect to the declaration by the Board of Directors of dividends on the Common Stock and the payment of any such dividends, it shall also be a condition precedent to the declaration by the Board of Directors of dividends on the Common Stock and the payment of any such dividends that

all amounts required to be paid or set aside for any sinking fund for the redemption or purchase of shares of Preference Stock of any series, with respect to all preceding sinking fund dates or periods, shall have been paid or set aside in accordance with the terms of the shares of such series. No funds shall be paid into or set aside for any sinking fund for the redemption or purchase of shares of Preference Stock of any series unless all dividends on the Preference Stock, for all past dividend periods, shall have been fully paid or declared and funds set apart for the payment thereof.

(3) Subject to the preferential rights of the holders of the Preferred Stock with respect to the payment of amounts upon the dissolution, liquidation or winding up of the corporation as set forth in paragraph (3) of Division I, upon the dissolution, liquidation or winding up of the corporation, whether voluntary or involuntary, the holders of shares of the Preference Stock of each series shall be entitled, before any amount shall be paid to the holders of shares of the Common Stock, to be paid in full out of the net assets of the corporation such amount or amounts per share as shall have been fixed for such series by the Board of Directors of the corporation as the voluntary or involuntary liquidation price, as the case may be, in the resolution establishing such series. After such payment in full to the holders of shares of the Preference Stock, the remaining assets and profits shall be divided among and paid to the holders of shares of the Common Stock.

(4) So long as any shares of the Preference Stock of any series are outstanding, the corporation [except as otherwise provided in the last sentence of this paragraph (4)] shall not, without the affirmative vote of the record holders of shares of the Preference Stock of all series at the time outstanding having in the aggregate a number of votes, calculated as provided in paragraph (2) of Division IV, at least equal to two-thirds of the total number of votes, as so calculated, possessed by all such holders:

(a) Amend the provisions of the Articles of Incorporation so as to create or authorize any stock of any class, other than the Preferred Stock, ranking prior in any respect to the Preference Stock or any security convertible into shares of stock of such class, other than the Preferred Stock; or

(b) Change, by amendment to the Articles of Incorporation, or otherwise, the terms and provisions of the Preference Stock so as to affect adversely the rights and preferences of the holders thereof; *provided, however*, that if any such change will affect adversely the holders of one or more, but less than all, of the series of Preference Stock at the time outstanding, there shall be required the vote only of the holders of shares of the series so adversely affected at the time outstanding having in the aggregate a number of votes, calculated as provided in paragraph (2) of Division IV, at least equal to two-thirds of the total number of votes, as so calculated, possessed by all such holders of such series.

No consent of the holders of the Preference Stock shall be required in respect of any transaction enumerated in this paragraph (4) if, at or prior to the time when such transaction is to take effect, provision is made for the redemption or other retirement of all shares of the Preference Stock at the time outstanding, the affirmative vote of which would otherwise be required hereunder.

(5) So long as any shares of the Preference Stock of any series are outstanding, the corporation [except as otherwise provided in the last sentence of this paragraph (5)] shall not, without the affirmative vote of the record holders of shares of the Preference Stock of all series at the time outstanding having in the aggregate a number of votes, calculated as provided in paragraph (2) of Division IV, at least equal to a majority of the total number of votes, as so calculated, possessed by all such holders, merge or consolidate with any other corporation or corporations, or sell or lease all or substantially all of the assets of the corporation; *provided, however*, that the foregoing restriction shall not apply to (i) a merger or consolidation of the corporation with or into, or the sale or lease of all or substantially all of the assets of the corporation to, any corporation 50% or more of the voting securities of which is owned by the corporation, directly or indirectly, or (ii) any merger, consolidation, sale or lease required by order or regulation of any regulatory body, federal or state, then having jurisdiction in the premises or which shall have been approved or permitted by all such regulatory bodies. No consent or vote of the holders of the Preference Stock shall be required in respect of any transaction enumerated in this paragraph (5) if, at or prior to the time when such transaction is to take effect, provision is made for the redemption or

other retirement of all shares of the Preference Stock at the time outstanding, the affirmative vote of which would otherwise be required hereunder.

(6) No provision contained in the foregoing paragraphs (4) and (5) is intended or shall be construed to relieve the corporation from compliance with any applicable statutory provision requiring the vote or consent of a greater number of the holders of the outstanding shares of the Preference Stock.

(7) No shares of Preference Stock shall be deemed to be "outstanding", as that term is used in the preceding paragraphs (4) and (5) of this Division II, if, prior to or concurrently with the event in reference to which a determination as to the amount thereof outstanding is to be made, the requisite funds for the redemption thereof shall have been deposited in trust for that purpose and the requisite notice for the redemption thereof shall have been given or the depositary of such funds shall have been irrevocably authorized and directed to give or complete such notice of redemption.

(8) No holder of the Preference Stock, as such, shall have any preemptive right to subscribe to stock or other securities of the corporation, of any class, whether now or hereafter authorized.

III. Provisions Relating To The Common Stock

No holder of the Common Stock, as such, shall have any preemptive right to subscribe to stock or other securities of the corporation, of any class, whether now or hereafter authorized.

IV. Voting Rights

The voting rights in respect of the shares of capital stock of the corporation shall be as follows:

(1) Shares of Common Stock of the corporation shall have full voting rights. Each shareholder of record of Common Stock entitled to vote on any matter shall be entitled to one vote on such matter for every share standing in his name on the books of the corporation, except that, in all elections for directors of the corporation, each holder of shares of Common Stock shall have the right to cast as many votes in the aggregate as he shall be entitled to vote thereon, multiplied by the number of directors to be elected at such election, and each such shareholder may cast the whole number of votes for one candidate or distribute those votes among two or more candidates.

(2) No holder of shares of the Preferred Stock, as such, shall be entitled to vote for the election of directors or in respect of any matter, except as provided in paragraph (5) or (6) of Division I or in paragraph (3) or (8) of this Division IV, or as may be required by law. No holder of shares of the Preference Stock, as such, shall be entitled to vote for the election of directors or in respect of any matter, except as provided in paragraph (4) or (5) of Division II or in paragraph (4) or (8) of this Division IV, or as may be required by law. In such excepted cases, each record holder of Preferred Stock shall have, for each share of Preferred Stock held by him, and each record holder of Preference Stock shall have, for each share of Preference Stock held by him, that number of votes (including any fractional vote) determined by dividing the stated value of such share by 100, *except that*, when holders of Preferred Stock are entitled to elect directors as provided in this Division IV, and when holders of Preference Stock are entitled to elect directors as provided in this Division IV, each holder of Preferred Stock and each holder of Preference Stock, as the case may be, shall have the right to cast the number of votes attributable to him as so computed multiplied by the number of directors to be so elected in such election by the Preferred Stock or the Preference Stock, as the case may be, and each such holder may cast the whole number of votes for one candidate or distribute those votes among two or more candidates.

(3) If and when dividends payable on the Preferred Stock shall be in default in an amount equivalent to four full quarter-yearly dividends on all shares of Preferred Stock then outstanding and until all dividends then in default on the Preferred Stock shall have been paid, the record holders of the shares of Preferred Stock, voting separately as one class, shall be entitled, at each meeting of the shareholders at which directors are elected, to elect the smallest number of directors necessary to

constitute a majority of the full Board of Directors, and the record holders of the shares of Common Stock, voting separately as a class, shall be entitled at any such meeting to elect the remaining directors of the corporation, subject to the special right of the holders of shares of Preference Stock to elect directors as provided in paragraph (4) of this Division IV, if then applicable. For the purpose of exercising the right of cumulative voting, the election by the record holders of shares of Preferred Stock of the number of directors which they are entitled to elect shall be considered one election, and the election by the record holders of shares of Common Stock of the number of directors which they are entitled to elect shall be considered another election. The term of office of each director of the corporation elected pursuant to the provisions of this paragraph (3) shall terminate upon the election of his successor. At each election of directors by a class vote pursuant to the provisions of this paragraph, the class first electing the directors which it is entitled to elect shall name the directors who are to be succeeded by the directors then elected by such class, whereupon the term of office of the directors so named shall terminate. The term of office of the directors not so named shall terminate upon the election by the other class of the directors which it is entitled to elect.

(4) If and when dividends payable on the Preference Stock shall be in default in an amount equivalent to four full quarter-yearly dividends on all shares of Preference Stock then outstanding and until all dividends then in default on the Preference Stock shall have been paid, the record holders of the shares of Preference Stock, voting separately as one class, shall be entitled, at each meeting of the shareholders at which directors are elected, to elect two directors, and the record holders of the shares of Common Stock, voting separately as a class, shall be entitled at any such meeting to elect the remaining directors of the corporation, subject to the special right of the holders of shares of Preferred Stock to elect directors as provided in paragraph (3) of this Division IV, if then applicable. For the purpose of exercising the right of cumulative voting, the election by the record holders of shares of Preference Stock of the number of directors which they are entitled to elect shall be considered one election, and the election by the record holders of shares of Common Stock of the number of directors which they are entitled to elect shall be considered a separate election. The term of office of each director of the corporation elected pursuant to the provisions of this paragraph (4) shall terminate upon the election of his successor. At each election of directors by a class vote of the Preference Stock or the Common Stock pursuant to the provisions of this paragraph, the class first electing the directors which it is entitled to elect shall name the directors who are to be succeeded by the directors then elected by such class, whereupon the term of office of the directors so named shall terminate. The term of office of the directors not so named shall terminate upon the election by the other class of the directors which it is entitled to elect.

(5) If and when all dividends in default on the Preferred Stock then outstanding shall be paid, the holders of the shares of the Preferred Stock shall thereupon be divested of the special right with respect to the election of directors provided in paragraph (3) of this Division IV, and the voting power of holders of shares of the Preferred Stock and the Common Stock shall revert to the status existing before the occurrence of such default, but always subject to the same provisions for vesting such special right in the Preferred Stock in case of further like default or defaults in dividends thereon and, in the case of the Common Stock, subject to the special right of the holders of shares of Preference Stock to elect directors as provided in paragraph (4) of this Division IV, if then applicable.

(6) If and when all dividends in default on the Preference Stock then outstanding shall be paid, the holders of the shares of the Preference Stock shall thereupon be divested of the special right with respect to the election of directors provided in paragraph (4) of this Division IV, and the voting power of holders of shares of the Preference Stock and the Common Stock shall revert to the status existing before the occurrence of such default, but always subject to the same provisions for vesting such special right in the Preference Stock in case of further like default or defaults in dividends thereon.

(7) Dividends shall be deemed to have been paid, as that term is used in paragraphs (3) and (4) of this Division IV, whenever such dividends shall have been declared and paid, or declared and provision made for the payment thereof, or whenever there shall be surplus and net profits of the corporation

legally available for the payment thereof which shall have accrued since the date of the default giving rise to such special voting rights.

(8) In case of any vacancy in the Board of Directors occurring among the directors elected by the holders of the shares of the Preferred Stock, as a class, pursuant to paragraph (3) of this Division IV, the holders of the shares of the Preferred Stock then outstanding and entitled to vote may elect a successor to hold office for the unexpired term of the director whose place shall be vacant. In case of any vacancy in the Board of Directors occurring among the directors elected by the holders of the shares of the Preference Stock, as a class, pursuant to paragraph (4) of this Division IV, the holders of the shares of the Preference Stock then outstanding and entitled to vote may elect a successor to hold office for the unexpired term of the director whose place shall be vacant. In case of a vacancy in the Board of Directors occurring among the directors elected by the holders of the shares of the Common Stock, as a class, pursuant to paragraph (3) or (4) of this Division IV, the holders of the shares of the Common Stock then outstanding and entitled to vote may elect a successor to hold office for the unexpired term of the director whose place shall be vacant. In all other cases, any vacancy occurring among the directors shall be filled by the vote of a majority of the remaining directors.

(9) Whenever the holders of the shares of the Preferred Stock, as a class, become entitled to elect directors of the corporation pursuant to paragraph (3) or (8) of this Division IV, or whenever the holders of the shares of the Preference Stock, as a class, become entitled to elect directors of the corporation pursuant to paragraph (4) or (8) of this Division IV, or whenever the holders of the shares of the Common Stock, as a class, become entitled to elect directors of the corporation pursuant to paragraph (3), (4) or (8) of this Division IV, a special meeting of the holders of the shares of the Preferred Stock, of the holders of the shares of the Preference Stock or of the holders of the shares of the Common Stock, as the case may be, for the election of such directors, shall be held at any time thereafter upon call by the holders of not less than 1,000 shares of the Common Stock, shares of the Preferred Stock with an aggregate stated value of not less than $100,000 or shares of the Preference Stock with an aggregate stated value of not less than $100,000 as the case may be, or upon call by the Secretary of the corporation at the request in writing of any stockholder addressed to him at the principal office of the corporation. If no such special meeting be called or be requested to be called, the respective elections of the directors to be elected by the holders of the shares of the Preferred Stock, the Preference Stock, and the Common Stock, each voting as a class, shall take place at the next annual meeting of the stockholders of the corporation next succeeding the accrual of such special voting right. At all meetings of stockholders at which directors are elected during such time as the holders of shares of the Preferred Stock or the holders of shares of the Preference Stock shall have the special right, each voting separately as one class, to elect directors pursuant to this Division IV, the presence in person or by proxy of the holders of a majority of the outstanding shares of the Common Stock shall be required to constitute a quorum of such class for the election of directors, the presence in person or by proxy of the holders of that number of the outstanding shares of all series of the Preference Stock having a majority of the votes entitled to be cast by the Preference Stock at the meeting shall be required to constitute a quorum of such class for the election of directors, and the presence in person or by proxy of the holders of that number of the outstanding shares of all series of the Preferred Stock having a majority of the votes entitled to be cast by the Preferred Stock at the meeting shall be required to constitute a quorum of such class for the election of directors; provided, however, that the absence of a quorum of the holders of stock of any such class shall not prevent the election at any such meeting or adjournment thereof of directors by any other such class if the necessary quorum of the holders of stock of such class is present in person or by proxy at such meeting; and *provided further* that in the absence of a quorum of the holders of stock of any such class, the holders of the stock of such class who are present in person or by proxy shall have power upon the majority vote of those votes represented at the meeting to adjourn the election of the directors to be elected by such class from day to day without notice other than announcement at the meeting until the requisite number of votes of such class shall be represented by stockholders present in person or by proxy.

(10) Notwithstanding the provisions of Article Seventh and Article Eighth of the Articles of Incorporation of the corporation and any provisions of the By-laws of the corporation, during any period in which both holders of shares of Preferred Stock and holders of shares of Preference Stock, each voting separately as a class, shall have the special right to elect directors as provided in this Division IV, the number of directors constituting the full Board of Directors shall not be less than seven.

(11) In consideration of the issue by the corporation, and the purchase by the holders thereof, of shares of the capital stock of the corporation, each and every present and future holder of shares of the capital stock of the corporation shall be conclusively deemed, by acquiring or holding such shares, to have expressly consented to all and singular the terms and provisions of this Division IV and to have agreed that the voting rights of such holders and the restrictions and qualifications thereof shall be as set forth in the Articles of Incorporation of the corporation.

(12) No shares of Preferred Stock or Preference Stock shall be deemed to be "outstanding", as that term is used in this Division IV, if, prior to or concurrently with the event in reference to which a determination as to the amount thereof outstanding is to be made, the requisite funds for the redemption thereof shall be deposited in trust for that purpose and the requisite notice for the redemption thereof shall be given or the depositary of such funds shall be irrevocably authorized and directed to give or complete such notice of redemption.

V. VOTE REQUIRED FOR CERTAIN ACTIONS

Except as otherwise provided in paragraphs (5) and (6) of Division I, in paragraphs (4) and (5) of Division II and paragraphs (3), (4) and (8) of Division IV, to the extent applicable law permits the Articles of Incorporation expressly to provide for a lesser vote than that otherwise provided by law to take any action for which a vote of shareholders is required, including, without limitation, approval of an amendment to the Articles of Incorporation of the corporation, a plan of merger or share exchange, a sale of all or substantially all of the assets of the corporation other than in the regular course of business or the dissolution of the corporation, such action or approval shall be with respect to each voting group entitled to vote on the proposal, by a majority of all votes entitled to be cast. Shareholder approval shall not be required in connection with the creation or issuance of rights, options or warrants to purchase shares of the corporation to be issued to directors, officers or employees of the corporation or any subsidiary thereof, and not to shareholders generally, to the extent applicable law permits the Articles of Incorporation expressly to so provide.

SIXTH: The corporation shall begin business as soon as authorized, as provided by statute, and shall have perpetual duration.

SEVENTH: The affairs of the corporation shall be conducted by a Board of nine directors, or such other number of directors, not less than three, as shall from time to time be prescribed by the By-laws, who, except as otherwise provided in this Article Seventh, shall be elected at each annual meeting of the corporation on a day to be fixed in the By-laws, for a term expiring at the next succeeding annual meeting of the corporation. During such time as there are nine or more directors, and subject to the special rights of the holders of shares of the Preferred Stock and the holders of the shares of the Preference Stock to elect directors as provided in paragraphs (3), (4) and (8) of Division IV of Article Fifth and as specified in this Article Seventh, the directors shall be divided into three groups, as nearly equal in number as possible, and the term of office of the first group will expire at the 1991 annual meeting of the corporation, the term of office of the second group will expire at the 1992 annual meeting of the corporation and the term of office of the third group will expire at the 1993 annual meeting of the corporation, and at each annual meeting commencing with the 1991 annual meeting, directors elected to succeed those whose terms expire shall be elected for a term of office expiring at the third succeeding annual meeting of the corporation after their election or, in the event of a director elected to succeed a director elected to fill a vacancy, for a term expiring at the annual meeting at which the term of the director whose termination of office first created such vacancy would have expired. Notwithstanding the

preceding sentence, the term of office of all directors shall expire at the special or annual meeting of the corporation at which the holders of the shares of the Preferred Stock are entitled to elect directors as provided in paragraph (3) of Division IV of Article Fifth or the holders of the shares of the Preference Stock are entitled to elect directors as provided in paragraph (4) of Division IV of Article Fifth; and so long as the holders of the shares of either the Preferred Stock or the Preference Stock shall be entitled to such special voting rights in the election of directors, the directors shall be elected and the term of each director shall expire as provided in said Division IV of Article Fifth. At such time as the holders of the shares of the Preferred Stock and the holders of the shares of the Preference Stock no longer have the special right to elect directors as provided in paragraph (5) or (6) of Division IV of Article Fifth, the Board shall again be divided into three groups as provided in this Article Seventh, the term of office of the first group to expire at the first annual meeting after the meeting at which directors are again elected by the holders of shares of the Common Stock, the term of office of the second group to expire at the second annual meeting after such meeting and the term of office of the third group to expire at the third annual meeting after such meeting (provided that no director shall be elected at such meeting for a term longer than three years), and directors elected to succeed those whose terms expire shall again be elected for a term of office expiring at the third succeeding annual meeting of the corporation after their election or, in the event of a director elected to succeed a director elected to fill a vacancy, for a term expiring at the annual meeting at which the term of the director whose termination of office first created such vacancy would have expired; subject to the same provisions for vesting in the holders of the shares of the Preferred Stock and the holders of the shares of the Preference Stock of such special rights in the election of directors as provided in Division IV of Article Fifth. The directors, as soon as practicable after each annual meeting, shall elect a President, one or more Vice-Presidents, a Secretary, a Treasurer, a Controller, and such other officers as may, from time to time, be provided for by the Board.

EIGHTH: The authority to make and to change, the By-laws is hereby vested in the Board of Directors, subject to the power of the stockholders to change or repeal the By-laws.

NINTH: The private property of the stockholders shall not be subject to the payment of corporate debts to any extent whatsoever.

TENTH: 1. No director of the corporation shall be personally liable to the corporation or its shareholders for monetary damages for any breach of his or her duties as a director, except for liability (a) for any transaction in which the director's personal financial interest is in conflict with the financial interests of the corporation or its shareholders; (b) for acts or omissions not in good faith or which involve intentional or wilful misconduct or are known to the director to be a violation of law; (c) for any vote for or assent to an unlawful distribution to shareholders as prohibited under Kentucky Revised Statutes 271B.8-330 and Virginia Stock Corporation Act § 13.1-692; or (d) for any transaction from which the director derived an improper personal benefit.

2. If either the Kentucky Business Corporation Act or the Virginia Stock Corporation Act is amended after approval by the shareholders of this Article to authorize corporate action further eliminating or limiting the personal liability of directors, and these Articles could be amended to effect such change, then the liability of a director of the corporation shall be eliminated or limited to the fullest extent permitted by the Kentucky Business Corporation Act and the Virginia Stock Corporation Act, as so amended, and without the necessity for further shareholder action in respect thereof.

3. Any repeal or modification of this Article by the shareholders of the corporation shall not adversely affect any right or protection of a director of the corporation hereunder in respect of any act or omission occurring prior to the time of such repeal or modification.

ELEVENTH: 1. The corporation shall indemnify a director, officer, employee, or agent who was wholly successful, on the merits or otherwise, in the defense of any proceeding to which he was a party because he is or was a director, officer, employee, or agent of the corporation against reasonable expenses incurred by him in connection with the proceeding.

2. Except as provided in paragraph 3 of this Article, the corporation shall indemnify an individual made a party to a proceeding because he is or was a director, officer, employee, or agent of the corporation against liability incurred in the proceeding if: (a) he conducted himself in good faith; and (b) he reasonably believed: (i) in the case of conduct in his official capacity with the corporation, that his conduct was in its best interest; and (ii) in all other cases, that his conduct was at least not opposed to its best interest; and (iii) in the case of any criminal proceeding, he had no reasonable cause to believe his conduct was unlawful.

3. The corporation shall not indemnify a director under paragraph 2 of this Article (a) in connection with a proceeding by or in the right of the corporation in which the director was adjudged liable to the corporation; or (b) in connection with any other proceeding charging improper personal benefit to him, whether or not involving action in his official capacity, in which he was adjudged liable on the basis that personal benefit was improperly received by him.

4. Indemnification under this Article in connection with a proceeding by or in the right of the corporation shall be limited to reasonable expenses incurred in connection with the proceeding.

5. If, after approval by the shareholders of this Article, either the Kentucky Business Corporation Act or the Virginia Stock Corporation Act is amended to extend the permissible indemnification of a director, officer, employee, or agent of the corporation and these Articles could be amended to effect such change, then the indemnification of a director, officer, employee, or agent of the corporation shall be afforded to the fullest extent permitted by the Kentucky Business Corporation Act and the Virginia Stock Corporation Act, as so amended, and without the necessity for further shareholder action in respect thereof.

6. In addition to (and not by way of limitation of) the foregoing provisions of this Article Eleventh and the provisions of the Kentucky Business Corporation Act and the provisions of the Virginia Stock Corporation Act, each person (including the heirs, executors, administrators and estate of such person) who is or was or had agreed to become a director, officer, employee or agent of the corporation and each person (including the heirs, executors, administrators and estate of such person) who is or was serving or who had agreed to serve at the request of the directors or any officer of the corporation as a director, officer, employee, trustee, partner or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be indemnified by the corporation to the fullest extent permitted by the Kentucky Business Corporation Act and the Virginia Stock Corporation Act, or any other applicable laws as presently or hereafter in effect. Without limiting the generality or the effect of the foregoing, the corporation is authorized to enter into one or more agreements with any person which provide for indemnification greater or different than that provided in this Article Eleventh.

7. Any repeal or modification of this Article by the shareholders of the corporation shall not adversely affect any indemnification of any person hereunder in respect of any act or omission occurring prior to the time of such repeal or modification.

TWELFTH: Except as otherwise provided in paragraph (9) of Division IV of Article Fifth, no special meeting of shareholders shall be held upon the demand of shareholders of the corporation unless the holders of at least fifty-one percent (51%) of all the votes entitled to be cast on each issue proposed to be considered at the special meeting shall have signed, dated and delivered to the corporation's secretary one or more written demands for the meeting describing the purpose or purposes for which it is to be held.

IN TESTIMONY WHEREOF, the foregoing Amended and Restated Articles of Incorporation are executed by the corporation by its President, this 27th day of October, 1992.

KENTUCKY UTILITIES COMPANY

By:

JOHN T. NEWTON, *Chairman and President*

STATE OF KENTUCKY }
COUNTY OF FAYETTE } ss.

I, the undersigned, a Notary Public in and for the State and County aforesaid, do hereby certify that on this 27th day of October, 1992, personally appeared before me John T. Newton, who being by me first duly sworn declared that he is Chairman and President of KENTUCKY UTILITIES COMPANY, that he signed the foregoing Amended and Restated Articles of Incorporation of KENTUCKY UTILITIES COMPANY, and that the statements therein contained are true.

WITNESS my signature this 27th day of October, 1992.

Marilyn B Ballard
MARILYN BALLARD
Notary Public, State at Large, Kentucky
My commission expires October 27, 1994.

The foregoing instrument was
prepared by George S. Brooks II,
One Quality Street, Lexington, Kentucky 40507.

George S. Brooks II
GEORGE S. BROOKS II

#28494

RECEIVED & FILED
$40.00
DEC 14 4 20 PM '93

ARTICLES OF AMENDMENT
TO
AMENDED AND RESTATED ARTICLES OF INCORPORATION
OF
KENTUCKY UTILITIES COMPANY

To the Secretary of State of Kentucky and the State Corporation Commission of Virginia (the "Commission"):

Pursuant to the provisions of Chapter 271B of the Kentucky Revised Statutes and Title 13.1 of the Code of Virginia, the undersigned corporation hereby amends its Articles of Incorporation, and for that purpose, submits the following statements:

1. The name of the corporation is KENTUCKY UTILITIES COMPANY.

2. The board of directors, acting on behalf of the corporation, duly adopted the following amendment (the "Amendment") to its Amended and Restated Articles of Incorporation (the "Articles") determining the terms of a series of Preferred Stock in accordance with authority granted to the board by the Articles. The Amendment adds new paragraph (12) to Division I of Article FIFTH of the Articles as follows:

785337

(12)(a) An additional series of the Preferred Stock of the corporation, consisting of 200,000 shares, is hereby created and established out of the authorized and unissued shares of the Preferred Stock, without par value, of the corporation; said shares, and each share thereof, shall be designated "6.53% Preferred Stock"; the stated value of each share of said series shall be $100 and all of said 200,000 shares of said series are hereby authorized to be issued by the corporation.

(b) The rate of dividend per annum payable in respect of each share of said series shall be 6.53% of the stated value of each such share, and dividends on the shares of said series at said rate per annum shall be computed on the basis of a 360-day year consisting of 30-day months, shall be payable on March 1, June 1, September 1 and December 1 in each year commencing on March 1, 1994, and shall be cumulative from and including the date of issuance.

(c) The shares of said series are not redeemable prior to December 1, 2003. On and after December 1, 2003 the shares of said series shall be subject to redemption at the option of the corporation, in whole at any time or in part from time to time, upon the notice and in the manner provided in paragraph (4) of Division I of Article FIFTH of the Articles, at the applicable

redemption price per share set forth below, plus, in each case, an amount equal to accrued and unpaid dividends to the date of redemption.

Redemption Dates (inclusive)	Redemption Price Per Share
December 1, 2003 through November 30, 2004	$ 103.265
December 1, 2004 through November 30, 2005	$ 102.939
December 1, 2005 through November 30, 2006	$ 102.612
December 1, 2006 through November 30, 2007	$ 102.286
December 1, 2007 through November 30, 2008	$ 101.959
December 1, 2008 through November 30, 2009	$ 101.633
December 1, 2009 through November 30, 2010	$ 101.306
December 1, 2010 through November 30, 2011	$ 100.980
December 1, 2011 through November 30, 2012	$ 100.653
December 1, 2012 through November 30, 2013	$ 100.327
December 1, 2013 and thereafter	$100.00

(d) The shares of said series shall be subject to all the terms, provisions and restrictions set forth in the Articles with respect to shares of the Preferred Stock of the Company and, except only as to the rate of dividend per annum payable in respect of the shares of said series, the redemption price and the terms and conditions of redemption applicable to the shares of said series, and except as otherwise provided in the Articles, the shares of said series shall have the same relative rights and preferences as, shall be of equal rank with, and shall confer rights equal to those conferred by, all other shares of the Preferred Stock of the corporation. All shares of said series redeemed and retired pursuant to the provisions of this paragraph (12), and all shares of said series purchased or otherwise acquired and retired by the corporation, shall be cancelled, shall not be reissued as shares of said series and shall constitute authorized and unissued shares of the Preferred Stock of the corporation; and, so long as any shares of said series are outstanding, the corporation shall not issue any of its authorized and unissued shares of Preferred Stock as additional shares of said series. Each notice of redemption of shares of said series to be redeemed pursuant to the provisions of this paragraph (12) shall

state that the redemption shall be of shares of said series, the date and place of redemption, the redemption price and the number of shares held by such holder to be redeemed.

3. The Amendment was adopted on December 13, 1993.

4. The Amendment, and the certificate related thereto issued by the Commission, shall be effective on December 21, 1993.

5. The Amendment was duly adopted by the board of directors of the corporation without shareholder approval pursuant to Section 271B.6-020 of the Kentucky Revised Statutes and Section 13.1-639 of the Code of Virginia, and shareholder action was not required.

Dated: December 14, 1993

KENTUCKY UTILITIES COMPANY

By: John T. Newton

Chairman and President

STATE OF KENTUCKY
COUNTY OF FAYETTE SS.

I, the undersigned, a Notary Public in and for the State and County aforesaid, do hereby certify that on this 14th day of December, 1993, personally appeared before me John T. Newton, who being by me first duly sworn declared that he is Chairman and President of Kentucky Utilities Company, that he signed the foregoing Amended and Restate Articles of Incorporation of Kentucky Utilities Company, and that the statements therein contained are true.

WITNESS my signature this 14th day of December, 1993.

George S. Brooks II

George S. Brooks II
Notary Public, State at Large, Kentucky
My commission expires January 19, 1997

The foregoing instrument was prepared by George S. Brooks II, One Quality Street, Lexington, Kentucky 40507

George S. Brooks II

George S. Brooks II

0028494.09 Ghance PAOA
Trey Grayson
Secretary of State
Received and Filed
04/08/2004 12:42:02 PM
Fee Receipt: $40.00

ARTICLES OF AMENDMENT
TO
ARTICLES OF INCORPORATION
OF
KENTUCKY UTILITIES COMPANY

Pursuant to the provisions of the Kentucky Revised Statutes and the Virginia Corporation Act, the following Articles of Amendment to the Articles of Incorporation of Kentucky Utilities Company, a Kentucky and Virginia corporation (the "Corporation"), are hereby adopted:

FIRST: The name of the Corporation is Kentucky Utilities Company.

SECOND: The text of the amendment to Article Seventh of the Corporation's Articles of Incorporation is as follows:

"**SEVENTH**: All corporate powers shall be exercised by or under the authority of, and the business and affairs of the corporation managed under the direction of, its Board of Directors. The number of directors shall be fixed by resolution of the Board of Directors from time to time.

The Board of Directors of the corporation, to the extent not prohibited by law, shall have the power to cause the corporation to repurchase its own shares and shall have the power to make distributions from time to time to the corporation's shareholders."

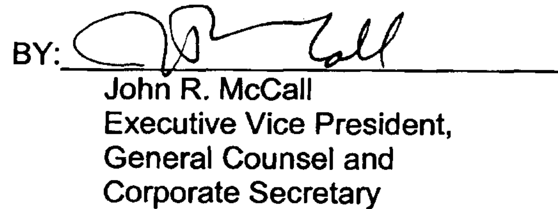
THIRD: The above designated amendments do not provide for an exchange, reclassification or cancellation of issued shares of stock of the Corporation.

FOURTH: The designated amendments were adopted by the Corporation's Board of Directors on July 1, 2002, and submitted for approval by the Corporation's sole shareholder entitled to vote. The Corporation has 31,817,878 outstanding shares of common stock, without

par value, which are entitled to vote on the amendment. One hundred percent of the common shares were indisputably represented at a duly called shareholders' meeting held on December 16, 2003, with 31,817,878 of the common shares indisputably cast in favor of the amendment, such vote being sufficient for approval of the amendment.

DATED: February 6, 2004

Kentucky Utilities Company



BY:________________________
John R. McCall
Executive Vice President,
General Counsel and
Corporate Secretary

o:\board\corp\corp-doc\ku art amd.doc

ARTICLES OF AMENDMENT
TO
ARTICLES OF INCORPORATION
OF
KENTUCKY UTILITIES COMPANY

Pursuant to the provisions of the Kentucky Revised Statutes and the Virginia Corporation Act, the following Articles of Amendment to the Articles of Incorporation of Kentucky Utilities Company, a Kentucky and Virginia corporation (the "Corporation"), are hereby adopted:

FIRST: The name of the Corporation is Kentucky Utilities Company.

SECOND: The text of the amendment to Article Seventh of the Corporation's Articles of Incorporation is as follows:

"**SEVENTH**: All corporate powers shall be exercised by or under the authority of, and the business and affairs of the corporation managed under the direction of, its Board of Directors. The number of directors shall be fixed by resolution of the Board of Directors from time to time.

The Board of Directors of the corporation, to the extent not prohibited by law, shall have the power to cause the corporation to repurchase its own shares and shall have the power to make distributions from time to time to the corporation's shareholders."

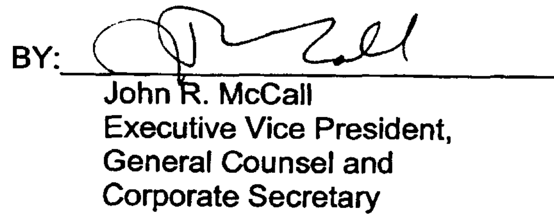
THIRD: The above designated amendments do not provide for an exchange, reclassification or cancellation of issued shares of stock of the Corporation.

FOURTH: The designated amendments were adopted by the Corporation's Board of Directors on July 1, 2002, and submitted for approval by the Corporation's sole shareholder entitled to vote. The Corporation has 31,817,878 outstanding shares of common stock, without

par value, which are entitled to vote on the amendment. One hundred percent of the common shares were indisputably represented at a duly called shareholders' meeting held on December 16, 2003, with 31,817,878 of the common shares indisputably cast in favor of the amendment, such vote being sufficient for approval of the amendment.

DATED: February 6, 2004

Kentucky Utilities Company



BY:____________________________

John R. McCall
Executive Vice President,
General Counsel and
Corporate Secretary

o:\board\corp\corp-doc\ku art amd.doc

Application – Exhibit 1

Louisville Gas and Electric Company - Articles of Incorporation

As filed November 6, 1996, as Amended April 8, 2004

Trey Grayson
SECRETARY OF STATE

CERTIFICATE

I, Trey Grayson, Secretary of State for the Commonwealth of Kentucky, do hereby certify that the foregoing writing has been carefully compared by me with the original thereof, now in my official custody as Secretary of State and remaining on file in my office, and found to be a true and correct copy of **AMENDED AND RESTATED ARTICLES OF INCORPORATION OF**

LOUISVILLE GAS AND ELECTRIC COMPANY FILED NOVEMBER 6, 1996,

ARTICLES OF AMENDMENT FILED APRIL 8, 2004.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my offical seal at Frankfort, Kentucky this 14th day of November, 2005.

Trey Grayson
Secretary of State
Commonwealth of Kentucky
(Printed By: BWeber - Certificate ID: 22597)

#0032196-A

CERTIFICATE

Pursuant to the provisions of KRS 271B.10-070, Louisville Gas and Electric Company, a Kentucky corporation (the "Company"), files herewith Articles of Amendment and Restated Articles of Incorporation and hereby certifies that:

FIRST: The name of the Company is Louisville Gas and Electric Company.

SECOND: The Articles of Amendment and Restated Articles of Incorporation (the "Restatement") filed herewith contains no amendments to the Company's Articles of Incorporation which require shareholder approval.

THIRD: Articles First through Fourteenth of the Company's Articles of Incorporation are restated in their entirety as set forth in the Restatement filed herewith, a copy of which is attached hereto.

FOURTH: The Restatement of the Company's Articles of Incorporation was adopted by the Company's Board of Directors as of September 4, 1996.

Dated: September 4, 1996.

LOUISVILLE GAS AND ELECTRIC COMPANY

By:
John R. McCall
Title: Executive Vice President, General Counsel and Corporate Secretary

N:\MURPHY\LT\LITVLGE.CRT

RECEIVED & FILED
NOV 5 2 10 PM '96

ARTICLES OF AMENDMENT AND RESTATED ARTICLES OF INCORPORATION OF LOUISVILLE GAS AND ELECTRIC COMPANY

Pursuant to the provisions of KRS 271B.10-030 and KRS 271B.10-060, Louisville Gas and Electric Company, a Kentucky corporation (the "Company"), hereby adopts the following Articles of Amendment to its Amended and Restated Articles of Incorporation, as amended, and restates its Articles of Incorporation, as amended:

FIRST: The name of the Company is Louisville Gas and Electric Company.

SECOND: These Articles of Amendment and Restated Articles of Incorporation (the "Restatement") do not contain any amendments to the Company's Amended and Restated Articles of Incorporation as amended, requiring shareholder approval and were adopted by the Company's Board of Directors on September 4, 1996.

THIRD: The amendments contained in the Restatement do not provide for an exchange, reclassification or cancellation of issued shares of stock of the Company.

FOURTH: The Restatement together with the amendments contained therein, supersede the original Amended and Restated Articles of Incorporation, as amended.

FIFTH: The Restatement, containing the amendments adopted, shall read in its entirety as set forth on Exhibit A attached hereto.

Dated: September 4, 1996

LOUISVILLE GAS AND ELECTRIC COMPANY

By:
John R. McCall
Title: Executive Vice President, General Counsel and Corporate Secretary

O:\BOARD\CORP DOC\UTILITY AMD

Exhibit A

ARTICLES OF AMENDMENT AND RESTATED ARTICLES OF INCORPORATION OF LOUISVILLE GAS AND ELECTRIC COMPANY

"**FIRST**. The corporate name is

LOUISVILLE GAS AND ELECTRIC COMPANY.

SECOND. The mailing address of the principal office of Louisville Gas and Electric Company (herein, the "Company") is 220 West Main Street, P. O. Box 32010, Louisville, Jefferson County, Kentucky 40232.

THIRD. The address of the registered office of the Company is 220 West Main Street, P. O. Box 32010, Louisville, Kentucky, 40232, and the name of the Company's registered agent at that office is John R. McCall.

FOURTH. The purpose of the Company is the transaction of any or all lawful business for which corporations may be incorporated under the Business Corporation Law of Kentucky, as amended.

FIFTH. The Capital stock of the Company shall be divided into (a) one million, seven hundred twenty thousand (1,720,000) shares of Preferred Stock of the par value of $25 each, (b) six million, seven hundred fifty thousand (6,750,000) shares of Preferred Stock (without par value) (the aggregate stated value thereof not to exceed $225,000,000), and (c) seventy-five million (75,000,000) shares of Common Stock without par value. The Preferred Stock and Preferred Stock (without par value) shall be issued in series having the preferences, rights, qualifications and restrictions hereinafter provided for.

PREFERRED STOCK AND PREFERRED STOCK (WITHOUT PAR VALUE)

(1) In addition to the series of Cumulative Preferred Stock, described in paragraphs (10) through (13) hereof, the Board of Directors is hereby authorized, subject to and in accordance with the provisions of paragraphs (1) through (9), inclusive, to cause Preferred Stock (without par value) to be issued in series, each such series to have such variations in respect thereof as may be determined by the Board of Directors prior to the issuance thereof.

The shares of the Preferred Stock of different series may vary as to:

(a) The distinctive serial designations and number of shares of such series;

(b) The rate of dividends (within such limits as shall be permitted by law not exceeding 8% per annum) payable on the shares of the particular series;

(c) The prices (not less than the amount limited by law) and terms upon which the shares of the particular series may be redeemed; and

(d) The amount or amounts which shall be paid to the holders of the shares of particular series in case of voluntary or involuntary dissolution or any distribution of assets.

The shares of the Preferred Stock (without par value) of different series may vary as to:

(a) The distinctive serial designations and number of shares of such series;

(b) The stated value thereof;

(c) The rate or rates of dividends (within such limits as shall be permitted by law) payable on the shares of the particular series, which may be expressed in terms of a formula or other method by which such rate or rates shall be calculated from time to time, and the dividend periods, including the date or dates on which dividends are payable;

(d) The prices (not less than the amount limited by law) and terms (including sinking fund provisions) upon which the shares of the particular series may be redeemed; and

(e) The amount or amounts which shall be paid to the holders of the shares of the particular series in case of voluntary or involuntary dissolution or any distribution of assets.

The shares of all series of Preferred Stock and Preferred Stock (without par value) shall in all other respects be identical, except that the Preferred Stock (without par value) shall not have the voting rights of the Preferred Stock provided by paragraph 9(A) hereof.

(2) The holders of each series of the Preferred Stock and the Preferred Stock (without par value) at the time outstanding shall be entitled, pari passu, with the holders of every other series of the Preferred Stock and the Preferred Stock (without par value), to receive, but only when and as declared by the Board of Directors, out of funds legally available for the payment of dividends, cumulative preferential dividends, at the dividend rate or rates for the particular series fixed therefor as herein provided, payable on such dates or for such period or periods as may be specified by the Board of Directors at the time of establishment of such series, to shareholders of record on the respective dates, not exceeding thirty (30) days preceding such dividend payment dates, fixed for the purpose by the Board of Directors. No dividends shall be declared on any series of the Preferred Stock or the Preferred Stock (without par value) in respect of any dividend

period unless there shall likewise be declared on all shares of all other series of the Preferred Stock and the Preferred Stock (without par value) at the time outstanding, like proportionate dividends, ratably, in proportion to the respective dividend rates fixed therefor, in respect of the same dividend period, to the extent that such shares are entitled to receive dividends for such dividend period. The dividends on shares of all series of the Preferred Stock and the Preferred Stock (without par value) shall be cumulative. In the case of all shares of each particular series, the dividends on shares of such series shall be cumulative from the date of issue thereof unless the Board of Directors at the time of establishing such series specifies that such dividends shall be cumulative from the first day of the current dividend period in which shares of such series shall have been issued, so that unless dividends on all outstanding shares of each series of the Preferred Stock and the Preferred Stock (without par value), at the dividend rate or rates and from the dates for accumulation thereof fixed as herein provided shall have been paid for all past dividend periods, but without interest on cumulative dividends, no dividends shall be paid or declared and no other distribution shall be made on the Common Stock and no Common Stock shall be purchased or otherwise acquired for value. The holders of the Preferred Stock and the Preferred Stock (without par value) of any series shall not be entitled to receive any dividends thereon other than the dividends referred to in this paragraph (2).

(3) The Company, by action of its Board of Directors, may redeem the whole or any part of any series of the Preferred Stock or the Preferred Stock (without par value), at any time or from time to time, by paying in cash the redemption price of the shares of the particular series, fixed therefor as herein provided, together with a sum in the case of each share of each series so to be redeemed, computed at the dividend rate or rates for the series of which the particular share is a part, from the date from which dividends on such share became cumulative to the date fixed for such redemption, less the aggregate of the dividends theretofore or on such redemption date paid thereon. Notice of every such redemption shall be given (i) at such time, in such form and in such manner as may have been determined and fixed for each series of Preferred Stock and Preferred Stock (without par value) at the time of establishment of such series or (ii) if such matters shall not have been so fixed by the Board of Directors, by publication at least once in one daily newspaper printed in the English language and of general circulation in Louisville, Kentucky, the first publication in such newspaper to be at least thirty (30) days prior to the date fixed for such redemption, and at least thirty (30) days' previous notice of every such redemption shall also be mailed to the holders of record of the shares of the Preferred Stock or the Preferred Stock (without par value) so to be redeemed, at their respective addresses as the same shall appear on the books of the Company; but no failure to mail such notice nor any defect therein or in the mailing thereof shall affect the validity of the proceedings for the redemption of any shares of the Preferred Stock or the Preferred Stock (without par value) so to be redeemed. In case of redemption of part only of any series of the Preferred Stock or the Preferred Stock (without par value) at the time outstanding, the Board of Directors shall fix and determine the stock to be so redeemed either by lot or by redemption pro rata or by designation of particular shares for redemption or in any other manner the Board of Directors may see fit. The Board of Directors shall have full power and authority, subject to the limitations and provisions herein contained, to prescribe the manner in which, and the terms and conditions upon which, the shares of the

Preferred Stock or the Preferred Stock (without par value) shall be redeemed from time to time. If such notice of redemption shall have been duly given and if on or before the redemption date specified in such notice all funds necessary for such redemption shall have been set aside by the Company, separate and apart from its other funds, in trust for the account of the holders of the shares to be redeemed, so as to be and continue to be available therefor, then, notwithstanding that any certificate for such shares so called for redemption shall not have been surrendered for cancellation, from and after the date fixed for redemption, the shares represented thereby shall no longer be deemed outstanding, the right to receive dividends thereon shall cease to accrue and all rights with respect to such shares so called for redemption shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive out of the funds so set aside in trust, the amount payable upon redemption thereof, without interest; provided, however, that the Company may, after giving notice of any such redemption as hereinbefore provided or after giving to the bank or trust company hereinafter referred to irrevocable authorization to give such notice, and at any time prior to the redemption date specified in such notice, deposit in trust, for the account of the holders of the shares to be redeemed, so as to be and continue to be available therefor, funds necessary for such redemption with a bank or trust company in good standing, organized under the laws of the United States of America or of the Commonwealth of Kentucky or of the State of New York doing business in the City of Louisville, or in the Borough of Manhattan, the City of New York, and having capital, surplus and undivided profits aggregating at least $1,000,000, designated in such notice of redemption, and, upon such deposit in trust, all shares with respect to which such deposit shall have been made shall no longer be deemed to be outstanding, and all rights with respect to such shares shall forthwith cease and terminate, except only the right of the holders thereof to receive at any time from and after the date of such deposit, the amount payable upon the redemption thereof, without interest.

(4) Before any amount shall be paid to, or any assets distributed among, the holders of the Common Stock or any other stock ranking junior to the Preferred Stock and the Preferred Stock (without par value) of each series, upon any liquidation, dissolution or winding up of the Company, and after paying or providing for the payment of all creditors of the Company, the holders of each series of the Preferred Stock and the Preferred Stock (without par value) at the time outstanding shall be entitled, pari passu, with the holders of every other series of the Preferred Stock and the Preferred Stock (without par value), to be paid in cash the amount for the particular series fixed therefor as herein provided, together with a sum in the case of each share of each series, computed at the dividend rate or rates for the series of which the particular share is a part, from the date from which dividends on such share became cumulative to the date fixed for the payment of such distributive amount, less the aggregate of the dividends theretofore or on such date paid thereon; but no payments on account of such distributive amounts shall be made to the holders of any series of the Preferred Stock or the Preferred Stock (without par value) unless there shall likewise be paid at the same time to the holders of each other series of the Preferred Stock and the Preferred Stock (without par value) at the time outstanding, like proportionate distributive amounts, ratably, in proportion to the full distributive amounts to which they are respectively entitled as herein provided. The holders of the Preferred Stock and

the Preferred Stock (without par value) of any series shall not be entitled to receive any amounts with respect thereto upon any liquidation. dissolution or winding up of the Company other than as provided in this paragraph. Neither the consolidation or merger of the Company with any other corporation or corporations. nor the sale or transfer by the Company of all or any part of its assets. shall be deemed to be a liquidation. dissolution or winding up of the Company.

(5) Whenever the full dividends on all series of the Preferred Stock and the Preferred Stock (without par value) at the time outstanding for all past dividend periods shall have been paid or declared and set apart for payment. then such dividends as may be determined by the Board of Directors may be declared and paid on the Common Stock or any other stock ranking junior to the Preferred Stock and the Preferred Stock (without par value) of each series, but only out of funds legally available for the payment of dividends; provided. however, that no dividend shall be declared or paid and no other distributions shall be made on the Common Stock or on any such other stock and no shares of the Common Stock or of any such other stock shall be purchased or otherwise acquired for value out of capital surplus arising from a reduction in capital.

(6) In the event of any liquidation, dissolution or winding up of the Company, all assets and funds of the Company remaining after paying or providing for the payment of all creditors of the Company and after paying or providing for the payment to the holders of all series of the Preferred Stock and the Preferred Stock (without par value) of the full distributive amounts to which they are respectively entitled as herein provided, shall be divided among and paid to the holders of the Common Stock or any other stock ranking junior to the Preferred Stock and the Preferred Stock (without par value) of each series, according to their respective rights and interests.

(7) (A) So long as any shares of the Preferred Stock or the Preferred Stock (without par value) of any series are outstanding, the Company shall not, without the affirmative vote or written consent of the holders of at least two-thirds of the total number of shares of such Preferred Stock and Preferred Stock (without par value) then outstanding:

> Amend, alter, change or repeal any of the express terms of any series of the Preferred Stock or the Preferred Stock (without par value) then outstanding in a manner prejudicial to the holders thereof; provided, however, that if any such amendment, alteration, change or repeal shall be prejudicial to the holders of one or more, but not all, of the series of Preferred Stock or the Preferred Stock (without par value) at the time outstanding, only such consent of the holders of two-thirds of the total number of shares of all series so affected shall be required.

(B) So long as any shares of the Preferred Stock or the Preferred Stock (without par value) of any series are outstanding, the Company shall not, without the affirmative

vote or written consent of the holders of a majority of the total number of shares of such Preferred Stock and Preferred Stock (without par value) then outstanding:

(a) Create or authorize any class of stock ranking prior to or (other than a series of the 1,720,000 authorized shares of Preferred Stock or 6,750,000 authorized shares of Preferred Stock (without par value)) ranking on a parity with any series of the Preferred Stock and the Preferred Stock (without par value) as to dividends or distributions, or create or authorize any obligation or security convertible into shares of stock of any such class; or

(b) Issue, sell or otherwise dispose of any shares of the Preferred Stock or the Preferred Stock (without par value), or of any class of stock ranking prior to or on a parity with the Preferred Stock and the Preferred Stock (without par value) of each series as to dividends or distributions, unless the net income of the Company, determined in accordance with generally accepted accounting practices, to be available for the payment of dividends on the Preferred Stock, the Preferred Stock (without par value) and any class of stock ranking prior thereto or on a parity therewith as aforesaid, for a period of twelve (12) consecutive calendar months within the fifteen (15) calendar months immediately preceding the issuance, sale or disposition of such stock, is at least equal to twice the annual dividend requirements on the entire amount of all Preferred Stock, all Preferred Stock (without par value), and of all such other classes of stock ranking prior thereto or on a parity therewith, as to dividends or distributions to be outstanding immediately after the issuance, sale of disposition of such additional shares; provided that for purposes of calculating the annual dividend requirements applicable to any series of Preferred Stock (without par value) proposed to be issued which will have dividends determined according to an adjustable, floating or variable rate, the dividend rate used shall be the higher of (1) the dividend rate applicable to such series of Preferred Stock (without par value) on the date of such calculation or (2) the average dividend rate payable on all series of Preferred Stock and Preferred Stock (without par value) during the twelve month period immediately preceding the date of such calculation; provided further that for purposes of calculating the annual dividend requirements applicable to any series of Preferred Stock (without par value) outstanding at the date of such proposed issue and having dividends determined according to an adjustable, floating or variable rate, the dividend rate used shall be: (1) if such series of Preferred Stock (without par value) has been outstanding for at least twelve months, the actual amount of dividends paid on account of such series of Preferred Stock (without par value) for the twelve-month period immediately preceding the date of such calculation, or (2) if such series of Preferred Stock (without par value) has been outstanding for less than twelve months, the average dividend rate payable on such series of Preferred Stock (without par value) during the period immediately preceding the date of such calculation; or

(c) Merge or consolidate with or into any other corporation or corporations, unless such merger or consolidation, or the issuance or assumption of all

securities, to be issued or assumed in connection with any such merger or consolidation, shall have been ordered, approved, or permitted by the Securities and Exchange Commission under the provisions of the Public Utility Holding Company Act of 1935 or by any successor commission or regulatory authority of the United States of America having jurisdiction in the premises; provided that the provisions of this clause (c) shall not apply to a purchase or other acquisition by the Company of franchises or assets of another corporation in any manner which does not involve a merger or consolidation.

(C) So long as any shares of the Preferred Stock or Preferred Stock (without par value) of any series are outstanding, the Company shall not without written consent of the holders of a majority of the total number of shares of such Preferred Stock and Preferred Stock (without par value) then outstanding or, in the alternative and subject to the proviso hereinafter set forth in this subdivision 7(C), the affirmative vote of the holders of a majority of the total number of the shares of such Preferred Stock and Preferred Stock (without par value) which are represented, by the attendance of the holders thereof in person or by proxy, at a meeting duly called for the purpose:

Issue or assume any unsecured notes, debentures or other securities representing unsecured indebtedness for any purpose other than (1) the refunding of outstanding unsecured securities theretofore issued or assumed by the Company, (2) the financing of pollution control facilities (as defined in the Internal Revenue Code, as amended or as hereafter amended, and the regulations and rulings thereunder) through the issuance or assumption of unsecured notes, debentures or other securities representing unsecured indebtedness the receipt of interest on which is exempt from federal income tax at the time of such issuance or assumption, or (3) the redemption or other retirement of outstanding shares of one or more series of the Preferred Stock or Preferred Stock (without par value) if, immediately after such issuance or assumption, the total principal amount of all unsecured notes, debentures or other unsecured securities representing unsecured indebtedness issued or assumed by the Company and then outstanding (including unsecured securities then to be issued or assumed but excluding unsecured securities theretofore consented to by the holders of such Preferred Stock and Preferred Stock (without par value)) will exceed 20% of the sum of (i) the total principal amount of all bonds or other securities representing secured indebtedness issued or assumed by the Company and then to be outstanding, and (ii) the capital and surplus of the Company as then to be stated on the books of account of the Company.

Provided, however, that if, at any such meeting, at least one-third of all shares of such Preferred Stock and Preferred Stock (without par value) then outstanding shall be voted against the action then proposed, of the character aforesaid, such action may be taken only with the affirmative vote of a majority of all shares of such Preferred Stock and Preferred Stock (without par value) then outstanding.

If at any meeting of such Preferred Stock and Preferred Stock (without par value) for the purpose of taking action on matters set forth in this subdivision 7(C), the presence in person or by proxy of the holders of a majority of such stock shall not have been obtained and shall not be obtained for a period of thirty days from the date of such meeting, the presence in person or by proxy of the holders of one-third of such stock then outstanding shall be sufficient to constitute a quorum.

(8) No holder of shares of Preferred Stock or Preferred Stock (without par value) shall be entitled as such as a matter of right to subscribe for or purchase any part of any new or additional issue of stock, or securities convertible into stock, of any class whatsoever, whether now or hereafter authorized, and whether issued for cash, property, services, by way of dividends, or otherwise.

(9) (A) Every holder of Preferred Stock of any series shall have one vote for each share of such Preferred Stock held by him, and every holder of the Common Stock shall have one vote for each share of Common Stock held by him, for the election of Directors and upon all other matters, except as otherwise provided in this paragraph (9) hereof. At all elections of directors, any Shareholder may vote cumulatively. The foregoing shall not modify or affect the special votes and consents provided for in paragraph (7) hereof.

(B) If and when dividends shall be in default in an amount equivalent to dividends for the immediately preceding eighteen months on all shares of all series of the Preferred Stock and the Preferred Stock (without par value) at the time outstanding, and until all dividends in default on such Preferred Stock and such Preferred Stock (without par value) shall have been paid, the holders of all shares of the Preferred Stock and all shares of the Preferred Stock (without par value), voting separately as one class, shall be entitled to elect the smallest number of Directors necessary to constitute a majority of the full Board of Directors, and the holders of the Common Stock, voting separately as a class, shall be entitled to elect the remaining Directors of the Company.

(C) If and when all dividends then in default on the Preferred Stock and the Preferred Stock (without par value) at the time outstanding shall be paid (and such dividends shall be declared and paid, or declared and funds set aside for that purpose out of any funds legally available therefor as soon as reasonably practicable), the Preferred Stock and the Preferred Stock (without par value) shall thereupon be divested of any special right with respect to the election of Directors provided in subparagraph (B) hereof, and the voting power of the Preferred Stock, the Preferred Stock (without par value) and the Common Stock shall revert to the status existing before the occurrence of such default; but always subject to the same provisions for vesting such special rights in the Preferred Stock and the Preferred Stock (without par value) in case of further like default or defaults in dividends thereon.

(D) In case of any vacancy in the Board of Directors occurring among the Directors elected by the holders of the Preferred Stock and the Preferred Stock (without par

value), as a class, pursuant to subparagraph (B) hereof, a majority of the remaining Directors elected by the holders of the Preferred Stock and the Preferred Stock (without par value) (including, as elected by such holders, any Directors then in office who were chosen by other Directors as successor Directors to fill vacancies as provided in this sentence) may elect a successor to hold office for the unexpired term of the Director whose place shall be vacant. In case of a vacancy in the Board of Directors occurring among the Directors elected by the holders of the Common Stock, as a class, pursuant to subparagraph (B) hereof, a majority of the remaining Directors elected by the holders of the Common Stock (including, as elected by such holders, any Directors then in office who were chosen by other directors as successor directors to fill vacancies as provided in this sentence) may elect a successor to hold office for the unexpired term of the Director whose place shall be vacant. In all other cases, any vacancy occurring among the Directors shall be filled by the vote of a majority of the remaining Directors.

(E) At all meetings of shareholders held for the purpose of electing Directors during such times as the holders of shares of the Preferred Stock and the Preferred Stock (without par value) shall have the special right, voting separately as one class, to elect Directors pursuant to subparagraph (B) hereof, the presence in person or by proxy of the holders of a majority of the outstanding shares of the Common Stock shall be required to constitute a quorum of such class for the election of directors, and the presence in person or by proxy of the holders of Preferred Stock and Preferred Stock (without par value) entitled to cast a majority of all the votes to which the holders of the Preferred Stock and the Preferred Stock (without par value) are entitled, shall be required to constitute a quorum of such class for the election of Directors; provided, however, that the absence of a quorum (according to votes, as aforesaid) of the holders of stock of any such class shall not prevent the election at any such meeting or adjournment thereof of Directors by the other such class if such quorum of the holders of stock of such other class is present in person or by proxy at such meeting; and provided further that in the absence of such quorum of the holders of stock of any such class, a majority (according to votes, as aforesaid) of those holders of the stock of such class who are present in person or by proxy shall have power to adjourn the election of the directors to be elected by such class from time to time without notice other than announcement at the meeting until the holders of the requisite number of shares of such class shall be present in person or by proxy.

(F) Except when some mandatory provision of law shall be controlling and except as otherwise provided in paragraph (7) hereof whenever shares of two or more series of the Preferred Stock or of the Preferred Stock (without par value) are outstanding, no particular series shall be entitled to vote as a separate series on any matter and all shares of the Preferred Stock and the Preferred Stock (without par value) shall be deemed to constitute but one class for any purpose for which a vote of the shareholders of the Company by classes may now or hereafter be required.

5% CUMULATIVE PREFERRED STOCK, $25 PAR VALUE

(10) The Company has classified $21,519,300 par value of the Preferred Stock as a series of such Preferred Stock designated as "5% Cumulative Preferred Stock, $25 Par Value," consisting of 860.772 shares of the par value of $25 per share.

(11) The preferences, rights, qualifications and restrictions of the shares of the "5% Cumulative Preferred Stock, $25 Par Value," shall be as follows:

(a) The annual dividend rate for such series shall be 5% per annum;

(b) The redemption price for such series shall be $28.00 per share; and

(c) The preferential amounts to which the holders of shares of such series shall be entitled upon any liquidation, dissolution or winding up of the Company, in addition to dividends accumulated but unpaid thereon, shall be:

$27.25 per share, in the event of any voluntary liquidation, dissolution or winding up of the Company, except that if such voluntary liquidation, dissolution or winding up of the Company shall have been approved by the vote in favor thereof given at a meeting called for that purpose or by the written consent of the holders of a majority of the total shares of the 5% Cumulative Preferred Stock, $25 Par Value then outstanding, the amount so payable on such voluntary liquidation, dissolution, or winding up shall be $25 per share: or

$25 per share, in the event of any involuntary liquidation, dissolution or winding up of the Company.

COMMON STOCK
(Without par value)

The Board of Directors is hereby authorized to cause shares of Common Stock, without par value, to be issued from time to time for such consideration as may be fixed from time to time by the Board of Directors, or by way of stock split pro rata to the holders of the Common Stock. The Board of Directors may also determine the proportion of the proceeds received from the sale of such stock which shall be credited upon the books of the Company to Capital or Capital Surplus.

Each share of the Common Stock shall be equal in all respects to every other share of the Common Stock.

No holder of shares of Common Stock shall be entitled as such as a matter of right to subscribe for or purchase any part of any new or additional issue of stock, or securities

convertible into stock, of any class whatsoever, whether now or hereafter authorized, and whether issued for cash, property, services, or otherwise.

SIXTH. The duration of the Company shall be perpetual.

SEVENTH. The private property of the shareholders of the Company shall not be subject to the payment of corporate debts.

EIGHTH. A. CERTAIN DEFINITIONS. For purposes of this Article Eighth:

(1) "Affiliate," including the term "affiliated person," means a person who directly, or indirectly through one (1) or more intermediaries, controls, or is controlled by, or is under common control with, a specified person.

(2) "Associate," when used to indicate a relationship with any person, means:

(a) Any corporation or organization (other than the Company or a Subsidiary), of which such person is an officer, director or partner or is, directly or indirectly, the Beneficial Owner of ten percent (10%) or more of any class of Equity Securities;

(b) Any trust or other estate in which such person has a substantial beneficial interest or as to which such person serves as trustee or in a similar fiduciary capacity; and

(c) Any relative or spouse of such person, or any relative of such spouse, any one (1) of whom has the same home as such person or is a director or officer of the corporation or any of its Affiliates.

(3) "Beneficial Owner," when used with respect to any Voting Stock, means a person:

(a) Who, individually or with any of its Affiliates or Associates, beneficially owns Voting Stock, directly or indirectly; or

(b) Who, individually or with any of its Affiliates or Associates, has:

1. The right to acquire Voting Stock, whether such right is exercisable immediately or only after the passage of time and whether or not such right is exercisable only after specified conditions are met, pursuant to any agreement, arrangement, or understanding or upon the

exercise of conversion rights, exchange rights, warrants or options, or otherwise;

2. The right to vote Voting Stock pursuant to any agreement, arrangement, or understanding; or

3. Any agreement, arrangement, or understanding for the purpose of acquiring, holding, voting or disposing of Voting Stock with any other person who beneficially owns, or whose Affiliates or Associates beneficially own, directly or indirectly, such shares of Voting Stock.

(4) "Business Combination" means:

(a) Any merger or consolidation of the Company or any Subsidiary with any Interested Shareholder, or any other corporation, whether or not itself an Interested Shareholder, which is, or after the merger or consolidation would be, an Affiliate of an Interested Shareholder who was an Interested Shareholder prior to the transaction;

(b) Any sale, lease, transfer, or other disposition, other than in the ordinary course of business, in one (1) transaction or a series of transactions in any twelve-month period, to any Interested Shareholder or any Affiliate of any Interested Shareholder, other than the Company or any Subsidiary, of any assets of the Company or any Subsidiary having, measured at the time the transaction or transactions are approved by the Board of Directors of the Company, an aggregate book value as of the end of the Company's most recently ended fiscal quarter of five percent (5%) or more of the total Market Value of the outstanding stock of the Company or of its net worth as of the end of its most recently ended fiscal quarter;

(c) The issuance or transfer by the Company, or any Subsidiary, in one transaction or a series of transactions in any twelve-month period, of any Equity Securities of the Company or any Subsidiary which have an aggregate Market Value of five percent (5%) or more of the total Market Value of the outstanding stock of the Company, determined as of the end of the Company's most recently ended fiscal quarter prior to the first such issuance or transfer, to any Interested Shareholder or any Affiliate of any Interested Shareholder, other than the Company or any of its Subsidiaries, except pursuant to the exercise of warrants or rights to purchase securities offered pro rata to all holders of the Company's Voting Stock or any other method affording substantially proportionate treatment to the holders of Voting Stock;

(d) The adoption of any plan or proposal for the liquidation or dissolution of the Company in which any thing other than cash will be received by an Interested Shareholder or any Affiliate of any Interested Shareholder; or

(e) Any reclassification of securities, including any reverse stock split; or recapitalization of the Company; or any merger or consolidation of the Company with any of its Subsidiaries; or any other transaction which has the effect, directly or indirectly, in one transaction or a series of transactions, of increasing by five percent (5%) or more the proportionate amount of the outstanding shares of any class of Equity Securities of the Company or any Subsidiary which is directly or indirectly beneficially owned by any Interested Shareholder or any Affiliate of any Interested Shareholder.

(5) "Common Stock" means any stock of the Company other than preferred or preference stock of the Company.

(6) "Continuing Director" means any member of the Company's Board of Directors who is not an Interested Shareholder or an Affiliate or Associate of an Interested Shareholder or any of its Affiliates, other than the Company or any of its Subsidiaries, and who was a director of the Company prior to the time the Interested Shareholder became an Interested Shareholder, and any successor to such Continuing Director who is not an Interested Shareholder or an Affiliate or Associate of an Interested Shareholder or any of its Affiliates, other than the Company or any of its Subsidiaries, and was recommended or elected by a majority of the Continuing Directors at a meeting at which a quorum consisting of a majority of the Continuing Directors is present.

(7) "Control," including the terms "controlling," "controlled by" and "under common control with," means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise, and the beneficial ownership of ten percent (10%) or more of the votes entitled to be cast by a corporation's Voting Stock creates a presumption of control.

(8) "Equity Security" means:

(a) Any stock or similar security, certificate of interest, or participation in any profit-sharing agreement, voting trust certificate, or certificate of deposit for the foregoing;

(b) Any security convertible, with or without consideration, into an Equity Security, or any warrant or other security carrying any right to subscribe to or purchase an Equity Security; or

(c) Any put, call, straddle, or other option, right or privilege of acquiring an Equity Security from or selling an Equity Security to another without being bound to do so.

(9) "Interested Shareholder" means any person, other than the Company or any of its Subsidiaries, who:

(a) Is the Beneficial Owner, directly or indirectly, of ten percent (10%) or more of the voting power of the outstanding Voting Stock of the Company; or is an Affiliate of the Company and at any time within the two-year period immediately prior to the date in question was the Beneficial Owner, directly or indirectly, of ten percent (10%) or more of the voting power of the then outstanding Voting Stock of the Company.

(b) For the purpose of determining whether a person is an Interested Shareholder, the number of shares of Voting Stock deemed to be outstanding shall include shares deemed owned by the person through application of Subsection (3) of this Paragraph A of Article Eighth but shall not include any other shares of Voting Stock which may be issuable pursuant to any agreement, arrangement, or understanding, or upon exercise of conversion rights, warrants or options or otherwise.

(10) "Market Value" means:

(a) In the case of stock, the highest closing sale price during the thirty-day period immediately preceding the date in question of a share of such stock on the composite tape for New York Stock Exchange listed stocks, or, if such stock is not quoted on the composite tape, on the New York Stock Exchange, or if such stock is not listed on New York Stock Exchange, or if such stock is not listed on such exchange, on the principal United States securities exchange, registered under the Securities Exchange Act of 1934 on which such stock is listed, or, if such stock is not listed on any such exchange, the highest closing bid quotation with respect to a share of such stock during the thirty-day period preceding the date in question on the National Association of Securities Dealers, Inc., Automated Quotations System or any system then in use, or if no such quotations are available, the fair market value on the date in question of a share of such stock as determined by a majority of the Continuing Directors at a meeting of the Board of Directors at which a quorum consisting of at least a majority of the Continuing Directors is present; and

(b) In the case of property other than cash or stock, the fair market value of such property on the date in question as determined by a majority of the

Continuing Directors at a meeting of the Board of Directors at which a quorum consisting of at least a majority of the Continuing Directors is present.

(11) "Subsidiary" means any corporation of which Voting Stock having a majority of the votes entitled to be cast is owned, directly or indirectly, by the Company.

(12) "Voting Stock" means shares of capital stock of a corporation entitled to vote generally in the election of its directors.

B. MINIMUM SHARE VOTE REQUIREMENTS FOR APPROVAL OF BUSINESS COMBINATIONS.

(1) In addition to any vote otherwise required by law or these Articles of Incorporation, a Business Combination shall be recommended by the Board of Directors of the Company and approved by the affirmative vote of at least:

(a) Eighty percent (80%) of the votes entitled to be cast by outstanding shares of Voting Stock of the Company, voting together as a single voting group; and

(b) Two-thirds of the votes entitled to be cast by holders of Voting Stock other than Voting Stock beneficially owned by the Interested Shareholder who is, or whose Affiliate is, a party to the Business Combination or by an Affiliate or Associate of such Interested Shareholder, voting together as a single voting group.

(2) Unless a Business Combination is exempted from the operation of this Paragraph B in accordance with Paragraph C of this Article Eighth, the failure to comply with the voting requirements of Subsection (1) of this Paragraph B shall render such Business Combination void.

C. EXEMPTIONS FROM MINIMUM SHARE VOTE REQUIREMENTS.

(1) For purposes of Section (2) of this Paragraph C:

(a) "Announcement Date" means the first general public announcement of the proposal or intention to make a proposal of the Business Combination or its first communication generally to shareholders of the Company, whichever is earlier;

(b) "Determination Date" means the date on which an Interested Shareholder first became an Interested Shareholder; and

(c) "Valuation Date" means

1. For a Business Combination voted upon by shareholders, the latter of the day prior to the date of the shareholders' vote or the date twenty (20) days prior the consummation of the Business Combination; and

2. For a Business Combination not voted upon by shareholders, the date of the consummation of the Business Combination.

(2) The vote required by Section B of this Article Eighth does not apply to a Business Combination if each of the following conditions is met:

(a) The aggregate amount of the cash and the Market Value as of the Valuation Date of consideration other than cash to be received per share by holders of Common Stock in such Business Combination is at least equal to the highest of the following:

1. The highest per share price (including any brokerage commissions, transfer taxes and soliciting dealers' fees) paid by the Interested Shareholder for any shares of Common Stock of the same class or series acquired by it:

a. Within the two-year period immediately prior to the Announcement Date of the proposal of the Business Combination; or

b. In the transaction in which it became an Interested Shareholder, whichever is higher; or

2. The Market Value per share of Common Stock of the same class or series on the Announcement Date or on the Determination Date, whichever is higher; or

3. The price per share equal to the Market Value per share of Common Stock of the same class or series determined pursuant to clause 2 of this Subsection (a), multiplied by the fraction of:

a. The highest per share price, including any brokerage commissions, transfer taxes and soliciting dealers' fees, paid by the Interested Shareholder for any shares of Common Stock of the

same class or series acquired by it within the two-year period immediately prior to the Announcement Date, over

b. The Market Value per share of Common Stock of the same class or series on the first day in such two-year period on which the Interested Shareholder acquired any shares of Common Stock.

(b) The aggregate amount of the cash and the Market Value as of the Valuation Date of consideration other than cash to be received per share by holders of shares of any class or series of outstanding stock other than Common Stock is at least equal to the highest of the following, whether or not the Interested Shareholder has previously acquired any shares of a particular class or series of stock:

1. The highest per share price, including any brokerage commissions, transfer taxes and soliciting dealers' fees, paid by the Interested Shareholder for any shares of such class of stock acquired by it:

a. Within the two-year period immediately prior to the Announcement Date of the proposal of the Business Combination; or

b. In the transaction in which it became an Interested Shareholder, whichever is higher; or

2. The highest preferential amount per share to which the holders of shares of such class of stock are entitled in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company; or

3. The Market Value per share of such class of stock on the Announcement Date or on the Determination Date, whichever is higher; or

4. The price per share equal to the Market Value per share of such class of stock determined pursuant to clause 3 of this Subsection (b), multiplied by the fraction of:

a. The highest per share price, including any brokerage commissions, transfer taxes and soliciting dealers' fees, paid by the Interested Shareholder for any shares of any class of Voting Stock acquired by it within the two-year period immediately prior to the Announcement Date, over

b. The Market Value per share of the same class of Voting Stock on the first day in such two-year period on which the Interested Shareholder acquired any shares of the same class of Voting Stock.

(c) In making any price calculation under Section (2) of this Paragraph C, appropriate adjustments shall be made to reflect any reclassification, including any reverse stock split; recapitalization; reorganization; or any similar transaction which has the effect of reducing the number of outstanding shares of the stock. The consideration to be received by holders of any class or series of outstanding stock is to be in cash or in the same form as the Interested Shareholder has previously paid for shares of the same class or series of stock. If the Interested Shareholder has paid for shares of any class of stock with varying forms of consideration, the form of consideration for such class of stock shall be either cash or the form used to acquire the largest number of shares of such class or series of stock previously acquired by it.

(d) 1. After the Interested Shareholder has become an Interested Shareholder and prior to the consummation of such Business Combination:

a. There shall have been no failure to declare and pay at the regular date therefor any full periodic dividends, whether or not cumulative, on any outstanding preferred stock of the Company;

b. There shall have been no reduction in the annual rate of dividends paid on any class or series of stock of the Company that is not preferred stock, except as necessary to reflect any subdivision of the stock; and an increase in such annual rate of dividends as necessary to reflect any reclassification, including any reverse stock split; recapitalization; reorganization; or any similar transaction which has the effect of reducing the number of outstanding shares of the stock; and

c. The Interested Shareholder shall not become the Beneficial Owner of any additional shares of stock of the Company except as part of the transaction which resulted in such Interested Shareholder becoming an Interested Shareholder or by virtue of proportionate stock splits or stock dividends.

2. The provisions of subclauses a and b of clause 1 do not apply if no Interested Shareholder or an Affiliate or Associate of the Interested Shareholder voted as a director of the Company in a manner inconsistent with such subclauses and the Interested Shareholder, within ten (10) days after any act or failure to act inconsistent with such subclauses, notifies the Board of Directors of the Company in writing that the Interested Shareholder disapproves thereof and requests in good faith that the Board of Directors rectify such act or failure to act.

(e) After the Interested Shareholder has become an Interested Shareholder, the Interested Shareholder may not have received the benefit, directly or indirectly, except proportionately as a shareholder, of any loans, advances, guarantees, pledges or other financial assistance provided by the Company or any Subsidiary, whether in anticipation of or in connection with such Business Combination or otherwise.

(3) (a) The vote required by Section B of this Article Eighth does not apply to any Business Combination that is approved by a majority of Continuing Directors at a meeting of the Board of Directors at which a quorum consisting of at least a majority of the Continuing Directors is present.

(b) Unless by its terms a resolution adopted under the foregoing subsection (a) of this Section (3) is made irrevocable, it may be altered or repealed by the Board of Directors, but this shall not affect any Business Combinations that have been consummated, or are the subject of an existing agreement entered into, prior to the alteration or repeal.

D. Powers of the Board of Directors. A majority of the Continuing Directors of the Company shall have the power and duty to determine, on the basis of information known to them after reasonable inquiry, all facts necessary to determine compliance with this Article Eighth, including without limitation, (a) whether a person is an Interested Shareholder, (b) the number of shares of Voting Stock beneficially owned by any person, (c) whether a person is an Affiliate or Associate of another, (d) whether the assets which are the subject of any Business Combination have, or the consideration to be received for the issuance or transfer of securities by the Company or any Subsidiary in any Business Combination has, an aggregate book value or Market Value of five percent (5%) or more of the total Market Value of the outstanding stock of the Company or of its net worth, and (e) whether the requirements of Paragraph C of this Article Eighth have been met.

E. No Effect on Fiduciary Obligations of Interested Shareholders. Nothing contained in this Article Eighth shall be construed to relieve any Interested Shareholder from any fiduciary obligation imposed by law.

F. Amendment or Repeal. Notwithstanding any other provisions of this Article Eighth or of any other Article hereof, or of the By-Laws of the Company (and notwithstanding the fact that a lesser percentage may be specified from time to time by law, this Article Eighth, any other Article hereof, or the By-Laws of the Company), the provisions of this Article Eighth may not be altered, amended or repealed in any respect, nor may any provision inconsistent therewith be adopted, unless such alteration, amendment, repeal or adoption is approved by the affirmative vote of the holders of at least: (i) 80% of the combined voting power of the then outstanding Voting Stock of the Company, voting together as a single class and (ii) 66-2/3% of the combined voting power of the then outstanding Voting Stock (which is not beneficially owned by any Interested Shareholder), voting together as a single class.

NINTH. A. Number, Election and Terms of Directors. The business of the Company shall be managed by a Board of Directors. The number of directors of the Company shall be fixed from time to time by or pursuant to the By-Laws of the Company. Except as otherwise provided in or fixed by or pursuant to the provisions of Article Fifth hereof relating to the rights of the holders of any class or series of stock having a preference over the Common Stock as to dividends or upon liquidation to elect directors under specified circumstances, the directors shall be classified, with respect to the time for which they severally hold office, into three classes, as nearly equal in number as possible, as shall be provided in the manner specified in the By-Laws of the Company, one class to be originally elected for a term expiring at the annual meeting of shareholders to be held in 1988, another class to be originally elected for a term expiring at the annual meeting of shareholders to be held in 1989, and another class to be originally elected for a term expiring at the annual meeting of shareholders to be held in 1990, with each member of each class to hold office until his successor is elected and qualified. At each annual meeting of shareholders of the Company and except as otherwise provided in or fixed by or pursuant to the provisions of Article Fifth hereof relating to the rights of the holders of any class or series of stock having a preference over the Common Stock as to dividends or upon liquidation to elect directors under specified circumstances, the successors of the class of directors whose term expires at that meeting shall be elected to hold office for a term expiring at the annual meeting of shareholders held in the third year following the year of their election.

B. Shareholder Nomination of Director Candidates and Introduction of Business. Advance notice of shareholder nominations for the election of directors, and advance notice of business to be brought by shareholders before an annual meeting of shareholders, shall be given in the manner provided in the By-Laws of the Company.

C. Newly Created Directorships and Vacancies. Except as otherwise provided in or fixed by or pursuant to the provisions of Article Fifth hereof relating to the rights of the holders of any class or series of stock having a preference over the Common Stock as to dividends or upon liquidation to elect directors under specified circumstances: (i) newly created directorships resulting from any increase in the number of directors and any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other cause shall be

filled by the affinnative vote of a majority of the remaining directors then in office, even though less than a quorum of the Board of Directors; (ii) any director elected in accordance with the preceding clause (i) shall hold office for the remainder of the full term of the class of directors in which the new directorship was created or the vacancy occurred and until such director's successor shall have been elected and qualified; and (iii) no decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

D. Removal. Except as otherwise provided in or fixed by or pursuant to the provisions of Article Fifth hereof relating to the rights of the holders of any class or series of stock having a preference over the Common Stock as to dividends or upon liquidation to elect directors under specified circumstances, any director may be removed from office, with or without cause, only by the affirmative vote of the holders of at least 80% of the combined voting power of the then outstanding shares of the Company's stock entitled to vote generally, voting together as a single class. Notwithstanding the foregoing provisions of this Paragraph D, if at any time any shareholders of the Company have cumulative voting rights with respect to the election of directors and less than the entire Board of Directors is to be removed, no director may be removed from office if the votes cast against his removal would be sufficient to elect him as a director if then cumulatively voted at an election of the class of directors of which he is a part. Whenever in this Article Ninth or in Article Tenth hereof or in Article Eleventh hereof, the phrase, "the then outstanding shares of the Company's stock entitled to vote generally" is used, such phrase shall mean each then outstanding share of any class or series of the Company's stock that is entitled to vote generally in the election of the Company's directors.

E. Amendment or Repeal. Notwithstanding any other provisions of this Article Ninth or of any other Article hereof or of the By-laws of the Company (and notwithstanding the fact that a lesser percentage may be specified from time to time by law, this Article Ninth, any other Article hereof, or the By-Laws of the Company), the provisions of this Article Ninth may not be altered, amended or repealed in any respect, nor may any provision inconsistent therewith be adopted, unless such alteration, amendment, repeal or adoption is approved by the affirmative vote of at least 80% of the combined voting power of the then outstanding shares of the Company's stock entitled to vote generally, voting together as a single class.

TENTH. Any action required or permitted to be taken by the shareholders of the Company at a meeting of such holders may be taken without such a meeting only if a consent in writing setting forth the action so taken shall be signed by all of the shareholders entitled to vote with respect to the subject matter thereof. Except as otherwise mandated by Kentucky law and except as otherwise provided in or fixed by or pursuant to the provisions of Article Fifth hereof relating to the rights of the holders of any class or series of stock having a preference over the Common Stock as to dividends or upon liquidation to elect directors under specified circumstances, special meetings of shareholders of the Company may be called only by the Board of Directors pursuant to a resolution approved by a majority of the entire Board of Directors or by the President of the Company. Notwithstanding any other provisions of this Article Tenth or of any other Article hereof or of the By-Laws of the Company (and

notwithstanding the fact that a lesser percentage may be specified from time to time by law, this Article Tenth, any other Article hereof, or the By-Laws of the Company), the provisions of this Article Tenth may not be altered, amended or repealed in any respect, nor may any provision inconsistent therewith be adopted, unless such alteration, amendment, repeal or adoption is approved by the affirmative vote of the holders of at least 80% of the combined voting power of the then outstanding shares of the Company's stock entitled to vote generally, voting together as a single class.

ELEVENTH. The Board of Directors shall have power to adopt, amend and repeal the By-Laws of the Company to the maximum extent permitted from time to time by Kentucky law; provided, however, that any By-Laws adopted by the Board of Directors under the powers conferred hereby may be amended or repealed by the Board of Directors or by the holders of at least a majority of the combined voting power of the then outstanding shares of the Company's stock entitled to vote generally, voting together as a single class, except that, and notwithstanding any other provisions of this Article Eleventh or of any other Article hereof or of the By-Laws of the Company (and notwithstanding the fact that a lesser percentage may be specified from time to time by law, this Article Eleventh, any other Article hereof or the By-Laws of the Company), no provision of Section 2, Section 4 or Section 5 of Article I of the By-Laws or of Section 1 of Article II of the By-Laws or of Section 2 of Article IV of the By-Laws or of Article IX of the By-Laws may be altered, amended or repealed in any respect, nor may any provision inconsistent therewith be adopted, unless such alteration, amendment, repeal or adoption is approved by the affirmative vote of the holders of at least 80% of the combined voting power of the then outstanding shares of the Company's stock entitled to vote generally, voting together as a single class. Notwithstanding any other provisions of this Article Eleventh or of any other Article hereof or of the By-Laws of the Company (and notwithstanding the fact that a lesser percentage may be specified from time to time by law, this Article Eleventh, any other Article hereof or the By-Laws of the Company), the provisions of this Article Eleventh may not be altered, amended or repealed in any respect, nor may any provision inconsistent therewith be adopted, unless such alteration, amendment, repeal or adoption is approved by the affirmative vote of the holders of at least 80% of the combined voting power of the then outstanding shares of the Company's stock entitled to vote generally, voting together as a single class.

TWELFTH. A director of the Company shall not be personally liable to the Company or its shareholders for monetary damages for breach of his duties as a director, except for liability (i) for any transaction in which the director's personal financial interest is in conflict with the financial interests of the Company or its shareholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or are known to the director to be a violation of law, (iii) under Kentucky Revised Statutes 271 B.8-330, or (iv) for any transaction from which the director derived any improper personal benefit. If the Kentucky Busines Corporation Act is amended after approval by the shareholders of this Article to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Company shall be eliminated or limited to the fullest extent permitted by the Kentucky Business Corporation Act, as so amended.

Any repeal or modification of the foregoing paragraph by the shareholders of the Company shall not adversely affect any right or protection of a director of the Company existing at the time of such repeal or modification.

THIRTEENTH. A. RIGHT TO INDEMNIFICATION. Each person who was or is a director of the Company and who was or is made a party or is threatened to be made a party to or is otherwise involved (including, without limitation, as a witness) in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a "proceeding"), by reason of the fact that he or she is or was a director or officer of the Company or is or was serving at the request of the Company as a director, officer, partner, trustee, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan (hereinafter an "Indemnified Director"), whether the basis of such proceeding is alleged action in an official capacity as a director or officer or in any other capacity while serving as a director or officer, shall be indemnified and held harmless by the Company to the fullest extent permitted by the Kentucky Business Corporation Act, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Company to provide broader indemnification rights than such law permitted the Company to provide prior to such amendment), against all liability, all reasonable expense and all loss (including, without limitation, judgments, fines, reasonable attorneys' fees, ERISA excise taxes or penalties and amounts paid in settlement) incurred or suffered by such Indemnified Director in connection therewith and such indemnification shall continue as to an Indemnified Director who has ceased to be a director and shall inure to the benefit of the Indemnified Director's heirs, executors and administrators. Each person who was or is an officer of the Company and not a director of the Company and who was or is made a party or is threatened to be made a party to or is otherwise involved (including, without limitation, as a witness) in any proceeding, by reason of the fact that he or she is or was an officer of the Company or is or was serving at the request of the Company as a director, officer, partner, trustee, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan (hereinafter an "Indemnified Officer"), whether the basis of such proceeding is alleged action in an official capacity as an officer or in any other capacity while serving as an officer, shall be indemnified and held harmless by the Company against all liability, all reasonable expense and all loss (including, without limitation, judgments, fines, reasonable attorneys' fees, ERISA excise taxes or penalties and amounts paid in settlement) incurred or suffered by such Indemnified Officer to the same extent and under the same conditions that the Company must indemnify an Indemnified Director pursuant to the immediately preceding sentence and to such further extent as is not contrary to public policy and such indemnification shall continue as to an Indemnified Officer who has ceased to be an officer and shall inure the benefit of the Indemnified Officer's heirs, executors and administrators. Notwithstanding the foregoing and except as provided in Paragraph B of this Article Thirteenth with respect to proceedings to enforce rights to indemnification, the Company shall indemnify an Indemnified Director or Indemnified Officer in connection with a proceeding (or part thereof) initiated by such Indemnified Director or

Indemnified Officer only if such proceeding (or part thereof) was authorized by the Board of Directors of the Company. As hereinafter used in this Article Thirteenth, the term "indemnitee" means any Indemnified Director or Indemnified Officer. Any person who is or was a director or officer of a subsidiary of the Company shall be deemed to be serving in such capacity at the request of the Company for purposes of this Article Thirteenth. The right to indemnification conferred in this Article shall include the right to be paid by the Company the expenses incurred in defending any such proceeding in advance of its final disposition (hereinafter an "advancement of expenses"); provided, however, that, if the Kentucky Business Corporation Act requires, an advancement of expenses incurred by an indemnitee who at the time of receiving such advance is a director of the Company shall be made only upon: (i) delivery to the Company of an undertaking (hereinafter an "undertaking"), by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (hereinafter, a "final adjudication") that such indemnitee is not entitled to be indemnified for such expenses under this Article or otherwise; (ii) delivery to the Company of a written affirmation of the indemnitee's good faith belief that he or she has met the standard of conduct that makes indemnification by the Company permissible under the Kentucky Business Corporation Act; and (iii) a determination that the facts then known to those making the determination would not preclude indemnification under the Kentucky Business Corporation Act. The right to indemnification and advancement of expenses conferred in this Paragraph A shall be a contract right.

B. RIGHT OF INDEMNITEE TO BRING SUIT. If a claim under Paragraph A of this Article Thirteenth is not paid in full by the Company within sixty days after a written claim has been received by the Company (except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty days), the indemnitee may at any time thereafter bring suit against the Company to recover the unpaid amount of the claim. If successful in whole or in part in any such suit or in a suit brought by the Company to recover an advancement of expenses pursuant to the terms of an undertaking, the indemnitee also shall be entitled to be paid the expense of prosecuting or defending such suit. In (i) any suit brought by the indemnitee to enforce a right to indemnification hereunder (other than a suit to enforce a right to an advancement of expenses brought by an indemnitee who will not be a director of the Company at the time such advance is made) it shall be a defense that, and in (ii) any suit by the Company to recover an advancement of expenses pursuant to the terms of an undertaking the Company shall be entitled to recover such expenses upon a final adjudication that, the indemnitee has not met the standard that makes it permissible hereunder or under the Kentucky Business Corporation Act (the "applicable standard") for the Company to indemnify the indemnitee for the amount claimed. Neither the failure of the Company (including its Board of Directors, a committee of the Board of Directors, independent legal counsel or its shareholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances because the indemnitee has met the applicable standard, nor an actual determination by the Company (including its Board of Directors, a committee of the Board of Directors, independent legal counsel or its shareholders) that the indemnitee has not met the applicable standard shall create a presumption that the indemnitee has

not met the applicable standard or, in the case of such a suit brought by the indemnitee, shall be a defense to such suit. In any suit brought by the indemnitee to enforce a right to indemnification or to an advancement of expenses hereunder, or by the Company to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the indemnitee is not entitled to be indemnified or to such advancement of expenses under this Article Thirteenth or otherwise shall be on the Company.

C. NON-EXCLUSIVITY OF RIGHTS. The rights to indemnification and to the advancement of expenses conferred in this Article Thirteenth shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, these Articles of Incorporation, any By-Law, any agreement, any vote of shareholders or disinterested directors or otherwise.

D. INSURANCE. The Company may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Company or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Company would have the power to indemnify such person against such expense, liability or loss under the Kentucky Business Corporation Act.

E. INDEMNIFICATION OF EMPLOYEES AND AGENTS. The Company may, to the extent authorized from time to time by the Board of Directors, grant rights to indemnification and to the advancement of expenses to any employee or agent of the Company and to any person serving at the request of the Company as an agent or employee of another corporation or of a joint venture, trust or other enterprise to the fullest extent of the provisions of this Article Thirteenth with respect to the indemnification and advancement of expenses of either directors or officers of the Company.

F. REPEAL OR MODIFICATION. Any repeal or modification of any provision of this Article Thirteenth shall not adversely affect any rights to indemnification and to advancement of expenses that any person may have at the time of such repeal or modification with respect to any acts or omissions occurring prior to such repeal or modification.

G. SEVERABILITY. In case any one or more of the provisions of this Article Thirteenth or any application thereof, shall be invalid or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions in this Article Thirteenth and any other application thereof, shall not in any way be affected or impaired thereby.

FOURTEENTH.

A. Terms of Preferred Stock, Auction Series A (without par value). The Company has classified 500,000 shares of the Preferred Stock (without par value) as a series of such Preferred Stock designated as "Preferred Stock, Auction Series A (without par value)." The

preferences, rights, qualifications and restrictions of the shares of the "Preferred Stock, Auction Series A (without par value)" shall be as follows:

(1) Authorized Shares: Units.

The shares of Preferred Stock, Auction Series A (without par value) (hereinafter referred to as the "Series A Stock") shall be purchased, sold, transferred and redeemed only in Units of 1,000 shares per unit (a "Unit"), except as provided in subsection (d) of Section (5).

(2) Dividends.

(a) The Holders shall be entitled to receive, when and as declared by the Board of Directors of the Company, out of funds legally available therefor, cumulative cash dividends at the dividend rate per annum, determined as, and payable on the respective dates, set forth below.

(b) The dividend rate on shares of Series A Stock shall be 3.30% per annum during the period (the "Initial Dividend Period") from February 11, 1992 (the "Date of Original Issue") and ending on April 14, 1992 and shall be payable on April 15, 1992 (the "Initial Dividend Payment Date"). Subsequent dividends shall be equal to the rate per annum that results from implementation of the Auction Procedures, except in the case of a Payment Failure. Notwithstanding the results of any Auction, however, and subject to subsection (l) of this Section (2), the dividend rate on the Series A Stock will not exceed 25% per annum for any Dividend Period (as hereinafter defined). Dividends on shares of Series A Stock shall accrue from February 11, 1992.

(c) As of the end of the Initial Dividend Period and any subsequent Dividend Period, the Board of Directors of the Company may designate either (i) a Dividend Period of three months which shall commence on the day immediately following the last day of the preceding Dividend Period and shall end on the fourteenth day of January, April, July or October next succeeding (a "Quarterly Period") or (ii) a Dividend Period of either 49 days or 13 weeks (in either case, subject to adjustment for non-Business Days and to meet the Minimum Holding Period, as provided in subsection (g) of this Section (2)) (a "Short-Term Period"). (The Initial Dividend Period, each subsequent Quarterly Period and any Short-Term Period, individually, is referred to herein as a "Dividend Period".) If and when the Board of Directors designates a Short-Term Period, each subsequent Dividend Period shall be a Short-Term Period. In the event of a change in law altering the minimum holding period (currently found in Section 246(c) of the Internal Revenue Code of 1986, as amended (the "Code")) (the "Minimum Holding Period") required for taxpayers to be entitled to the Dividends-Received Deduction, the length of each Short-Term Period commencing after the effective

date of such change in law shall be adjusted so that the number of days in such Short-Term Periods shall exceed the then-current Minimum Holding Period; provided that, (i) the Short-Term Period that originally was a 49-day Short-Term Period shall not exceed by more than nine days the length of the then-current Minimum Holding Period, (ii) the number of days in any Short-Term Period shall be evenly divisible by seven, and (iii) the maximum number of days in any Short-Term Period shall in no event exceed 98 days. Upon any such change in the number of days in a Short-Term Period, the Company shall give notice of such change to the Trust Company, the Securities Depository and each Existing Holder. Notwithstanding the provisions of this subsection (c), designation of a Short-Term Period shall be permitted only after such amendments to these Articles as are necessary to accommodate the payment of dividends for a Short-Term Period have been duly adopted.

(d) The initial Short-Term Period shall end on a Wednesday designated by the Board of Directors of the Company which will be no earlier than the 46th day and no later than the 98th day after the last day of the preceding Quarterly Period (in any case, subject to adjustment for non-Business Days and to meet the Minimum Holding Period, as provided in subsection (g) of this Section (2)). Each subsequent Short-Term Period will commence on the day immediately following the last day of the preceding Short-Term Period and will end (i) on the seventh Wednesday thereafter, in the case of a 49-day Short-Term Period or (ii) on the thirteenth Wednesday thereafter, in the case of a 13-week Short Term Period (in each case, subject to adjustment for non-Business Days and to meet the Minimum Holding Period as provided in subsection (g) of this Section (2)). In the absence of a designation by the Board of Directors of the Company to the contrary, each 49-day Short-Term Period will be followed by a 49-day Short-Term Period and each 13-week Short-Term Period will be followed by a 13-week Short-Term Period.

(e) Following any amendment of these Articles to permit dividend payments on a basis other than quarterly, and without regard to the designation by the Board of Directors of the Company of the duration of the next succeeding Dividend Period, (i) if Sufficient Clearing Bids do not result from an Auction, then the Dividend Period to which such Auction relates will be a 49-day Short-Term Period or (ii) if a Payment Failure has occurred, then the Dividend Period during which such Payment Failure has occurred, and each subsequent Dividend Period until such Payment Failure has been cured, will be a 49-day Short-Term Period (in each case, subject to adjustment for non-Business Days and to meet the Minimum Holding Period, as described in subsection (g) of this Section (2)).

(f) Dividends with respect to any Quarterly Period will be payable in arrears, when and as declared, on the fifteenth day of each January, April, July and

October, unless such day is not a Business Day, in which case they shall be payable on the next succeeding Business Day (each a "Quarterly Dividend Payment Date"). Dividends with respect to any Short-Term Period shall be payable in arrears, when and as declared, on the Thursday next following the last day of the Short-Term Period (a Short-Term Dividend Payment Date"), except as provided in subsection (g) of this Section (2). (Each Quarterly Dividend Payment Date and Short-Term Dividend Payment Date, individually, is referred to herein as a "Dividend Payment Date.")

(g) Notwithstanding the provisions of subsections (c), (d), (e) and (f), with respect to the Short-Term Dividend Payment Date:

1. If the Thursday is not a Business Day, then the Short-Term Dividend Payment Date shall be the preceding Tuesday if both such Tuesday and the Wednesday following such Tuesday are Business Days; or

2. If the Friday following such Thursday is not a Business Day, then the Short-Term Dividend Payment Date will be the Wednesday preceding such Thursday if both such Wednesday and such Thursday are Business Days; or

3. If either (a) such Thursday is not a Business Day and either the preceding Tuesday or Wednesday is not a Business Day or (b) such Thursday is a Business Day and the Friday following such Thursday and such preceding Wednesday are not Business Days, then the Short-Term Dividend Payment Date shall be the first Business Day preceding such Thursday that is next succeeded by a Business Day.

Even though any particular Short-Term Dividend Payment Date may not occur on the originally scheduled Short-Term Dividend Payment Date because of the adjustments provided for in this subsection (g), the next succeeding Short-Term Dividend Payment Date shall occur, subject to such adjustments, on the seventh or the thirteenth Thursday, as applicable, following the originally scheduled Short-Term Dividend Payment Date. Notwithstanding the foregoing, if any Short-Term Dividend Payment Date set pursuant to this subsection (g) would occur in a number of days after the immediately preceding Short-Term Dividend Payment Date that is less than the number of days in the then-current Minimum Holding Period, the Short-Term Dividend Payment Date shall instead be the next Business Day that (i) is at least a number of days after the preceding Dividend Payment Date as to include the then-current Minimum Holding Period and (ii) is next succeeded by a Business Day. After any such adjustment pursuant to this subsection (g) to the Dividend Payment Date for any Short-Term Period, the last

day of such Short-Term Period shall also be adjusted so as to be the day immediately preceding such Dividend Payment Date.

(h) Any designation by the Board of Directors of a Short-Term Period following a Quarterly Period shall be effective upon written notice thereof given by the Company to the Trust Company and to the Securities Depository prior to 1:00 P.M., New York City time, on the fifth Business Day prior to the Auction Date. Any designation by the Board of Directors of a change in the duration of the Short-Term Period shall be effective upon written notice thereof given by the Company to the Trust Company and to the Securities Depository prior to 1:00 P.M., New York City time, on the third Business Day prior to the Auction Date.

(i) Dividends shall be payable to the Holders as their names appear on the stock books of the Company or of the registrar of the Series A Stock on the Business Day next preceding the Dividend Payment Date in the case of a Short-Term Period and on such date, not more than 30 days and not less than 10 days, as may be fixed by the Board of Directors, next preceding the Dividend Payment Date in the case of a Quarterly Period; provided that, if a Payment Failure exists, then such dividends shall be paid to the Holders as their names appear on the stock books on such date, not exceeding 15 days preceding the payment date thereof, as may be fixed by the Board of Directors.

(j) Dividend rates for the shares of Series A Stock for each Dividend Period (other than the Initial Dividend Period) shall be equal to the rate per annum that results from the Auction with respect to such Dividend Period; provided that, (i) if a Payment Failure shall have occurred, the dividend rate for all Dividend Periods commencing on or after such Dividend Payment Date or redemption date and until such Payment Failure has been cured shall be a rate per annum equal to 250% of the Applicable AA Composite Commercial Paper Rate on the Business Day next preceding the commencement of each such Dividend Period (notwithstanding the results of any Auction for any such Dividend Period); and (ii) if a Payment Failure is remedied by reason of the Company having paid all dividends accrued and unpaid, and all unpaid redemption payments, on all shares of Series A Stock, the dividend rate for each Dividend Period commencing after the date on which the Payment Failure is remedied shall again be determined by an Auction. Notwithstanding the foregoing, and subject to subsection (l) of this Section (2), the dividend rate for any Dividend Period shall not exceed 25% per annum. The rate per annum at which dividends are payable on shares of Series A Stock for any Dividend Period (other than the Initial Dividend Period) is hereinafter referred to as the "Applicable Rate."

(k) The dividend per share to accrue and be payable on each share of Series A Stock for the Initial Dividend Period shall be computed by multiplying the

product of 3.30% (the dividend rate for the Initial Dividend Period) and $100 by a fraction, the numerator of which shall be the number of days in the Initial Dividend Period, including the first and last days of such Initial Dividend Period, and the denominator of which shall be 360. The dividend per share to accrue and be payable on each share of Series A Stock for each Quarterly Period shall be computed by dividing by four the product of the Applicable Rate for such Dividend Period and $100. The dividend per share to accrue and be payable on each share of Series A Stock for any Short-Term Period shall be computed by multiplying the Applicable Rate for such Short-Term Period by a fraction, the numerator of which shall be the number of days in such Short-Term Period, including the first and last days of such Dividend Period, and the denominator of which shall be 360, and multiplying by $100 the rate so obtained.

(l) Notwithstanding anything to the contrary contained in subarticle A of this Article Fourteenth, the dividend rate for any Dividend Period on the Series A Stock shall not exceed 25% per annum; provided, however, that if paragraph (7)(B)(b) of Article Fifth hereof is amended to provide a method for computing the dividend rate on preferred stock having dividends determined pursuant to an adjustable, floating or variable rate, then from and after the date such amendment becomes effective, this subsection (l), including the 25% restriction contained in this subsection (l), shall cease to be operative, and shall be of no force and effect and all references to this subsection (l) in subarticle A of this Article Fourteenth shall be of no force and effect.

B. Terms of $5.875 Cumulative Preferred Stock (without par value). The Company has classified 250,000 shares of the Preferred Stock (without par value) as a series of such Preferred Stock designated as "$5.875 Cumulative Preferred Stock (without par value)." The preferences, rights, qualifications and restrictions of the shares of the "$5.875 Cumulative Preferred Stock (without par value)," shall be as follows:

(3) Definitions.

As used with respect to the shares of Series A Stock, the following terms shall have the following meanings, unless the context otherwise requires:

"Affiliate" shall mean any Person known to the Trust Company to be controlled by, in control of or under common control with the Company.

"Agent Member" shall mean a member of the Securities Depository that will act on behalf of a Bidder and is identified as such in such Bidder's Master Purchaser's Letter.

"Applicable AA Composite Commercial Paper Rate," on any date, shall mean (i) with respect to a 49-day Short-Term Period, (A) the Interest Equivalent of the 60-day rate on commercial paper placed on behalf of issuers whose corporate bonds are rated "AA" by Standard & Poor's Corporation or its successor ("S&P"), or the equivalent of such rating by S&P or another rating agency, as such 60-day rate is made available on a discount basis or otherwise by the Federal Reserve Bank of New York for the Business Day immediately preceding such date, or (B) in the event that the Federal Reserve Bank of New York does not make available such a rate, then the arithmetic average of the Interest Equivalent of the 60-day rate on commercial paper placed on behalf of such issuers, and as quoted, on a discount basis or otherwise, to the Trust Company for the close of business on the Business Day immediately preceding such date by the Commercial Paper Dealers or (ii) with respect to a Quarterly Period or a 13-week Short-Term Period, the Interest Equivalent of the 90-day rate on such commercial paper as so determined. In the event that either of the Commercial Paper Dealers does not quote a rate required to determine the Applicable AA Composite Commercial Paper Rate, the Applicable AA Composite Commercial Paper Rate shall be determined on the basis of the quotations furnished by the remaining Commercial Paper Dealer and the Substitute Commercial Paper Dealer selected by the Company to provide such rate or, if the Company does not select any such Substitute Commercial Paper Dealer, the remaining Commercial Paper Dealer. If an adjustment is made to the length of a Short-Term Period to comply with the Minimum Holding Period pursuant to subsection (c) of Section (2), then if the resulting number of days in each subsequent Short-Term Period, before any adjustment shall be (i) 70 or more days but fewer than 85 days, such rate shall be the arithmetic average of the Interest Equivalent of the 60-day and 90-day rates on such commercial paper, or (ii) 85 or more days but 98 or fewer days, such rate shall be the Interest Equivalent of the 90-day rate on such commercial paper.

"Applicable Rate" shall have the meaning specified in Section (2), subsection (j).

"Auction" shall mean periodic implementation of the Auction Procedures set forth herein.

"Auction Date" shall mean the Business Day immediately preceding a Dividend Payment Date.

"Auction Procedures" shall mean the procedures for conducting Auctions set forth in Section (4).

"Available Units" shall have the meaning specified in Section (4), subsection (c), paragraph 1, subparagraph a.

"Bid" and "Bids" shall have the respective meanings specified in Section (4), subsection (a), paragraph 1, subparagraph c.

"Bidder" and "Bidders" shall have the respective meanings specified in Section (4), subsection (a), paragraph 1, subparagraph c.

"Board of Directors" shall mean the Board of Directors of the Company or any committee authorized by the Board of Directors to perform any or all of the duties of the Board with respect to the Series A Stock.

"Broker-Dealer" shall mean any broker-dealer or other entity permitted by law to perform the functions required of a Broker-Dealer in Sections (4) and (5), that is a member of, or a participant in, the Securities Depository and that has been selected by the Company and has entered into a Broker-Dealer Agreement with the Trust Company that remains effective.

"Broker-Dealer Agreement" shall mean an agreement between the Trust Company and a Broker-Dealer pursuant to which such Broker-Dealer agrees to follow the procedures specified in Sections (4) and (5).

"Business Day" shall mean a day on which the New York Stock Exchange, Inc. is open for trading and which is not a day on which banks in New York City are authorized by law to close.

"Code" shall mean the Internal Revenue Code of 1986, as amended.

"Commercial Paper Dealers" shall mean Goldman, Sachs & Co. and Morgan Stanley & Co. Incorporated or, in lieu thereof, their respective affiliates or successors that are engaged in the business of buying and selling commercial paper.

"Date of Original Issue" shall have the meaning specified in Section (2), subsection (b).

"Dividend Payment Date" shall have the meaning specified in Section (2), subsection (f).

"Dividend Period" shall have the meaning specified in Section (2), subsection (c).

"Dividends-Received Deduction" shall mean the dividends-received deduction on preferred stock held by nonaffiliate corporations (currently found in Section 243(a) of the Code).

"Existing Holder" shall mean a Person who has executed a Master Purchaser's Letter and who is listed as the beneficial owner of shares of Series A Stock in the records of the Trust Company.

"Hold Order" and "Hold Orders" shall have the respective meanings specified in Section (4), subsection (a), paragraph 1, subparagraph c.

"Holders" shall mean the holders of shares of the Series A Stock as the same appear on the stock books of the Company or the registrar of the Series A Stock.

"Initial Dividend Payment Date" shall have the meaning specified in Section (2), subsection (b).

"Initial Dividend Period" shall have the meaning specified in Section (2), subsection (b).

"Interest Equivalent" shall mean the equivalent yield on a 360-day basis of a discount basis security to an interest-bearing security.

"Master Purchaser's Letter" shall mean a letter addressed to the Company, the Trust Company, the remarketing agent, a Broker-Dealer and an Agent Member in which the executing Person agrees, among other things, to offer to purchase, to purchase, to offer to sell and to sell shares of Series A Stock as set forth in Section (4).

"Maximum Rate" for any Auction shall mean, subject to subsection (l) of Section (2), the product of the Applicable AA Composite Commercial Paper Rate on the Auction Date for such Auction and the Rate Multiple.

"Minimum Holding Period" shall have the meaning specified in Section (2), subsection (c).

"Minimum Rate" for any Auction shall mean, subject to subsection (l) of Section (2), 58% of the Applicable AA Composite Commercial Paper Rate on the Auction Date for such Auction.

"Order" and "Orders" shall have the respective meanings specified in Section (4), subsection (a), paragraph 1, subparagraph c.

"Outstanding Shares" shall mean, as of any date, shares of Series A Stock theretofore issued by the Company except, without duplication, (i) any shares theretofore canceled or delivered to the Trust Company for cancellation or redeemed or deemed to have been redeemed by the Company, (ii) any shares as to

which the Company or any Affiliate thereof shall be an Existing Holder, and (iii) any shares represented by any certificate in lieu of which a new certificate has been executed and delivered by the Company.

"Outstanding Units" shall mean Units comprised of Outstanding Shares.

"Payment Failure" shall mean a failure by the Company to pay to the Holders on or within three Business Days (i) after any Dividend Payment Date, the full amount of any dividends to be paid on such Dividend Payment Date on any share of the Series A Stock or (ii) after any redemption date, the redemption price to be paid on that redemption date on any share of the Series A Stock with respect to which a notice of redemption has been given.

"Person" shall mean an individual, a partnership, a corporation, a trust, an unincorporated association, a joint venture or other entity or a government or any agency or political subdivision thereof.

"Potential Holder" shall mean any Person, including any Existing Holder, (i) who shall have executed a Master Purchaser's Letter and (ii) who may be a prospective purchaser of Units (or, in the case of an Existing Holder, additional Units).

"Quarterly Dividend Payment Date" shall have the meaning specified in Section (2), subsection (f).

"Quarterly Period" shall have the meaning specified in Section (2), subsection (c).
"Rate Multiple," on any Auction Date, shall mean the percentage determined as set forth below based on the Prevailing Rating (as defined below) of the Series A Stock in effect at the close of business on the Business Day immediately preceding such Auction Date:

Prevailing Rating	Percentage
AA/aa or above	110%
A/a	150%
BBB/baa	200%
Below BBB/baa	250%

For purposes of this definition, the "Prevailing Rating" of the Series A Stock shall be (i) AA/aa or above, if the Series A Stock has a rating of AA- or better by S&P and a rating of aa3 or better by Moody's Investors Service, Inc. or its successor ("Moody's"), or the equivalent of both of such ratings by a substitute rating agency or substitute rating agencies selected as provided below, (ii) if not AA/aa or above, then A/a, if the Series A Stock has a rating of A- or better by S&P and a

rating of a3 or better by Moody's, or the equivalent of both of such ratings by a substitute rating agency or substitute rating agencies selected as provided below, (iii) if not AA/aa or above or A/a, then BBB/baa, if the Series A Stock has a rating of BBB- or better by S&P and a rating of baa3 or better by Moody's, or the equivalent of both of such ratings by a substitute rating agency or substitute rating agencies selected as provided below, and (iv) if not AA/aa or above, A/a or BBB/baa, then Below BBB/baa. If both S&P and Moody's fail to make such a rating available, Goldman, Sachs & Co. and Morgan Stanley & Co. Incorporated, or their successors and assigns, will select one or two nationally recognized securities rating agencies to act as a substitute rating agency or agencies. The Company will take all reasonable action necessary to enable S&P and Moody's, or such substitute rating agency or agencies, to provide a rating for the Series A Stock.

"Remaining Units" shall have the meaning specified in Section (4), subsection (d), paragraph l, subparagraph d.

"Securities Depository" shall mean The Depository Trust Company and its successors and assigns or any other securities depository selected by the Company which agrees to follow the procedures required to be followed by such securities depository in connection with shares of the Series A Stock.

"Sell Order" and "Sell Orders" shall have the respective meanings specified in Section (4), subsection (a), paragraph 1, subparagraph c.

"Short-Term Dividend Payment Date" shall have the meaning specified in Section (2), subsection (f).

"Short-Term Period" shall have the meaning specified in Section (2), subsection (c).

"Submission Deadline" shall mean 1:00 P.M., New York City time, on any Auction Date or such other time on any Auction Date by which Broker-Dealers are required to submit Orders to the Trust Company as specified by the Trust Company from time to time.

"Submitted Bid" and "Submitted Bids" shall have the respective meanings specified in Section (4), subsection (c), paragraph l.

"Submitted Hold Order" and "Submitted Hold Orders" shall have the respective meanings specified in Section (4), subsection (c), paragraph l.

"Submitted Order" shall have the meaning specified in Section (4), subsection (c), paragraph l.

"Submitted Sell Order" and "Submitted Sell Orders" shall have the respective meanings specified in Section (4), subsection (c), paragraph 1.

"Substitute Commercial Paper Dealer" shall mean any commercial paper dealer that is a leading dealer in the commercial paper market.

"Sufficient Clearing Bids" shall have the meaning specified in Section (4), subsection (c), paragraph 1, subparagraph b.

"Trust Company" shall mean a bank or trust company duly appointed as such with respect to the shares of the Series A Stock.

"Unit" shall have the meaning specified in Section (l).

"Winning Bid Rate" shall have the meaning specified in Section (4), subsection (c) paragraph l. subparagraph c.

(4) Auction Procedures.

(a) Orders by Existing Holders and Potential Holders.

1. Prior to the Submission Deadline on each Auction Date:

a. Each Existing Holder may submit to a Broker-Dealer by telephone information as to:

(i) the number of Outstanding Units, if any, held by such Existing Holder that such Existing Holder desires to continue to hold for the next succeeding Dividend Period without regard to the rate determined by the Auction Procedures;

(ii) the number of Outstanding Units, if any, that such Existing Holder desires to continue to hold for the next succeeding Dividend Period, if the rate determined by the Auction procedures shall not be less than the rate per annum specified by such Existing Holder; and/or

(iii) the number of Outstanding Units, if any, held by such Existing Holder that such Existing Holder offers to

sell without regard to the rate determined by the Auction Procedures for the next succeeding Dividend Period; and

b. Each Broker-Dealer, using a list of Potential Holders, in good faith for the purpose of conducting a competitive Auction in a commercially reasonable manner, shall contact Potential Holders, including Persons that are not Existing Holders, on such list to determine the number of Outstanding Units, if any, that each such Potential Holder offers to purchase, if the rate determined by the Auction Procedures for the next succeeding Dividend Period shall not be less than the rate per annum specified by such Potential Holder.

c. *For the purposes hereof, the communication to a Broker-*Dealer of information referred to in subparagraph a or subparagraph b of this paragraph 1 is referred to hereinafter as an "Order" and collectively as "Orders," and each Existing Holder and each Potential Holder placing an Order is referred to hereinafter as a "Bidder" and collectively as "Bidders;" an Order containing the information referred to in clause (i) of subparagraph a of this paragraph 1 is referred to hereinafter as a "Hold Order" and collectively as "Hold Orders;" an Order containing the information referred to in clause (ii) of subparagraph a or subparagraph b of this paragraph 1 is referred to hereinafter as a "Bid" and collectively as "Bids;" and an Order containing the information referred to in clause (iii) of subparagraph a of this paragraph 1 is referred to hereinafter as a "Sell Order" and collectively as "Sell Orders."

d. On any Auction Date, a Bid submitted by an Existing Holder shall constitute an irrevocable offer to sell:

(i) the number of Outstanding Units specified in such bid if the rate determined by the Auction Procedures on such Auction Date shall be less than the rate specified in such Bid; or

(ii) such number or a lesser number of Outstanding Units to be determined as set forth in subsection (d), paragraph 1, subparagraph d, of this Section (4), if the rate determined by the Auction Procedures on such Auction Date shall be equal to the rate specified in such Bid; or

(iii) a lesser number of Outstanding Units than was specified in such Bid, to be determined as set forth in subsection (d), paragraph 2, subparagraph c, of this Section (4), if the rate specified therein shall be higher than the Maximum Rate and Sufficient Clearing Bids do not exist.

e. On any Auction Date, a Sell Order by an Existing Holder shall constitute an irrevocable offer to sell:

(i) the number of Outstanding Units specified in such Sell Order; or

(ii) such number or a lesser number of Outstanding Units as set forth in subsection (d), paragraph 2, subparagraph c, of this Section (4) if Sufficient Clearing bids do not exist.

f. On any Auction Date, a Bid by a Potential Holder shall constitute an irrevocable offer to purchase:

(i) the number of Outstanding Units specified in such Bid if the rate determined by the Auction Procedures on such Auction Date shall be higher than the rate specified in such Bid; or

(ii) such number or a lesser number of Outstanding Units as set forth in subsection (d), paragraph 1, subparagraph e, of this Section (4) if the rate determined by the Auction Procedures on such Auction Date shall be equal to the rate specified in such Bid.

g. On each Auction Date, the Trust Company shall determine the Applicable AA Composite Commercial Paper Rate and the Maximum Rate and shall notify the Company and each Broker-Dealer of each such rate not later than 9:30 A.M. on such Auction Date or such other time on such Auction Date as specified by the Trust Company with the consent of the Company (which consent shall not be unreasonably withheld).

(b) Submission of Orders by Broker-Dealers to Trust Company.

1. Each Broker-Dealer shall submit in writing to the Trust Company prior to the Submission Deadline on each Auction Date all Orders obtained by such Broker-Dealer and specifying with respect to each Order:

a. The name of the Bidder placing such Order;

b. The aggregate number of Units that are the subject of such Order;

c. To the extent that such Bidder is an Existing Holder:

(i) the number of Units, if any, subject to any Hold Order placed by such Existing Holder;

(ii) the number of Units, if any, subject to any Bid placed by such Existing Holder and the rate specified in such Bid; and

(iii) the number of Units, if any, subject to any Sell Order placed by such Existing Holder; and

d. To the extent such Bidder is a Potential Holder, the number of Units and the rate specified in such Potential Holder's Bid.

2. If any rate specified in any Bid contains more than three figures to the right of the decimal point, the Trust Company shall round such rate up to the next highest one thousandth (.001) of 1%.

3. If, for any reason, an Order or Orders covering all of the Outstanding Units held by any Existing Holder is not submitted to the Trust Company prior to the Submission Deadline, the Trust Company shall deem a Hold Order to have been submitted on behalf of such Existing Holder covering the number of Outstanding Units held by such Existing Holder and not subject to Orders submitted to Trust Company.

4. If one or more Orders by an Existing Holder covering in the aggregate more than the number of Outstanding Units held by such Existing Holder are submitted to the Trust Company by one or more Broker-Dealers on behalf of such Existing Holder, such Orders shall be considered valid as follows and in the following order of priority:

a. Any Hold Orders submitted on behalf of such Existing Holder shall be considered valid up to and including, in the aggregate, the number of Outstanding Units held by such Existing Holder; provided that, if more than one Hold Order is submitted on behalf of such Existing Holder and the number of Units subject to such Hold Orders exceeds the number of Outstanding Units held by such Existing Holder, the number of Units subject to such Hold Orders shall be reduced pro rata so that such Hold Orders shall cover only the number of Outstanding Units held by such Existing Holder;

b. (i) Any Bid submitted on behalf of an Existing Holder shall be considered valid up to and including the excess of the number of Outstanding Units held by such Existing Holder over the number of Units subject to valid Hold Orders of such Existing Holder referred to in subparagraph a of this paragraph 4,

(ii) subject to clause (i) of this subparagraph b, if more than one Bid with the same rate is submitted on behalf of such Existing Holder and the aggregate number of Outstanding Units subject to such Bids is greater than the excess referred to in clause (i) of this subparagraph b, such Bids shall be considered valid up to the amount of such excess and the number of Units subject to such Bids shall be reduced pro rata so that such Bids shall cover only the number of Units equal to such excess,

(iii) subject to clause (i) of this subparagraph b, if more than one Bid with different rates is submitted on behalf of such Existing Holder, such Bids shall be considered valid in their entirety up to the excess referred to in clause (i) of this subparagraph b in the ascending order of their respective rates, and

(iv) in any such event specified in this subparagraph b, the number, if any, of such Units subject to Bids not valid under this subparagraph b shall be treated as the subject of a Bid by a Potential Holder; and

c. Any Sell Order shall be considered valid up to and including, in the aggregate, the excess of the number of Outstanding Units held by such Existing Holder over the sum of

the Units subject to valid Hold Orders of such Existing Holder referred to in subparagraph a of this paragraph 4 and valid Bids by such Existing Holder referred to in subparagraph b of this paragraph 4.

5. In any Auction, if more than one Bid is submitted on behalf of any Potential Holder, each Bid submitted shall be a separate Bid with the rate and number of Units therein specified.

6. Orders by Existing Holders and Potential Holders must specify a whole number of Units. An Order that does not specify a whole number of Units will not be considered a Submitted Order for purposes of the Auction.

(c) <u>Determination of Sufficient Clearing Bids, Winning Bid Rate and Applicable Rate</u>.

1. Not earlier than the Submission Deadline on each Auction Date, the Trust Company shall assemble all Orders submitted or deemed submitted to it by Broker-Dealers (each such Order as submitted or deemed submitted by a Broker-Dealer being referred to hereinafter individually as a "Submitted Hold Order," a "Submitted Bid" or a "Submitted Sell Order," as the case may be, or as a "Submitted Order") and shall determine:

a. The excess of the total number of Outstanding Units over the number of Outstanding Units that are the subject of Submitted Hold Orders (such excess being hereinafter referred to as the "Available Units");

b. From the Submitted Orders, whether the number of Outstanding Units that are the subject of Submitted Bids by Existing Holders and Potential Holders specifying one or more rates equal to or lower than the Maximum Rate exceeds or is equal to the sum of:

(i) the number of Outstanding Units that are the subject of Submitted Bids by Existing Holders specifying one or more rates higher than the Maximum Rate, and

(ii) the number of Outstanding Units that are subject to Submitted Sell Orders (in the event of such excess or of such equality (other than because the number of Units specified in each of clauses (i) and (ii) of this subparagraph

b is zero because all of the Outstanding Units are the subject of Submitted Hold Orders) such Submitted Bids in this subparagraph b are hereinafter referred to collectively as "Sufficient Clearing Bids"); and

c. If Sufficient Clearing Bids exist, the lowest rate specified in the Submitted Bids (the "Winning Bid Rate") which if:

(i) (A) Each Submitted Bid from Existing Holders specifying such Winning Bid Rate and (B) all other Submitted Bids from Existing Holders specifying lower rates were accepted, thus entitling such Existing Holders to continue to hold the Outstanding Units that are the subject of such Submitted Bids, and

(ii) (A) Each Submitted Bid from Potential Holders specifying such Winning Bid Rate and (B) all other Submitted Bids from Potential Holders specifying lower rates were accepted, thus requiring the Potential Holders to purchase the Outstanding Units that are subject to such Submitted Bids,

would result in such Existing Holders described in clause (i) of this subparagraph c continuing to hold an aggregate number of Outstanding Units that, when added to the numbers of Outstanding Units to be purchased by such Potential Holders described in clause (ii) of this subparagraph c, would at least equal the Available Units.

2. In connection with any Auction and promptly after the Trust Company has made the determinations pursuant to paragraph 1 of this subsection (c), the Trust Company shall advise the Company of the Applicable AA Composite Commercial Paper Rate and the Maximum Rate and, based on such determinations, of the Applicable Rate for the next succeeding Dividend Period and such other information as follows:

a. If Sufficient Clearing Bids exist, that the Applicable Rate for the next succeeding Dividend Period shall be equal to the Winning Bid Rate so determined;

b. If Sufficient Clearing Bids do not exist (other than because all of the Outstanding Units are the subject of Submitted Hold

Orders), that the Applicable Rate for the next succeeding Dividend Period shall be the Maximum Rate; or

c. If all of the Outstanding Units are the subject of Submitted Hold Orders, that the Applicable Rate for the next succeeding Dividend Period shall be equal to the Minimum Rate.

(d) <u>Acceptance and Rejection of Submitted Bids and Submitted Sell Orders and Allocation of Units</u>.

Based on the determinations made pursuant to subsection (c), paragraph 1, of this Section (4), the Submitted Bids and Submitted Sell Orders shall be accepted or rejected and the Trust Company shall take such other action as set forth below:

1. If Sufficient Clearing Bids have been made, subject to the provisions of paragraphs 4 and 5 of this subsection (d), Submitted Bids and Submitted Sell Orders shall be accepted or rejected in the following order of priority and all other Submitted Bids shall be rejected:

a. The Submitted Sell Orders of each Existing Holder shall be accepted and the Submitted Bids of each Existing Holder specifying any rate that is higher than the Winning Bid Rate shall be rejected, thus requiring each such Existing Holder to sell the Outstanding Units that are the subject of such Submitted Sell Orders or Submitted Bids;

b. The Submitted Bids of each Existing Holder specifying any rate that is lower than the Winning Bid Rate shall be accepted, thus entitling each such Existing Holder to continue to hold the Outstanding Units that are the subject of such Submitted Bids:

c. The Submitted Bids of each Potential Holder specifying any rate that is lower than the Winning Bid Rate shall be accepted, thus requiring such Potential Holder to purchase the number of Outstanding Units that are the subject of such Submitted Bids;

d. The Submitted Bids of each Existing Holder specifying a rate that is equal to the Winning Bid Rate shall be accepted, thus entitling such Existing Holder to continue

to hold the Outstanding Units that are the subject of each such Submitted Bid, unless the number of Outstanding Units subject to all such Submitted Bids of Existing Holders shall be greater than the number of Outstanding Units ("Remaining Units") equal to the excess of the Available Units over the number of Outstanding Units subject to Submitted Bids described in subparagraphs b and c of this paragraph 1, in which event the Submitted Bids of each such Existing Holder shall be rejected, and each such Existing Holder shall be required to sell Units, but only in an amount equal to the difference between (i) the number of Outstanding Units then held by such Existing Holder subject to such Submitted Bid and (ii) the number of Outstanding Units obtained by multiplying (x) the number of Remaining Units by (y) a fraction (the numerator of which shall be the number of Outstanding Units held by such Existing Holder subject to such Submitted Bid and the denominator of which shall be the sum of the number of Outstanding Units subject to such Submitted Bids made by all such Existing Holders that specified a rate equal to the Winning Bid Rate); and

e. The Submitted Bid of each Potential Holder specifying a rate that is equal to the Winning Bid Rate shall be accepted, but only in an amount equal to the number of Outstanding Units obtained by multiplying (x) the difference between the Available Units and the number of Outstanding Units subject to Submitted Bids described in subparagraphs b, c, and d of this paragraph 1 by (y) a fraction (the numerator of which shall be the number of Outstanding Units subject to such Submitted Bid of such Potential Holder and the denominator of which shall be the sum of the number of Outstanding Units subject to Submitted Bids that specified rates equal to the Winning Bid Rate submitted by all such Potential Holders).

2. If Sufficient Clearing Bids have not been made (other than because all of the Outstanding Units are subject to Submitted Hold Orders), subject to the provisions of paragraph 4 of this subsection (d), Submitted Orders shall be accepted or rejected in the following order of priority and all other Submitted Bids shall be rejected:

a. The Submitted Bids of each Existing Holder specifying any rate that is equal to or lower than the Maximum Rate shall be accepted, thus entitling such Existing Holder to continue to hold the Outstanding Units that are the subject of such Submitted Bids;

b. The Submitted Bids of each Potential Holder specifying any rate that is equal to or lower than the Maximum Rate shall be accepted, thus requiring such Potential Holder to purchase the Outstanding Units that are the subject of such Submitted Bids; and

c. The Submitted Bids of each Existing Holder specifying any rate that is higher than the Maximum Rate shall be rejected, and each Submitted Sell Order of each Existing Holder shall be accepted, thus requiring such Existing Holder to sell the Outstanding Units that are the subject of each such Submitted Bid or Submitted Sell Order, in both cases only in an amount equal to the difference between (i) the number of Outstanding Units then held by such Existing Holder subject to such Submitted Bid or Submitted Sell Order and (ii) the number of Outstanding Units obtained by multiplying (x) the difference between the Available Units and the aggregate number of Outstanding Units subject to Submitted Bids described in subparagraphs a and b of this paragraph 2 by (y) a fraction (the numerator of which shall be the number of Outstanding Units held by such Existing Holder subject to such Submitted Bid or Submitted Sell Order and the denominator of which shall be the number of Outstanding Units subject to all such Submitted Bids and Submitted Sell Orders of Existing Holders).

3. If all of the Outstanding Units are the subject of Submitted Hold Orders, all Submitted Bids shall be rejected.

4. If, as a result of the procedures described in paragraph 1 or 2 of this subsection (d), any Existing Holder would be entitled to hold or required to sell, or any Potential Holder would be required to purchase, a fraction of a Unit on any Auction Date, the Trust Company shall, in such manner as, in its sole discretion, it shall determine, round up or down the number of Units to be held or sold by any Existing Holder or purchased by any Potential Holder

on such Auction Date so that the number of Units held or sold by each Existing Holder or purchased by any Potential Holder on such Auction Date shall be a whole number of Units.

5. If, as a result of the procedures described in paragraph 1 of this subsection (d), any Potential Holder would be entitled or required to purchase less than a whole Unit on any Auction Date, the Trust Company shall, in such manner as, in its sole discretion, it shall determine, allocate Units for purchase among Potential Holders so that only whole Units are purchased on such Auction Date by any Potential Holder, even if such allocation results in one or more of such Potential Holders not purchasing Units on such Auction Date.

6. Based on the results of each Auction, the Trust Company shall determine the aggregate number of Outstanding Units to be purchased and the aggregate number of Outstanding Units to be sold by Potential Holders and Existing Holders on whose behalf each Broker-Dealer submitted Bids or Sell Orders and, with respect to each Broker-Dealer, to the extent that such aggregate number of Units to be sold differ, determine to which other Broker-Dealer or Broker-Dealers acting for one or more purchasers such Broker-Dealer shall deliver, or from which other Broker-Dealer or Broker-Dealers acting for one or more sellers such Broker-Dealer shall receive, as the case may be, Units.

(5) Miscellaneous.

(a) So long as the Applicable Rate is based on the results of an Auction, an Existing Holder (i) may sell, transfer or otherwise dispose of shares of Series A Stock only in Units and only pursuant to a Bid or Sell Order in accordance with the Auction Procedures, or to or through a Broker-Dealer or to a Person that has delivered a signed copy of a Master Purchaser's Letter to the Trust Company; provided that, in the case of all transfers other than pursuant to Auctions, such Existing Holder or its Broker-Dealer or its Agent Member advises the Trust Company of such transfer, and (ii) shall have the ownership of the shares of Series A Stock held by it maintained in book entry form by the Securities Depository in the account of its Agent Member, which in turn will maintain account records of such Existing Holder's beneficial ownership.

(b) Neither the Company nor any Affiliate thereof may submit an Order in any Auction.

(c) All references to time of day refer to New York City time.

(d) From and during the continuance of a Payment Failure and during any period in which there shall not be a Securities Depository, shares of Series A Stock may be registered for transfer or exchange and new certificates issued upon surrender of the old certificates properly endorsed for transfer, with (i) all necessary endorsers' signatures guaranteed in such manner and form as the Trust Company (or such other transfer agent or registrar) may require by a guarantor reasonably believed by the Trust Company (or such other transfer agent or registrar) to be responsible, (ii) accompanied by such assurances as the Trust Company (or such other transfer agent or registrar) shall deem necessary or appropriate to evidence the genuineness and effectiveness of each necessary endorsement and (iii) satisfactory evidence of compliance with all applicable laws relating to the collection of taxes or funds necessary for the payment of such taxes.

(e) Commencing with the Dividend Payment Date for which a Payment Failure occurs, the Company or an Affiliate thereof, at the option of the Company, may perform any of the functions to be performed by the Trust Company or the Securities Depository set forth herein.

(f) The Board of Directors of the Company may interpret the provisions of the Auction Procedures as set forth herein to resolve any inconsistency or ambiguity which may arise or be revealed in connection therewith, and, if such inconsistency or ambiguity reflects an inaccurate provision hereof, the Board of Directors of the Company may, in appropriate circumstances, authorize the filing of a corrected Articles of Amendment.

(g) Shares of Series A Stock which have been redeemed or otherwise acquired by the Company or any Affiliate are not subject to reissuance as Series A Stock.

(6) Redemption.

The shares of Series A Stock shall be subject to redemption, in whole or in part on any Dividend Payment Date, upon the notice and in the manner and with the effect provided in Article Fifth of these Articles; provided that if such Article Fifth is amended to grant the Company's Board of Directors in certain instances the authority to determine the time, form and manner of a notice of redemption, from and after the date such amendment becomes effective, publication of notice of the redemption of the Series A Stock shall not be required and notice of such redemption shall be sufficient if mailed at least thirty (30) days' prior to redemption to the holders of record of the Series A Stock so to be redeemed, at their respective addresses as the same shall appear on the books of the Company, but no failure to mail a particular notice nor any defect therein or in the

mailing thereof shall affect the validity of the proceedings for the redemption of those shares of Series A Stock for which proper notice has been given; provided further that all other terms of Article Fifth, as amended, relating to the redemption of shares of Preferred Stock and Preferred Stock (without par value) shall continue to apply to the redemption of the Series A Stock. The notice of redemption shall include a statement setting forth (i) the number of shares of the Series A Stock to be redeemed (if applicable to be denominated in Units), (ii) the date fixed for redemption and (iii) the redemption price. So long as shares of Series A Stock are held of record by the nominee of the Securities Depository, the Company need only give notice to the Securities Depository of any such redemption. The redemption price or prices applicable to shares of said series shall be $100.00 per share plus accrued and unpaid dividends to the date of redemption. Unless the shares of Series A Stock shall have been registered for transfer and exchange as provided in subsection (d) of Section (5), redemptions shall be made only in whole Units.

(7) Voluntary or Involuntary Liquidation.

The preferential amounts to which the holders of Series A Stock shall be entitled upon any voluntary or involuntary liquidation, dissolution or winding up of the Company, in addition to dividends accumulated but unpaid thereon, shall be $100 per share.

(8) Stated Value.

The stated value of the Series A Stock shall be $100 per share.

B. Terms of $5.875 Cumulative Preferred Stock (without par value). The Company has classified 250,000 shares of the Preferred Stock (without par value) as a series of such Preferred Stock designated as "$5.875 Cumulative Preferred Stock (without par value)." The preferences, rights, qualifications and restrictions of the shares of the "$5.875 Cumulative Preferred Stock (without par value)," shall be as follows:

(1) The annual dividend payable in respect of each share of said series shall be $5.875; and the initial dividend in respect of each share of said series shall be payable on July 15, 1993, when and as declared by the Board of Directors of this Company, to holders of record on June 30, 1993, and will accrue from the date of original issuance of said series; thereafter, such dividends shall be payable on January 15, April 15, July 15 and October 15 in each year (or the next business date thereafter in each case), when and as declared by the Board of Directors of this Company, for the quarter-yearly period ending on the last business day of the preceding month.

(2) The shares of said series are not subject to redemption prior to July 1, 1998. On and after July 1, 1998, the shares of said series shall be subject to redemption, in whole or in part, in the manner and with the effect provided in these Articles; and the redemption price or prices applicable to shares of said series shall be $105.875 per share plus accrued and unpaid dividends to the date of redemption if such date of redemption is on or subsequent to July

1, 1998, and prior to July 1, 1999: $104.700 per share plus accrued and unpaid dividends to the date of redemption if such date of redemption is on or subsequent to July 1, 1999, and prior to July 1, 2000: $103.525 per share plus accrued and unpaid dividends to the date of redemption if such date of redemption is on or subsequent to July 1, 2000, and prior to July 1, 2001; $102.350 per share plus accrued and unpaid dividends to the date of redemption if such date of redemption is on or subsequent to July 1, 2001, and prior to July 1, 2002; $101.175 per share plus accrued and unpaid dividends to the date of redemption if such date of redemption is on or subsequent to July 1, 2002, and prior to July 1, 2003; and $100.000 per share plus accrued and unpaid dividends thereafter.

Notice of every such redemption shall be mailed at least thirty (30) days prior to redemption to the holders of record of the $5.875 Cumulative Preferred Stock (without par value) so to be redeemed, at their respective addresses as the same shall appear on the books of the Company, but no failure to mail a particular notice nor any defect therein or in the mailing thereof shall affect the validity of the proceedings for the redemption of those shares of $5.875 Cumulative Preferred Stock (without par value) for which proper notice has been given.

(3) So long as any shares of said series shall remain outstanding, the Company shall on or before July 15, 2003, and on or before July 15 of each year thereafter to and including July 15, 2007, set aside, separate and apart from its other funds, an amount equal to $1,250,000 (or such lesser amount as may be sufficient to redeem all of the shares of said series then outstanding) and shall on or before July 15, 2008 (each such July 15 being hereinafter in this Section 3 called a "Sinking Fund Redemption Date"), set aside, separate and apart from its other funds, an amount equal to $18,750,000 (or such lesser amount as may be sufficient to redeem all the shares of said series then outstanding) as a mandatory sinking fund payment for the exclusive benefit of shares of said series, plus such further amount as shall equal the accrued and unpaid dividends on the shares of said series to be redeemed out of such payment (as hereinafter in this Section 3 provided) through the day preceding the applicable Sinking Fund Redemption Date. The obligation of the Company to make such payment shall be cumulative, so that if for any reason the full amount thereof shall not be set aside for any year, the amount of the deficiency from time to time shall be added to the amount due from the Company on subsequent Sinking Fund Redemption Dates (or, if such deficiency exists on July 15, 2008, on subsequent quarterly dividend payment dates thereafter for such series) until the deficiency shall have been fully satisfied. The Company shall be entitled to credit against any such mandatory sinking fund payment shares of said series redeemed by the Company at the Company's option, purchased by the Company in the open market or otherwise acquired by the Company, except through application of any sinking fund payment, and not theretofore so credited, at the sinking fund redemption price hereinafter specified in this Section 3.

Any amounts set aside by the Company pursuant to this Section 3 shall be applied on the date of such setting aside if a Sinking Fund Redemption Date or otherwise on the first Sinking Fund Redemption Date occurring thereafter to the redemption of shares of said series at $100.000 per share, plus accrued and unpaid dividends through the day preceding the applicable

Sinking Fund Redemption Date, in the manner and upon the notice provided in Section 2 of this subarticle B. If any Sinking Fund Redemption Date shall be a Saturday, Sunday or other day on which banking institutions in Louisville, Kentucky are authorized or obligated to remain closed, such term shall be construed to refer to the next preceding business day.

Notwithstanding anything to the contrary set forth above, no sinking fund payments on the shares of said series of $5.875 Cumulative Preferred Stock shall be made: (i) unless the full dividends on all shares of Preferred Stock and Preferred Stock (without par value) at the time outstanding for all past dividend periods shall have been paid or declared and set apart for payment or (ii) if such sinking fund payment would be contrary to applicable law.

(4) The preferential amounts to which the holders of shares of such series shall be entitled upon any liquidation, dissolution or winding up of the Company in addition to dividends accumulated but unpaid thereon, shall be $100.000 per share in the event of any voluntary liquidation, dissolution or winding up of the Company, except that if such voluntary liquidation, dissolution or winding up of the Company shall have been approved by the vote in favor thereof given at a meeting called for that purpose or by the written consent of the holders of a majority of the total shares of the $5.875 Cumulative Preferred Stock (without par value) then outstanding, the amount so payable on such voluntary liquidation, dissolution or winding up shall be $100.000 per share; or $100.000 per share, in the event of any involuntary liquidation, dissolution or winding up of the Company.

(5) The shares of said series of $5.875 Cumulative Preferred Stock (without par value) shall be subject to all other terms, provisions and restrictions set forth in these Articles with respect to the shares of the Preferred Stock (without par value) and, excepting only as to the rates of dividend payable in respect of the shares of said series, the dividend periods and dividend payment dates, the redemption price or prices applicable to the shares of said series, the sinking fund provisions applicable to the shares of said series, and the liquidation price applicable to shares of said series, shall have the same relative rights and preferences as, shall be of equal rank with, and shall confer rights equal to those conferred by, all other shares of the Preferred Stock (without par value) of the Company.

(6) The stated value of the shares of said series shall be $100.00 per share."

The undersigned hereby certifies that the Articles of Amendment and Restated Articles of Incorporation correctly sets forth the corresponding Articles of Incorporation as amended and that these Articles of Amendment and Restated Articles of Incorporation supersede the original Articles of Incorporation and any amendments and corrections thereto.

Louisville Gas and Electric Company

By:
John R. McCall, Executive Vice President,
Secretary and General Counsel

N:\MURPHY\UTILITY\MASTER.DOC

0032196.09

Ghance
PAOA

Trey Grayson
Secretary of State
Received and Filed
04/08/2004 12:40:33 PM
Fee Receipt: $40.00

ARTICLES OF AMENDMENT
TO
ARTICLES OF INCORPORATION
OF
LOUISVILLE GAS AND ELECTRIC COMPANY

Pursuant to the provisions of KRS 271B.10-030 and KRS 271B.10-060, the following Articles of Amendment to the Articles of Incorporation of Louisville Gas and Electric Company, a Kentucky corporation (the "Corporation"), are hereby adopted:

FIRST: The name of the Corporation is Louisville Gas and Electric Company.

SECOND: The text of the amendment to Article Ninth of the Corporation's Articles of Incorporation is as follows:

"**NINTH**: All corporate powers shall be exercised by or under the authority of, and the business and affairs of the Company managed under the direction of, its Board of Directors. The number of directors shall be fixed by resolution of the Board of Directors from time to time.

The Board of Directors of the Company, to the extent not prohibited by law, shall have the power to cause the Company to repurchase its own shares and shall have the power to make distributions from time to time to the corporation's shareholders."

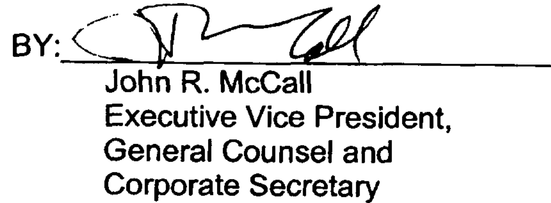
THIRD: The above designated amendments do not provide for an exchange, reclassification or cancellation of issued shares of stock of the Corporation.

FOURTH: The designated amendments were adopted by the Corporation's Board of Directors on March 21, 2003, and submitted for approval by the Corporation's shareholders. The Corporation has 21,294,223 outstanding shares of common stock, without par value and 860,287 outstanding shares of Preferred Stock, par value $25 per share, 5% Series, which are entitled to vote on the amendment. One hundred percent of the common shares and at least 99.9 percent of the voting

Preferred Stock were indisputably represented at a shareholders' meeting held December 16, 2003, duly called in accordance with the Kentucky Business Corporation Act, with 21,294,223 of the common shares and 65,098 Preferred Shares indisputably cast in favor of the amendment, such votes being sufficient for approval of the amendment.

DATED: February 6, 2004

Louisville Gas and Electric Company



BY: ______________________

John R. McCall
Executive Vice President,
General Counsel and
Corporate Secretary

o:\board\corp\corp-doc\lg&e amd art.doc

ARTICLES OF AMENDMENT
TO
ARTICLES OF INCORPORATION
OF
LOUISVILLE GAS AND ELECTRIC COMPANY

Pursuant to the provisions of KRS 271B.10-030 and KRS 271B.10-060, the following Articles of Amendment to the Articles of Incorporation of Louisville Gas and Electric Company, a Kentucky corporation (the "Corporation"), are hereby adopted:

FIRST: The name of the Corporation is Louisville Gas and Electric Company.

SECOND: The text of the amendment to Article Ninth of the Corporation's Articles of Incorporation is as follows:

"**NINTH**: All corporate powers shall be exercised by or under the authority of, and the business and affairs of the Company managed under the direction of, its Board of Directors. The number of directors shall be fixed by resolution of the Board of Directors from time to time.

The Board of Directors of the Company, to the extent not prohibited by law, shall have the power to cause the Company to repurchase its own shares and shall have the power to make distributions from time to time to the corporation's shareholders."

THIRD: The above designated amendments do not provide for an exchange, reclassification or cancellation of issued shares of stock of the Corporation.

FOURTH: The designated amendments were adopted by the Corporation's Board of Directors on March 21, 2003, and submitted for approval by the Corporation's shareholders. The Corporation has 21,294,223 outstanding shares of common stock, without par value and 860,287 outstanding shares of Preferred Stock, par value $25 per share, 5% Series, which are entitled to vote on the amendment. One hundred percent of the common shares and at least 99.9 percent of the voting

Preferred Stock were indisputably represented at a shareholders' meeting held December 16, 2003, duly called in accordance with the Kentucky Business Corporation Act, with 21,294,223 of the common shares and 65,098 Preferred Shares indisputably cast in favor of the amendment, such votes being sufficient for approval of the amendment.

DATED: February 6, 2004

Louisville Gas and Electric Company

BY:

John R. McCall
Executive Vice President,
General Counsel and
Corporate Secretary

o:\board\corp\corp-doc\lg&e amd art.doc

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND	)	
ELECTRIC COMPANY AND KENTUCKY	)	
UTILITIES COMPANY TO TRANSFER	)	CASE NO: 2005-00471
FUNCTIONAL CONTROL OF THEIR	)	
TRANSMISSION SYSTEM	)	

TESTIMONY OF
PAUL W. THOMPSON
SENIOR VICE PRESIDENT OF ENERGY SERVICES
LG&E ENERGY LLC

Filed: November 18, 2005

1 **Q. Please state your name, position and business address.**

2 A. My name is Paul W. Thompson. I am the Senior Vice President of Energy Services
3 for LG&E Energy LLC ("LG&E Energy"), the parent company of Louisville Gas and
4 Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (LG&E and
5 KU are collectively referred to as the "Companies"). My business address is 220
6 West Main Street, Post Office Box 32020, Louisville, Kentucky 40202.

7 **Q. What is the purpose of your testimony?**

8 A. I will provide a brief general overview of the Companies' application and the
9 evidence that supports it. I will also present the Companies' reasons for becoming
10 charter members of Midwest Independent Transmission System Operator, Inc.
11 ("MISO"), and describe the reasons that the Companies now seek to withdraw from
12 MISO in favor of pursuing operation with an Independent Transmission Organization
13 ("ITO") and a new North American Electric Reliability Council ("NERC")-certified
14 Reliability Coordinator ("RC"). Finally, I will briefly state why the Commission
15 should, pursuant to KRS 278.218, approve the Companies' exit from MISO and
16 transfer of functional control of the Companies' transmission assets from MISO to the
17 Companies, to TVA for reliability coordination purposes, and to SPP for the purposes
18 of SPP's acting as the Companies' ITO.

19 **Q. Please provide a brief overview of the Companies' proposal set out in its**
20 **application and the evidence that supports it.**

21 A. The proposal contained in the Companies' application would not only effect the
22 Companies' exit from MISO, but would also install an Independent Transmission
23 Organization to administer the Companies' Open Access Transmission Tariff

1 ("OATT") and a new NERC-certified Reliability Coordinator to maintain the
2 Companies' excellent transmission system reliability. The Companies issued Request
3 for Proposals ("RFPs") to identify the best candidates for these roles, and have
4 selected the Southwest Power Pool ("SPP") and the Tennessee Valley Authority
5 ("TVA") to fill the ITO and RC roles, respectively. These providers will allow the
6 Companies and their customers to enjoy significant cost savings as compared to
7 continued MISO membership, and will maintain the level of independence in the
8 operation of their transmission system that the Federal Energy Regulatory
9 Commission ("FERC") requires, and will maintain a high level of system reliability.
10 The Companies are currently in negotiations with SPP regarding an ITO
11 Agreement. To date, the ITO Agreement has not been executed, so the Companies
12 submit a pro forma version of this agreement in MSJ Exhibit 5. Under that
13 agreement, the Companies will remain the owners and operators of their transmission
14 system (as they are today), and will continue to maintain ultimate responsibility for
15 the provision of transmission service, including the sole authority to amend their
16 OATT pursuant to Section 205 of the Federal Power Act. However, the ITO would
17 assume responsibility for a number of core transmission functions, including OATT
18 administration, approval of all transmission service requests, oversight of system
19 impact studies and facilities study agreements, OASIS administration, calculation of
20 total transfer capability and available transmission capacity, transmission scheduling,
21 generation interconnections, and administration of a stakeholder process. Each of the
22 functions that will be assigned to the ITO meets, or exceeds, the level of

1 responsibility that FERC has found to facilitate competition through transmission
2 independence.
3 In addition, the Companies have negotiated an agreement and coordinated
4 with TVA to institute TVA as their NERC-certified Reliability Coordinator. (To
5 date, the RC Agreement has not been executed, so the Companies submit a pro forma
6 version of this agreement in MSJ Exhibit 6.) In this role, TVA will provide: (i)
7 security coordination (as defined in relevant NERC Version 0 standards); (ii)
8 transmission planning and regional coordination; and (iii) administration of any
9 seams agreements (although this function may also be provided by the Companies).
10 In support of its filing, the Companies submit the testimony of several
11 witnesses. First, Mr. Mark Johnson, Director of Transmission, LG&E Energy, LLC
12 ("LG&E Energy") describes the functions of the Independent Transmission
13 Organization and Reliability Coordinator and the RFP process that led to their
14 selection, and why the Commission can be assured that the Companies will continue
15 to provide to their customers excellent transmission system reliability once they exit
16 MISO. Second, Dr. Mathew J. Morey, Senior Consultant, Laurits R. Christensen
17 Associates Inc., explains how the Companies' proposed ITO/RC is economically
18 superior to, and hence more prudent than, the Companies' continuing MISO
19 membership. Third, Mr. Kent W. Blake, Director, State Regulation and Rates for
20 LG&E Energy Services, Inc., testifies concerning why the Companies' ITO/RC
21 proposal meets the requirements of KRS 278.218. Fourth, Dr. Susan F. Tierney,
22 Managing Principal of The Analysis Group, Inc., testifies that the Companies'
23 ITO/RC proposal is one the Commission ought to approve based on her independent

1 analysis and opinion that the proposal is consistent with the regulatory requirements
2 of Kentucky. Fifth, Mr. Mike S. Beer, Vice President, Federal Regulation & Policy
3 for LG&E Energy Services, Inc., testifies about how this application, the Companies'
4 recent FERC application concerning this same subject matter, and the Commission's
5 earlier investigation of the Companies' membership in MISO, relate to one another.
6 Finally, the Companies present the independent testimony of representatives
7 of two third-party contractors, TVA and SPP, which testimony informs the
8 Commission of the contractors' qualifications to perform the duties of the
9 Companies' RC and ITO, respectively. Specifically, Mr. Stuart L. Goza of TVA
10 testifies as to TVA's qualifications and ability to serve as the Companies' Reliability
11 Coordinator, and Mr. Bruce Rew of SPP testifies concerning SPP's qualifications and
12 ability to serve as the Companies' Independent Transmission Organization.
13 **Q. What were the reasons that the Companies became charter members of MISO?**
14 A. The Companies had two primary goals in helping to form and initially joining MISO
15 as it was originally conceived: (i) to comport with emerging federal regulations, such
16 as Order No. 888 (and subsequently Order No. 2000); and (ii) to achieve greater
17 transmission system reliability. At the time the Companies became charter members
18 of MISO, they believed that MISO's structure and function would help further their
19 functions as low- cost, vertically integrated utilities because MISO's purposes were
20 limited to providing non-discriminatory open access transmission service over the
21 transmission assets entrusted to its operational control, as well as receiving and
22 distributing funds for the use of those assets as agent for the MISO Transmission
23 Owners. The Companies' belief that MISO could help the Companies' continue their

1 low-cost provision of service to native load also made MISO participation seem
2 prudent from a state regulatory perspective.
3 **Q. Why do the Companies now seek to exit MISO in favor of the ITO/RC proposal?**
4 A. As the Companies' evidence showed in the Commission's previous investigation of
5 the Companies' membership in MISO, Case No. 2003-00266, even on conservative
6 assumptions concerning the costs of MISO membership, the Companies can obtain
7 significant and recurring economic benefits by exiting MISO in favor of an
8 arrangement such as the ITO/RC proposal. The Companies' actual operating
9 experience to date confirms the Companies' estimates of MISO membership costs
10 were indeed quite conservative, so it truer today than it was then that exit from MISO
11 should afford financial benefits for the Companies and their customers. Dr. Morey's
12 updated cost-benefit figures contained in his testimony filed today show that the
13 ITO/RC proposal will provide the Companies and their customers $10-12 million in
14 net economic benefits each year as compared to the Companies' continued MISO
15 membership. As Dr. Morey further shows, the Companies and their customers can
16 expect net benefits from MISO withdrawal even taking into account the fee that the
17 Companies will have to pay MISO upon exit.[1]
18 Moreover, the Companies can obtain equivalent reliability coordination
19 services from other providers because all reliability coordinators must be NERC-
20 certified. Indeed, FERC has proposed that RCs will be governed by an Electric
21 Reliability Organization pursuant to FERC's new authority in Title XII, Subtitle A,

---

[1] See Agreement of Transmission Facilities Owners to Organize The Midwest Independent Transmission System
Operator, Inc., A Delaware Non-Stock Corp., ("MISO Transmission Owners' Agreement") Article V, Effective Feb. 1, 2002.

1 Section 1211(a) of the Energy Policy Act of 2005, further ensuring equivalence of
2 reliability coordination services.
3 As Mr. Blake more fully explains in his testimony, the ITO/RC proposal,
4 which provides economic benefits to the Companies and their customers while
5 maintaining the Companies' superb transmission system reliability, fully complies
6 with the requirements of KRS 278.218.
7 For these reasons, on December 28, 2004, the Companies formally notified
8 MISO in writing of their intent to withdraw from the MISO. Sending the notice
9 before the end of the calendar year also served to prevent the Companies from having
10 to pay an additional year of schedule fees. (A copy of the notice is attached hereto as
11 PWT Exhibit 1.) MISO has acknowledged that the Companies have given proper and
12 effective notice and that, once the Companies receive the Commission's and FERC's
13 permission to exit, the Companies may indeed exit MISO as early as January 1, 2006.
14 As demonstrated by the letter attached to Mr. Michael Beer's testimony as MSB
15 Exhibit 1, the Companies and MISO have reached agreement on the formula that will
16 be used to calculate the exit fee once the date of the Companies' withdrawal from
17 MISO becomes certain; the exit fee is currently projected to be approximately $41
18 million.
19 **Q. By what date do the Companies plan to have completed their exit from MISO?**
20 A. It is the Companies' goal to complete exit from MISO, including obtaining all
21 necessary regulatory approvals, no later than April 2006. The Companies therefore
22 request that the Commission issue its final order in this case no later than March 31,

1 2006, granting the Companies' application, subject to the FERC issuing an order
2 approving the Companies' application before that agency.
3 **Q. Does this conclude your testimony?**
4 A. Yes, it does.

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Paul W. Thompson**, being duly sworn, deposes and says he is the Senior Vice President of Energy Services for LG&E Energy LLC, that he has personal knowledge of the matters set forth in the foregoing testimony, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

PAUL W. THOMPSON

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18th day of November, 2005.

Notary Public

My Commission Expires:

August 5, 2008

Paul W. Thompson
Senior Vice President
Energy Services

LG&E Energy Corp.
220 West Main Street
P.O. Box 32030 (40232)
Louisville, Kentucky 40202
502-627-3861
502-627-2985 FAX

VIA OVERNIGHT MAIL, FACSIMILE, AND ELECTRONIC MAIL
(317) 249-5945

December 28, 2004

Mr. James P. Torgerson
President & CEO
Midwest Independent System Operator, Inc.
701 City Center Drive
Carmel, Indiana 46032

Dear Jim:

Pursuant to and in accordance with Section 1 of Article Five and Section J of Article Nine of the Agreement of Transmission Facilities Owners to Organize the Midwest Independent Transmission System Operator, Inc. ("MISO"), a Delaware Non-Stock Corporation ("TO Agreement"), Louisville Gas and Electric Company and Kentucky Utilities Company (hereinafter, the "Companies"), each hereby tenders to you in your capacity as President of MISO notice of withdrawal to effectuate withdrawal of the Companies' facilities from the Transmission System (as defined under Article One of the TO Agreement). The Companies note that Section 1 of Article Five of the TO Agreement provides that, based on the delivery date of this notice of withdrawal, the Companies' withdrawal will not become effective at any time prior to December 31, 2005, and that such withdrawal requires the approval of the Federal Energy Regulatory Commission. Such withdrawal, when effective, shall terminate the Companies' status as an Owner pursuant to the TO Agreement.

The Companies look forward to working with you closely to coordinate any transition issues that may arise. We are also certain that MISO and LG&E personnel will continue to coordinate their efforts to ensure that the system is operated in a reliable and efficient manner.

Please do not hesitate to contact me if you have any further questions.

Sincerely,

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND	)	
ELECTRIC COMPANY AND KENTUCKY	)	
UTILITIES COMPANY TO TRANSFER	)	**CASE NO: 2005-**00471
FUNCTIONAL CONTROL OF THEIR	)	
TRANSMISSION SYSTEM	)	

TESTIMONY OF
MARK S. JOHNSON
DIRECTOR, TRANSMISSION
LG&E ENERGY LLC

Filed: November 18, 2005

Q. Please state your name and business address.

A. My name is Mark S. Johnson. I am currently employed as Director, Transmission for LG&E Energy LLC. LG&E Energy LLC is the parent company of Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (collectively, the "Companies"), the applicants in this proceeding. My business address is 220 West Main Street, Louisville, Kentucky 40202. A complete statement of my professional training and work experience is contained in Appendix A.

Q. Can you expand upon your current employment duties?

A. I am responsible for the oversight of functions related to transmission reliability, planning and expansion for LG&E and KU. I oversee the development and analysis of base cases for the Companies' footprint used today by the Midwest Independent Transmission System Operator, Inc. ("MISO") in power flow analyses and electricity models, stability analyses, Available Transfer Capability ("ATC") calculations, and reliability criteria compliance. My responsibilities also include the oversight review of studies and analyses for transmission service and generation interconnection requests in coordination MISO as required. Recently, I have actively participated in the process to choose for the Companies an Independent Transmission Organization ("ITO") to perform key transmission-related functions and a Reliability Coordinator ("RC") to manage reliability functions for the Companies' transmission system.

I am also directly involved in organization and formation of Reliablity*First* Council, the larger successor to three regional reliability councils: East Central Area Reliability Council, Midwest Reliability Organization, and Mid-America Interconnected Network, Inc. Reliability*First*'s goal is to preserve and enhance

1 electric service reliability and security for the interconnected electric systems within
2 its region. The portions of the network covered by Reliability*First* are currently in
3 the East Central Area Reliability Council Mid-America Interconnected Network and
4 the Mid-Atlantic Area Council. These councils will turn over regional
5 responsibilities and will wind down other operations when Reliability*First* becomes
6 operational in early 2006.

7 I have also been involved with NERC's efforts to implement the provision in
8 the *Energy Policy Act of 2005* concerning the authorization of a self-regulatory
9 Electric Reliability Organization ("ERO") and to gain recognition as the ERO.

10 **Q. Have you previously testified before this Commission?**

11 A. Yes. I have testified in the Commission's investigation into the continuation of the
12 Companies' membership in the Midwest Independent System Operator, Inc. and in
13 numerous cases involving the public convenience and necessity for transmission
14 lines.

15 **Q. What is the purpose of your testimony in this proceeding?**

16 A. The purpose of my testimony is twofold. First, I will explain the fundamental
17 characteristics and functions of an RC and ITO. Second, I will describe the Request
18 for Proposals ("RFP") process by which the Companies chose TVA to act as their RC
19 and SPP to act as their ITO.

20 **<u>Overview of Independent Transmission Organization and Reliability Coordinator</u>**

21 **Q. Would you briefly explain what a Reliability Coordinator ("RC") will do to**
22 **manage reliability functions for the Companies' transmission system?**

1 A Yes. The RC will perform reliability coordination services consistent with North
2 American Electric Reliability Council ("NERC") guidelines, have authority to
3 approve or deny maintenance schedules for the Companies' systems, and act as the
4 transmission planning authority for the systems (including reviewing and determining
5 the need for expansions and upgrades, approving planning criteria, and conducting
6 reliability assessments).

7 **Q. Would you briefly explain what key transmission-related functions an**
8 **Independent Transmission Organization ("ITO") will perform?**

9 **A.** Yes. The ITO will conduct all transmission scheduling (including calculation of
10 available transmission capacity and awarding of transmission service to customers),
11 administer the Companies' Open Access Transmission Tariff ("OATT") and Open
12 Access Same-time Information System ("OASIS"), and control all generation
13 interconnection determinations, among other functions. Representatives of TVA and
14 SPP are also submitting testimony in this proceeding to describe their organizations'
15 capabilities relevant to performing their functions as the Companies' RC and ITO,
16 respectively.

17 **Q. Is the ITO a good fit for a vertically integrated utility like LG&E or KU?**

18 A. Yes. An ITO provides a mechanism for retaining the benefits of the vertically
19 integrated utility model (rate stability and least-cost integrated planning of generation
20 and transmission investments) while also gaining the market benefits of open access
21 wholesale competition (and the assurance to market participants that transmission will
22 be run by an independent party). It allows low-cost vertically integrated utilities to
23 continue the planning and operating activities that have made them low-cost; it

1 provides the non-discriminatory transmission access that is essential to wholesale
2 competition; and it keeps the costs of transmission and coordination services low.

3 **Q. What role will the ITO play in the operations of the LG&E/KU systems?**

4 A. The ITO will be responsible for, and have the authority necessary to carry out,
5 management of transmission service on the Companies' system. The ITO will be the
6 single contact for transmission customers seeking to schedule transactions on the
7 Companies' system and will make all decisions relating to allocation of transmission
8 service to customers.

9 **Q. What are some of the specific functions of the ITO?**

10 A. As the relevant RFP and pro forma agreement provide, SPP as the ITO will take over
11 many of the same transmission functions that MISO currently performs for the
12 Companies. The ITO will have complete authority, and an obligation, to administer
13 the terms and conditions of the Companies' FERC-approved OATT. The ITO will
14 have the authority and obligation to administer the Companies' OASIS, including the
15 responsibility to update and post information to ensure compliance with all FERC
16 OASIS-related regulations.

17 SPP as the ITO also will evaluate all transmission service requests, including
18 requests for network service and existing point-to-point service agreements. The ITO
19 will maintain all of the appropriate documentation associated with transmission
20 determinations. As with all other functions managed by the ITO, transmission
21 requests must be evaluated on a non-discriminatory basis. In addition, the ITO will
22 be the clearinghouse for transmission customers' questions regarding transmission

1 and scheduling. The ITO will act as the scheduling coordinator for all transmission
2 transactions into, out of, or through the Companies' transmission system.

3 The ITO will also conduct all System Impact Studies ("SIS") and Facilities
4 Studies as may be required under the OATT when transmission service is requested.
5 The ITO has the option of coordinating with the Companies or Reliability
6 Coordinator personnel to the extent that it wishes assistance in performing such
7 studies. The Companies have the right to review and provide comment on studies,
8 but the ITO has ultimate authority to determine the impact of service requests on the
9 system and required upgrades. The ITO will calculate ATC and Total Transfer
10 Capability in accordance with the FERC-approved OATT. ATC will be calculated on
11 a control area basis for LG&E/KU's control area interfaces.

12 With regard to generator interconnection, the ITO will process all requests by
13 generators and will perform such studies as warranted by the OATT and the
14 interconnection standards contained therein. This authority includes the ability to
15 manage the interconnection queue and establish a system model to evaluate requests
16 for interconnection.

17 **Q. Will the ITO and RC work cooperatively so that each can perform their**
18 **respective functions?**

19 **A.** Yes. The ITO and RC will exchange information and cooperate to ensure that both
20 entities can perform their assigned functions. The application contains a matrix which
21 highlights the functions of each entity, and communications and coordination
22 protocols. (The Matrix is attached hereto as MSJ Exhibit 1.)

23

Request for Proposal Process

Q. Where you involved in the Companies' RFP process to choose and ITO and RC?

A. Yes. I was involved in all steps of the two, separate RFPs to select an ITO and RC. I assisted in the preparation of the RFPs, including the listed functions of the ITO and RC.

Q. Please describe the Companies' RFP process to choose an ITO and RC.

A. On August 10, 2005 the Companies' issued an RFP for the Reliability Coordinator position to MISO, TVA, SPP and PJM. A copy of the RC RFP is attached to my testimony as MSJ Exhibit 2. The Responses to the RFP were due on August 24, 2005. There were only two respondents to the RFP. On August 30, 2005, the Companies selected TVA as the reliability coordinator for their systems and, based on TVA's response to the RFP, on September 27, 2005, the parties executed a Letter of Intent, which is attached hereto as MSJ Exhibit 3. The parties anticipate negotiating a mutually acceptable Reliability Coordination Agreement to be executed on or before April 1, 2006.

The Companies' ITO RFP was distributed on August 22, 2005. As with the RFP for the RC, the Companies issued the RFP to a number of potential entities that could provide the needed services: SPP, PJM, MISO, New York ISO, ISO New England, ERCOT, and the California ISO. Responses to the ITO RFP were due on September 8, 2005. A copy of the ITO RFP is attached hereto as MSJ Exhibit 4. SPP was the only respondent. SPP and the Companies are currently negotiating an ITO agreement. The parties plan to conclude negotiations on mutually acceptable terms on or before April 1, 2006. A copy of the current pro forma ITO agreement

1 between the Companies and SPP is attached hereto as MSJ Exhibit 5, which
2 agreement sets out SPP's role as ITO, including its having the complete authority,
3 and an obligation, to administer the terms and conditions of the Companies' FERC-
4 approved OATT. The ITO will also have the authority and obligation to administer
5 the Companies' OASIS, including the responsibility to update and post information to
6 ensure compliance with all FERC OASIS-related regulations.

7 **SELECTION OF TVA AS RC**

8 Q. **What were the reasons the Companies selected TVA to be the Reliability**
9 **Coordinator for their systems?**

10 A. Of the two responses received by the Companies to their RFP for RC services, TVA's
11 proposal was the most reasonable, least cost-alternative to the current MISO
12 membership. The evidence of this evaluation is contained in the testimony of Dr.
13 Morey; based on TVA's response to the Companies' RFP, the Companies anticipate
14 that TVA's RC services will cost $1.5-2.0 million per year. In addition to being
15 lowest cost respondent, TVA has substantial operational experience in the power
16 industry.

17 TVA already acts as the Reliability Coordinator for the Big Rivers Electric
18 Corporation ("BREC") and East Kentucky Power Cooperative, Inc. ("EKPC"),
19 systems that adjoin the Companies' system. Once TVA becomes the RC for the
20 Companies' system, TVA will manage a Reliability Area that encompasses most of
21 Kentucky. TVA's expertise with the BREC and EKPC systems, and the region
22 generally, was seen as a substantial benefit that certainly influenced the Companies'
23 decision to engage TVA as its Reliability Coordinator.

TVA also has in place an operational seams agreement with MISO and the Pennsylvania-Jersey-Maryland RTO ("PJM"), which agreement is called a Joint Reliability Coordination Agreement ("JRCA"). This is an important benefit: were the Companies to obtain reliability coordination services from an entity not a party to the JRCA, the Companies would have to develop individualized seams agreements with each adjacent control area. Although any of the three NERC-certified Reliability Coordinators who are parties to the JRCA could fold the Companies into the market to non-market seams arrangement set forth in the JRCA, TVA was the only one of the three to respond to the Companies' RC RFP.

In addition to demonstrating a core competency and a contractual arrangement to handle reliability coordination issues in the region, TVA meets all of the criteria regarding independent operation, and met all of the numerous other requirements outlined in the RFP.

Finally, as I alluded to before, TVA has proposed to perform the functions of Reliability Coordinator at a rate that is very competitive and would offer the most economic benefit to the Companies' retail customers. The cost of the proposed TVA service is reflected in the analysis present by Dr. Morey in this case.

In sum, the Companies now have chosen TVA as their reliability coordinator through an RFP process and are confident that TVA will be an excellent Reliability Coordinator. TVA currently provides reliability coordination service for public power customers in Kentucky with widely dispersed loads throughout the Companies' service territory. TVA is well suited to provide such service to the Companies. In addition, the Companies' proposed contract gives TVA the authority to oversee

1 regional planning. This makes sense from market and reliability perspectives
2 considering TVA's current reliability footprint in Kentucky. (A copy of the TVA
3 Reliability Coordination Agreement is attached hereto as MSJ Exhibit 6.)

4 **Q. Is contracting for reliability coordination services typical in the electric utility**
5 **industry?**

6 A. Yes. Reliability Coordination services have been contracted out by public utilities for
7 many years and continue to be obtained through contract. The Companies can enter
8 into a contract with one of several NERC-certified Reliability Coordinators in
9 proximity to the Companies' control area. The reliability of the transmission system
10 will be maintained and the costs of doing so can be kept to a minimum. Prior to
11 joining MISO, the Companies contracted with American Electric Power to provide
12 reliability coordination services for many years.

13 **Q. What factors lead the Companies to select TVA as their proposed Reliability**
14 **Coordinator?**

15 A. The Companies' proposed contract gives TVA the authority to oversee regional
16 planning. This makes sense from market and reliability perspectives considering
17 TVA's current reliability footprint in Kentucky.

18 **Q. Given TVA's NERC-certification as a reliability coordinator, its demonstrated**
19 **excellence as an RC for EKPC, BREC, and other systems, and all of TVA's**
20 **other qualifications, is it your opinion that TVA will ensure the reliability of the**
21 **Companies' transmission system as well as has MISO?**

1 A. Yes, it is my opinion that TVA has clearly demonstrated that it can provide reliability
2 coordination services that will result in reliability for the Companies' transmission
3 system that is equivalent to the reliability the Companies enjoy today.

4 **SELECTION OF SPP AS THE ITO**

5 **Q. What factors led the Companies to select SPP as their ITO?**

6 A. The Companies selected SPP as their ITO using essentially the same factors as the
7 Companies used to select a Reliability Coordinator. Namely, the Companies wanted
8 to ensure that the ITO can: (i) competently perform the functions required of it, as
9 described in the RFP; (ii) meet all other requirements listed in the RFP, especially
10 those related to their independence from other market participants; and (iii) provide
11 substantial value to LG&E/KU's customers through a competitive rate for the service
12 it provides. Based on SPP's RFP response, the Companies anticipate that SPP's ITO
13 services will cost approximately $3.0 million per year.

14 Although SPP was the only entity to respond to the ITO RFP, its proposal was
15 very reasonable when compared to, for example, the cost of the arrangement between
16 Duke and MISO, which, based on my understanding, generally provides for the same
17 types of tariff administration services. SPP is competent to perform the duties
18 required of the ITO, willing to perform all of those duties, and sees provision of these
19 unbundled services as mutually beneficial for the Companies and SPP's existing
20 membership. SPP already has in place the personnel and infrastructure needed to
21 perform the transmission function duties needed and, most importantly, has
22 substantial experience in transmission operations. SPP has offered to provide ITO
23 services to the Companies at a very competitive rate. Moreover, SPP processed

1 transmission service requests for the American Electric Power East (which includes

2 Kentucky Power) transmission system from 2000 through 2004. In this role, SPP

3 independently accepted or denied transmission service requests received on AEP's

4 OASIS. Thus, SPP is well qualified to serve as the Companies' ITO.

5 **Q. Are the proposed agreements with TVA and SPP for a proper purpose and**

6 **consistent with the public interest?**

7 A. Yes, in my opinion, the agreements are clearly for a proper purpose and are consistent

8 with the public interest. Collectively, they will allow the Companies to satisfy

9 FERC's regulation of the operation of the transmission system and provide a

10 reasonable and reliable method of operating the transmission system at a more

11 reasonable cost than is allowed under the Companies' current MISO membership.

12 The Companies expect to enter into final agreements with TVA and SPP within the

13 next sixty days and will file them with the Commission.

14 **Q. Does this conclude your testimony?**

15 A. Yes.

APPENDIX A

Mark S. Johnson

Director of Transmission
LG&E Energy LLC
220 West Main Street
Louisville, Kentucky 40202
Telephone: (502) 627-2824

Education

Murray State University, Bachelor of Science - Civil Engineering Technology (1980)

Previous Positions

LG&E Energy LLC

- Jan 2001 - Director of Transmission
- Nov 1997 - Director, Distribution Operations

Entergy, Grand Gulf Nuclear Generation Station

- Jan 1985 to Feb 1987 - Manager, Engineering Support

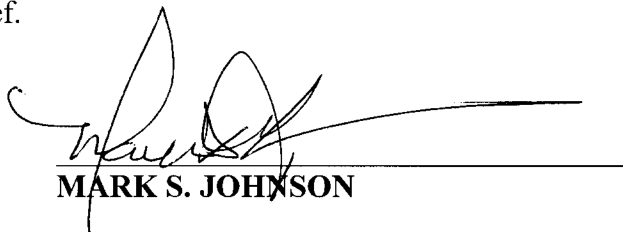
Tennessee Valley Authority, Watts Bar Nuclear Generating Station

- Feb 1987 to Nov 1997 - Area Vice President, Transmission, Customer Service and Marketing (for 3-1/2 years), and other various senior level positions in power generation, transmission, customer service and marketing
- May 1980 to Jan 1985 - Manager, Document Control and Configuration Management

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Mark S. Johnson**, being duly sworn, deposes and says that he is Director, Transmission for LG&E Energy LLC, that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

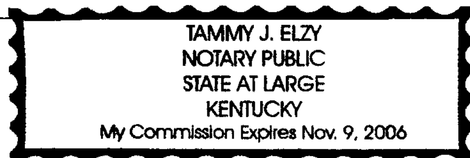


MARK S. JOHNSON

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18th day of November, 2005.

(SEAL)
Notary Public

My Commission Expires:


TAMMY J. ELZY
NOTARY PUBLIC
STATE AT LARGE
KENTUCKY
My Commission Expires Nov. 9, 2006

PRIMARY RESPONSIBILITIES AND SUPPORT FUNCTIONS FOR OPERATING AND OVERSEEING TRANSMISSION OWNER'S TRANSMISSION SYSTEM UNDER THE ITO/RELIABILITY COORDINATOR MODEL[1]

RELIABILITY COORDINATOR

A. Primary Responsibilities

- The Reliability Coordinator shall enforce operational reliability requirements as the NERC-certified Reliability Coordinator.

- The Reliability Coordinator shall implement applicable NERC and regional reliability criteria initiatives, such as maintaining a connection to NERC's Interregional Security Network ("ISN"), day-ahead load-flow analysis, transmission loading relief procedures, and information exchange.

- The Reliability Coordinator shall develop and coordinate with the Reliability Coordination Advisory Committee new operating procedures and guidelines and revisions to existing operating procedures and guidelines under this Agreement.

- The Reliability Coordinator shall develop and maintain system models and tools needed to perform analysis needed to develop operational plans.

- The Reliability Coordinator shall coordinate with neighboring Reliability Coordinators and other operating entities as appropriate to ensure regional reliability.

- The Reliability Coordinator shall coordinate transmission loading relief and voltage correction actions with Transmission Owner and with other Reliability Coordinators.

- The Reliability Coordinator shall identify Coordinated Flowgates and determination of flowgates requiring Reciprocal Coordination (twice annually).

- The Reliability Coordinator shall compile reservation set based on Freeze Date; compile designated resources based on Freeze Date; calculate Historic Firm Flow Values and Ratios for all coordinated flowgates on both Transmission Owner's system and adjoining systems (Bi-annual).

- The Reliability Coordinator shall develop Reciprocal Coordination Agreements that establish how each Operating Entity will consider its own Flowgate or constraint usage as well as the usage of other Operating Entities when it determines the amount of Flowgate or constraint capacity remaining. This process will include both operating horizon determination as well as forward looking capacity allocation.

---

[1] This list of primary responsibilities and support functions is designed to compliment Attachment L of the OATT and does not replace or negate any provision contained therein.

- The Reliability Coordinator shall implement AFC Process -- determine AFC attribute requirements; obtain NNL Impact Data; implement Allocation Calculation Process; implement ASTFC Process; implement AFC Calculation Process; implement CMP business rules for AFC vs. ASTFC.

- The Reliability Coordinator shall provide the Transmission Owner and ITO with data necessary to analyze requests for new Transmission service.

- The Reliability Coordinator shall monitor, analyze, and coordinate the reliability of the Transmission Owner's facilities and interfaces with other Balancing Authorities, Transmission Operators, and other Reliability Coordinators.

- The Reliability Coordinator shall ensure a long-term (one year and beyond) plan is available for adequate resources and transmission within the Area; integrate and assess the plans from the Transmission Planners and Resource Planners within the Reliability Area to ensure those plans meet the reliability standards; and coordinate the development of recommended solutions to plans that do not meet those standards.

- The Reliability Coordinator shall integrate transmission and resource (demand and capacity) system models from the Relaibility Area operating entities to evaluate transmission system performance and resource adequacy.

- The Reliability Coordinator shall apply methodologies and tools to assess and analyze the transmission systems expansion plans and the resource adequacy plans.

- The Reliability Coordinator shall collect all information and data required for modeling and evaluation purposes.

- The Reliability Coordinator shall monitor all reliability-related parameters within the Reliability Authority Area, including generation dispatch and transmission maintenance plans and perform analyses of planned transmission and generation outages and the coordination of such outages with NERC, the ITO, the Transmission Owner, and other Reliability Coordinators.

- The Reliability Coordinator shall direct revisions to transmission maintenance plans as required and as permitted by agreements.

- The Reliability Coordinator shall request revisions to generation maintenance plans as required and as permitted by agreements.

- The Reliability Coordinator shall develop Interconnection Reliability Operating Limits (to protect from instability and cascading outages).

- The Reliability Coordinator shall perform the reliability analysis (actual and contingency) for the Reliability Authority Area.

- The Reliability Coordinator shall approve or deny bilateral schedules from the reliability perspective.

- The Reliability Coordinator shall assist in the determination of Interconnected Operations Services requirements for balancing generation and load, and transmission reliability (*e.g.*, reactive requirements, location of operating reserves).

- The Reliability Coordinator shall identify, communicate, and direct actions to relieve reliability threats and limit violations in the Reliability Authority Area.

- The Reliability Coordinator shall direct implementation of emergency procedures.

- The Reliability Coordinator shall direct and coordinate System Restoration.

- The Reliability Coordinator shall perform analyses to develop an evaluation of the expected next-day transmission system operations and the overall system conditions with information provided by the Transmission Owner.

- The Reliability Coordinator shall assess, develop and document resource and transmission expansion plans by:

    - Integrating and verifying that the respective resource and transmission expansion plans for the Planning Authority Area meet reliability standards.

    - Identifying and reporting on potential transmission system and resource adequacy deficiencies, and provide alternate resource and transmission expansion plans that mitigate these deficiencies.

- The Reliability Coordinator shall approve Interchange Transactions from ramping ability perspective.

- The Reliability Coordinator shall provide telemetry of transmission system information.

- The Reliability Coordinator shall notify others of any planned transmission changes that may impact their facilities.

B. Support Functions

- The Reliability Coordinator shall review the Transmission Owner's development and maintenance of transmission and resource (demand and capacity) system models to evaluate transmission system performance and resource adequacy.

- The Reliability Coordinator shall review the Transmission Owner's methodologies and tools for: (i) the analysis and simulation of the transmission systems in the assessment and development of transmission expansion plans; and (ii) the analysis and development of resource adequacy plans.

- The Reliability Coordinator shall review the ITO's plans for evaluating responses to long-term (generally one year and beyond) transmission service requests

- The Reliability Coordinator shall review the ITO's and Transmission Owner's evaluation of transmission facility plans required to integrate new (end-use customer, generation, and transmission) facilities into the interconnected bulk electric systems.

- The Reliability Coordinator shall review the ITO's analyses and reports as required on the long-term resource and transmission plans for the Planning Authority Area.

- The Reliability Coordinator shall review the Transmission Owner's monitoring of transmission expansion plan and resource plan implementation.

- The Reliability Coordinator shall review the Transmission Owner's coordination of project implementation that requires transmission outages that can impact reliability and firm transactions.

- The Reliability Coordinator shall review the ITO's evaluation of the impact of revised transmission and generator in-service dates on resource and transmission adequacy.

- The Reliability Coordinator shall review the ITO's formulation of operational plans (generation commitment, outages, etc) for reliability assessment.

- The Reliability Coordinator shall review the Transmission Owner's determination of the need for Interconnected Operations Services.

- The Reliability Coordinator shall review the Transmission Owner's deployment of Interconnected Operations Services.

- The Reliability Coordinator shall review the Transmission Owner's implementation of emergency procedures.

- The Reliability Coordinator shall review the Transmission Owner's role in maintaining reliability of the transmission area in accordance with Reliability Standards.

- The Reliability Coordinator shall review the Transmission Owner's maintenance schedules (dates and times).

- The Reliability Coordinator shall review the Transmission Owner's defined voltage profiles.

- The Reliability Coordinator shall review the Transmission Owner's definitions of operating limits, development of contingency plans, and oversight of operations of the transmission facilities.

- The Reliability Coordinator shall review the Transmission Owner's development of a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within a portion of the Planning Authority Area.

- The Reliability Coordinator shall review the Transmission Owner's maintenance of transmission system models (steady-state, dynamics, and short circuit) and application of appropriate tools for the development of transmission plans.

- The Reliability Coordinator shall review the Transmission Owner's development of transmission plans to ensure that such plans are within defined voltage and stability limits and within appropriate facility thermal ratings.

- The Reliability Coordinator shall review the Transmission Owner's definitions of system protection and control needs and requirements, including special protection systems (remedial action schemes), that are needed to meet reliability standards.

- The Reliability Coordinator shall review the ITO's evaluation of and plan for transmission service and interconnection requests beyond one year.

- The Reliability Coordinator shall review the Transmission Owner's development of and report on transmission expansion plans for assessment and compliance with reliability standards.

- The Reliability Coordinator shall coordinate with the Transmission Owner to define, collect and develop information needed for planning purposes, including: (i) transmission facility characteristics and ratings; (ii) demand and energy end-use customer forecasts, capacity resources, and demand response programs; (iii) generator unit performance characteristics and capabilities; and (iv) long-term capacity purchases and sales.

- The Reliability Coordinator shall assist the ITO in reviewing and determining TTC values (generally one year and beyond) as appropriate.

- The Reliability Coordinator shall coordinate with the Transmission Owner to ensure that Transmission Owner has control over the following combinations within a Balancing Authority Area: (i) Load and Generation (an isolated system); (ii) Load and Scheduled Interchange; (iii) Generation and Scheduled Interchange; and (iv) Generation, Load, and Scheduled Interchange.

- The Reliability Coordinator shall assist the Transmission Owner in calculating Area Control Error within the Balancing Authority Area.

- The Reliability Coordinator shall assist the Transmission Owner in reviewing generation commitments, dispatch, and load forecasts.

- The Reliability Coordinator shall assist the Transmission Owner in implementing interchange schedules.
- The Reliability Coordinator shall assist the Transmission Owner in monitoring and reporting control performance and disturbance recovery.
- The Reliability Coordinator shall assist the Transmission Owner and the ITO in providing balancing and energy accounting (including hourly checkout of Interchange Schedules and Actual Interchange), and administering Inadvertent energy paybacks.
- The Reliability Coordinator shall assist the ITO in determining valid, balanced, Interchange Schedules (validation of sources and sinks, transmission arrangements, interconnected operations services, etc.).
- The Reliability Coordinator shall assist the ITO in verifying ramping capability of the source and sink Balancing Authority Areas for requested Interchange Schedules.
- The Reliability Coordinator shall assist the ITO in collecting and disseminating Interchange Transaction approvals, changes, and denials.
- The Reliability Coordinator shall assist the ITO in authorizing implementation of Interchange Transactions.
- The Reliability Coordinator shall assist in entering Interchange Transaction information into Reliability Assessment Systems (*e.g.*, the Interchange Distribution Calculator in the Eastern Interconnection).
- The Reliability Coordinator shall assist the Transmission Owner in defining and collecting transmission information and transmission facility characteristics and ratings.
- The Reliability Coordinator shall assist the Transmission Owner in monitoring and reporting, as appropriate, on transmission expansion plan implementation.
- The Reliability Coordinator shall assist the ITO in processing transmission service requests.
- The Reliability Coordinator shall provide support to the ITO in approving or denying transmission service requests.
- The Reliability Coordinator shall provide support to the ITO in approving Interchange Transactions from a transmission service arrangement perspective.
- The Reliability Coordinator shall assist the ITO in determining and posting available transfer capability (ATC) values.

ITO

A. Primary Responsibilities

- The ITO shall evaluate plans for customer requests for transmission service.
    - The ITO shall evaluate responses to long-term (generally one year and beyond) transmission service requests.
    - The ITO shall review transmission facility plans required to integrate new (end-use customer, generation, and transmission) facilities into the interconnected bulk electric systems.
- The ITO shall review and determine TTC values as appropriate.
- The ITO shall provide analyses and reports as required on the long-term resource and transmission plans for the Planning Authority Area.
- The ITO shall evaluate the impact of revised transmission and generator in-service dates on resource and transmission adequacy.
- The ITO shall formulate an operational plan (generation commitment, outages, etc) for reliability assessment.
- The ITO shall provide balancing and energy accounting (including hourly checkout of Interchange Schedules and Actual Interchange), and administer Inadvertent energy paybacks.
- The ITO shall determine valid, balanced, Interchange Schedules (validation of sources and sinks, transmission arrangements, interconnected operations services, etc.).
- The ITO shall verify ramping capability of the source and sink Balancing Authority Areas for requested Interchange Schedules.
- The ITO shall collect and disseminate Interchange Transaction approvals, changes, and denials.
- The ITO shall authorize implementation of Interchange Transactions.
- The ITO shall maintain record of individual Interchange Transactions.
- The ITO shall evaluate and plan for transmission service and interconnection requests beyond one year.
- The ITO shall receive transmission service requests and process each request for service according to the requirements of the tariff.

- The ITO shall maintain commercial interface for receiving and confirming requests for transmission service according to the requirements of the tariff (*e.g.*, OASIS).

- The ITO shall approve or deny transmission service requests.

- The ITO shall approve Interchange Transactions from transmission service arrangement perspective.

- The ITO shall determine and post available transfer capability (ATC) values.

B. Support Functions

- The ITO shall assist the Reliability Coordinator in directing revisions to transmission maintenance plans as required and as permitted by agreements.

- The ITO shall assist the Reliability Coordinator in requesting revisions to generation maintenance plans as required and as permitted by agreements.

- The ITO shall assist the Reliability Coordinator in approving or deny bilateral schedules from the reliability perspective.

- The ITO shall assist the Transmission Owner in defining, collecting, and developing demand and energy end-use customer forecasts, capacity resources, and demand response programs.

- The ITO shall assist the Transmission Owner in defining, collecting, and developing Long-term capacity purchases and sales.

- The ITO shall assist the Reliability Coordinator in assessing, developing, and documenting resource and transmission expansion plans.

    - The ITO shall assist the Reliability Coordinator in integrating and verifying that the respective plans for the Planning Authority Area meet reliability standards.

    - The ITO shall assist the Reliability Coordinator in identifying and reporting on potential transmission system and resource adequacy deficiencies, and providing alternate plans that mitigate these deficiencies.

- The ITO shall assist the Transmission Owner in monitoring transmission expansion plan and resource plan implementation.

- The ITO shall assist the Transmission Owner in coordinating project implementation that requires transmission outages that can impact reliability and firm transactions.

- The ITO shall coordinate with the Transmission Owner to ensure that Transmission Owner has control over the following combinations within a Balancing Authority Area: (i) Load and Generation (an isolated system); (ii) Load and Scheduled Interchange; (iii) Generation and Scheduled Interchange; and (iv) Generation, Load, and Scheduled Interchange.

- The ITO shall assist the Transmission Owner in calculating Area Control Error within the Balancing Authority Area.

- The ITO shall assist the Transmission Owner in reviewing generation commitments, dispatch, and load forecasts.

- The ITO shall assist the Transmission Owner in implementing interchange schedules.

- The ITO shall assist the Transmission Owner in monitoring and reporting control performance and disturbance recovery.

- The ITO shall assist in the development and review of Transmission Owner's maintenance schedules (dates and times).

- The ITO shall assist the Reliability Coordinator in notifying others of any planned transmission changes that may impact their facilities.

- The ITO shall assist the Transmission Owner in monitoring and reporting, as appropriate, on transmission expansion plan implementation.

- The ITO shall assist the Transmission Owner in allocating transmission losses (MWs or funds) among Balancing Authority Areas.

TRANSMISSION OWNER

A. Primary Responsibilities

- The Transmission Owner shall develop and maintain transmission and resource (demand and capacity) system models to evaluate transmission system performance and resource adequacy.

- The Transmission Owner shall maintain and apply methodologies and tools for the analysis and simulation of the transmission systems in the assessment and development of transmission expansion plans and the analysis and development of resource adequacy plans.

- The Transmission Owner shall define and collect or develop information required for planning purposes, including: (i) transmission facility characteristics and ratings; (ii) demand and energy end-use customer forecasts, capacity resources, and demand response

programs; (iii) generator unit performance characteristics and capabilities; and (iv) long-term capacity purchases and sales.

- The Transmission Owner shall review transmission facility plans required to integrate new (end-use customer, generation, and transmission) facilities into the interconnected bulk electric systems.
- The Transmission Owner shall monitor transmission expansion plan and resource plan implementation.
- The Transmission Owner shall coordinate project implementation that requires transmission outages that can impact reliability and firm transactions.
- The Transmission Owner must have control the following combinations within a Balancing Authority Area: (i) load and generation (an isolated system); (ii) load and Scheduled Interchange; (iii) generation and Scheduled Interchange; and (iv) generation, load, and Scheduled Interchange.
- The Transmission Owner shall calculate Area Control Error within the Balancing Authority Area.
- The Transmission Owner shall review generation commitments, dispatch, and load forecasts.
- The Transmission Owner shall implement interchange schedules by entering those schedules into an energy management system.
- The Transmission Owner shall provide frequency response.
- The Transmission Owner shall monitor and report control performance and disturbance recovery.
- The Transmission Owner shall provide balancing and energy accounting (including hourly checkout of Interchange Schedules and Actual Interchange), and administer Inadvertent energy paybacks.
- The Transmission Owner shall determine needs for Interconnected Operations Services.
- The Transmission Owner shall deploy Interconnected Operations Services.
- The Transmission Owner shall implement emergency procedures.
- The Transmission Owner shall maintain reliability of the transmission area in accordance with Reliability Standards.

- The Transmission Owner shall provide detailed maintenance schedules (dates and times) to the Reliability Coordinator for review.
- The Transmission Owner shall maintain defined voltage profiles.
- The Transmission Owner shall define operating limits, develop contingency plans, and monitor operations of the transmission facilities.
- The Transmission Owner shall provide telemetry of transmission system information.
- The Transmission Owner shall develop a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within a portion of the Planning Authority Area.
- The Transmission Owner shall maintain transmission system models (steady-state, dynamics, and short circuit) and apply appropriate tools for the development of transmission plans.
- The Transmission Owner shall define and collect transmission information and transmission facility characteristics and ratings.
- The Transmission Owner shall develop transmission plans within defined voltage and stability limits and within appropriate facility thermal ratings.
- The Transmission Owner shall define system protection and control needs and requirements, including special protection systems (remedial action schemes), to meet reliability standards.
- The Transmission Owner shall develop and report, as appropriate, on its transmission expansion plan for assessment and compliance with reliability standards.
- The Transmission Owner shall monitor and report, as appropriate, on its transmission expansion plan implementation.
- The Transmission Owner shall allocate transmission losses (MWs or funds) among Balancing Authority Areas.

B. Support Functions

- The Transmission Owner shall cooperate with the Reliability Coordinator in its enforcement operational reliability requirements.
- The Transmission Owner shall cooperate with the Reliability Coordinator in its monitoring of all reliability-related parameters within the Reliability Authority Area, including generation dispatch and transmission maintenance plans.

- The Transmission Owner shall comply with the Reliability Coordinator's revisions to transmission maintenance plans as required and as permitted by agreements.

- The Transmission Owner shall consider the Reliability Coordinator's requests for revisions to generation maintenance plans as required and as permitted by agreements.

- The Transmission Owner shall assist the Reliability Coordinator in developing Interconnection Reliability Operating Limits (to protect from instability and cascading outages).

- The Transmission Owner shall assist the Reliability Coordinator in performing reliability analyses (actual and contingency) for the Reliability Authority Area.

- The Transmission Owner shall comply with the Reliability Coordinator's approval or denial of bilateral schedules from the reliability perspective.

- The Transmission Owner shall assist in determining Interconnected Operations Services requirements for balancing generation and load, and transmission reliability (*e.g.*, reactive requirements, location of operating reserves).

- The Transmission Owner shall comply with the Reliability Coordinator's directives for relieving reliability threats and limiting violations in the Reliability Authority Area.

- The Transmission Owner shall comply with the Reliability Coordinator's directives for implementing emergency procedures.

- The Transmission Owner shall comply with the Reliability Coordinator's directives regarding System Restoration.

- The Transmission Owner shall assist the ITO in its evaluation of responses to long-term (generally one year and beyond) transmission service requests.

- The Transmission Owner shall assist the ITO in its review and determination of TTC values as appropriate.

- The Transmission Owner shall assist the Reliability Coordinator in assessing, developing, and documenting resource and transmission expansion plans.

    - The Transmission Owner shall assist the Reliability Coordinator in integrating and verifying that the respective plans for the Planning Authority Area meet reliability standards.

    - The Transmission Owner shall assist the Reliability Coordinator in identifying and reporting on potential transmission system and resource adequacy deficiencies, and providing alternate plans that mitigate these deficiencies.

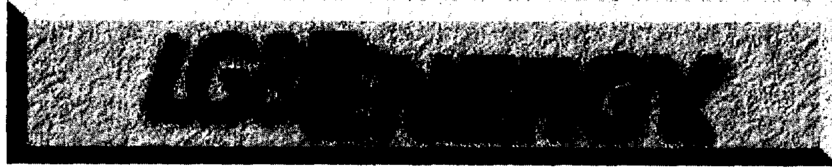
- The Transmission Owner shall assist the ITO in preparing analyses and reports as required on the long-term resource and transmission plans for the Planning Authority Area.
- The Transmission Owner shall assist the ITO in evaluating the impact of revised transmission and generator in-service dates on resource and transmission adequacy.
- The Transmission Owner shall assist the ITO in formulating an operational plan (generation commitment, outages, etc) for reliability assessment.
- The Transmission Owner shall assist the ITO in determining valid, balanced, Interchange Schedules (validation of sources and sinks, transmission arrangements, interconnected operations services, etc.).
- The Transmission Owner shall assist the ITO in verifying ramping capability of the source and sink Balancing Authority Areas for requested Interchange Schedules.
- The Transmission Owner shall assist the ITO in collecting and disseminating Interchange Transaction approvals, changes, and denials.
- The Transmission Owner shall assist the ITO in authorizing implementation of Interchange Transactions.
- The Transmission Owner shall assist in entering Interchange Transaction information into Reliability Assessment Systems (*e.g.*, the Interchange Distribution Calculator in the Eastern Interconnection).
- The Transmission Owner shall assist the Reliability Coordinator in notifying others of any planned transmission changes that may impact their facilities.
- The Transmission Owner shall assist the Reliability Coordinator in evaluating and planning for transmission service and interconnection requests beyond one year.
- The Transmission Owner shall assist the ITO in processing transmission service requests.
- The Transmission Owner shall assist the ITO in maintaining a commercial interface for receiving and confirming requests for transmission service according to the requirements of the tariff (*e.g.*, OASIS).
- The Transmission Owner shall assist the ITO in the process of approving or denying transmission service requests.
- The Transmission Owner shall assist the ITO in the process of approving Interchange Transactions from transmission service arrangement perspective.

- The Transmission Owner shall assist the ITO in determining and posting available transfer capability (ATC) values.

Legend: **Lead Responsibility - L** **Review and Approval - A** **Coordination - C**	LG&E	RC/TVA	ITO	RC/TVA Coordination With Other TOs/RCs/RRCs
Function – Operating Reliability				
Tasks				
1. Enforce operational reliability requirements	C	L		
2. Monitor all reliability-related parameters within the Reliability Authority Area, including generation dispatch and transmission maintenance plans	C	L		
3. Direct revisions to transmission maintenance plans as required and as permitted by agreements	C	L	C	Yes
4. Request revisiCns tC generatiCn maintenance plans as required and as permitted by agreements	C	L	C	Yes
5. Develop Interconnection Reliability Operating Limits (to protect from instability and cascading outages).	C	L		
6. Perform reliability analysis (actual and contingency) for the Reliability Authority Area	C	L		Yes
7. Approve or deny bilateral schedules from the reliability perspective	C	L	C	Yes
8. Assist in determining Interconnected Operations Services requirements for balancing generation and load, and transmission reliability (e.g., reactive requirements, location of operating reserves).	C	L		
9. Identify, communicate, and direct actions to relieve reliability threats and limit violations in the Reliability Authority Area	C	L		Yes
10. Direct implementation of emergency procedures	C	L		Yes
11. Direct and coordinate System Restoration	C	L		Yes
Function – Planning Reliability				
Tasks				
1. Develop and maintain transmission and resource (demand and capacity) system models to evaluate transmission system performance and resource adequacy.	L	A		Yes
2. Maintain and apply methodologies and tools for the analysis and simulation of the transmission systems in the assessment and development of transmission expansion plans and the analysis and development of resource adequacy plans.	L	A		
3. Define and collect or develop information required for planning purposes, including:				
a. Transmission facility characteristics and ratings,	L	C		Yes
b. Demand and energy end-use customer forecasts, capacity resources, and demand response programs,	L	C	C	Yes
c. Generator unit performance characteristics and capabilities, and	L	C		Yes
d. Long-term capacity purchases and sales.	L	C	C	
4. Evaluate plans for customer requests for transmission service.				
a. Evaluate responses to long-term (generally one year and beyond) transmission service requests.	C	A	L	Yes
b. Review transmission facility plans required to integrate new (end-use customer, generation, and transmission) facilities into the interconnected bulk electric systems.	L	A	L	
5. Review and determine TTC values (generally one year and beyond) as appropriate.	C	C	L	
6. Assess, develop, and document resource and transmission expansion plans.				
a. Integrate and verify that the respective plans for the Planning Authority Area meet reliability standards.	C	L	C	Yes
b. Identify and report on potential transmission system and resource adequacy deficiencies, and provide alternate plans that mitigate these deficiencies.	C	L	C	

Legend: Lead Responsibility - L Review and Approval - A Coordination - C	LG&E	RC/TVA	ITO	RC/TVA Coordination With Other TOs/RCs/RRCs
7. Provide analyses and reports as required on the long-term resource and transmission plans for the Planning Authority Area.	C	A	L	Yes
8. Monitor transmission expansion plan and resource plan implementation.	L	A	C	
9. Coordinate project implementation requiring transmission outages that can impact reliability and firm transactions.	L	A	C	Yes
10. Evaluate the impact of revised transmission and generator in-service dates on resource and transmission adequacy.	C	A	L	Yes
Function – Balancing				
Tasks				
1. Must have control of any of the following combinations within a Balancing Authority Area:				
a. Load and Generation (an isolated system)	L	C	C	
b. Load and Scheduled Interchange	L	C	C	
c. Generation and Scheduled Interchange	L	C	C	
d. Generation, Load, and Scheduled Interchange	L	C	C	
2. Calculate Area Control Error within the Balancing Authority Area.	L	C	C	
3. Review generation commitments, dispatch, and load forecasts.	L	C	C	Yes
4. Formulate an operational plan (generation commitment, outages, etc) for reliability assessment	C	A	L	Yes
5. Approve Interchange Transactions from ramping ability perspective		L		Yes
6. Implement interchange schedules by entering those schedules into an energy management system	L	C	C	
7. Provide frequency response	L			
8. Monitor and report control performance and disturbance recovery	L	C	C	Yes
9. Provide balancing and energy accounting (including hourly checkout of Interchange Schedules and Actual Interchange), and administer Inadvertent energy paybacks	L	C	L	
10. Determine needs for Interconnected Operations Services	L	A		Yes
11. Deploy Interconnected Operations Services.	L	A		Yes
12. Implement emergency procedures	L	A		Yes
Function – Transmission Operations				
Tasks				
1. Maintain reliability of the transmission area in accordance with Reliability Standards.	L	A		Yes
2. Provide detailed maintenance schedules (dates and times)	L	A	C	Yes
3. Maintain defined voltage profiles.	L	A		
4. Define operating limits, develop contingency plans, and monitor operations of the transmission facilities.	L	A		Yes
5. Provide telemetry of transmission system information	L	L		
Function – Interchange				
Tasks				
1. Determine valid, balanced, Interchange Schedules (validation of sources and sinks, transmission arrangements, interconnected operations services, etc.).	C	C	L	Yes
2. Verify ramping capability of the source and sink Balancing Authority Areas for requested Interchange Schedules	C	C	L	Yes
3. Collect and disseminate Interchange Transaction approvals, changes, and denials	C	C	L	Yes

Legend: Lead Responsibility - L Review and Approval - A Coordination - C	LG&E	RC/TVA	ITO	RC/TVA Coordination With Other TOs/RCs/RRCs
4. Authorize implementation of Interchange Transactions	C	C	L	Yes
5. Enter Interchange Transaction information into Reliability Assessment Systems (e.g., the Interchange Distribution Calculator in the Eastern Interconnection)	C	C	?	Yes
6. Maintain record of individual Interchange Transactions			L	
Function – Transmission Planning				
Tasks				
Develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within a portion of the Planning Authority Area.	L	A		Yes
1. Maintain transmission system models (steady-state, dynamics, and short circuit) and apply appropriate tools for the development of transmission plans.	L	A		Yes
2. Define and collect transmission information and transmission facility characteristics and ratings.	L	C		Yes
3. Develop plans within defined voltage and stability limits and within appropriate facility thermal ratings.	L	A		Yes
4. Define system protection and control needs and requirements, including special protection systems (remedial action schemes), to meet reliability standards.	L	A		
5. Determine TTC values as appropriate.	C	C	L	
6. Notify others of any planned transmission changes that may impact their facilities.	C	L	C	Yes
7. Evaluate and plan for transmission service and interconnection requests beyond one year.	C	A	L	Yes
8. Develop and report, as appropriate, on its transmission expansion plan for assessment and compliance with reliability standards.	L	A		Yes
9. Monitor and report, as appropriate, on its transmission expansion plan implementation.	L	C	C	Yes
Function – Transmission Service				
Tasks				
1. Receive transmission service requests and process each request for service according to the requirements of the tariff.	C	C	L	
a. Maintain commercial interface for receiving and confirming requests for transmission service according to the requirements of the tariff (e.g., OASIS).	C		L	Yes
2. Approve or deny transmission service requests	C	C	L	Yes
3. Approve Interchange Transactions from transmission service arrangement perspective	C	C	L	Yes
4. Determine and post available transfer capability (ATC) values.	C	C	L	
5. Allocate transmission losses (MWs or funds) among Balancing Authority Areas.	L		C	



Request for Proposal
No. 3043

Services
For

LG&E Energy Services Inc.

CONFIDENTIAL INFORMATION
This document, including any exhibits or attachments, is solely for use by employees of LG&E Energy LLC and those employees or agents of suppliers invited to submit Proposals with a need to know. Not to be disclosed to or used by any other person without the express written consent of LG&E Energy LLC.

Issued By:

LG&E Energy Services Inc.
820 West Broadway
Louisville, Kentucky 40202

Issue Date:
August 10, 2005

Proposal Due Date:
August 24, 2005

Table of Contents

Section			Page
1	Introduction		3
	1.1	Corporate Overview	3
	1.2	History and RFP Goals	3
	1.3	Timetable	3
	1.4	Confidentiality	4
	1.5	Disclaimer	4
	1.6	Prebid Questions	4
	1.7	Duration of Offer	4
	1.8	Response Instructions	4-5
	1.9	Disqualification	5-6
2	Business Objective and Scope of Work/Service Requirements		5-10
	2.1	Summary of RFP Requirements	
3	Company Information		10-11
	3.1	Proposed Solution	
	3.2	Conditions of Bid	
	3.3	Service provider Contact Information	
	3.4	Company Profile	
	3.5	Support for MBE/WBE	
	3.6	Use of Union Labor	
	3.7	Bid Clarifications and/or Exceptions	
	3.8	Pricing	
	3.9	Confidentiality Agreement	
4	Other Services		11
Attachment A	CONDITIONS OF BID		12
Attachment B	SERVICE PROVIDER INFORMATION		13
Attachment C	COMPANY PROFILE		14
Attachment D	BUSINESS CLASSIFICATION		15
Attachment E	BID CLARIFICATIONS AND/OR EXCEPTIONS		16
Attachment F	PRICING SUMMARY		17
Confidentiality Agreement			18-19

1 Introduction

1.1 Corporate Overview

LG&E Energy LLC is a diversified energy services company and is a member of E.ON AG, headquartered in Düsseldorf, Germany. LG&E Energy LLC, headquartered in Louisville, Kentucky, operates in domestic and international markets with businesses in power generation; project development; retail gas and electric utility services; and asset-based energy marketing. LG&E Energy LLC, through its subsidiaries, Louisville Gas and Electric, Kentucky Utilities (KU), and Western Kentucky Energy (WKE) provides electric and gas service throughout the state of Kentucky and in seven counties in Virginia and is one of the US's lowest-cost energy providers and an industry innovator. LG&E Energy Services Inc., another subsidiary of LG&E Energy LLC provides support functions for Louisville Gas & Electric, KU, and WKE (LG&E Energy LLC and its affiliates collectively referred to as "LG&E"). Our mission is to provide exceptional value to our customers and shareholders as we move toward the era of competition in the energy industry.

1.2 History and RFP Goals

LG&E would like to receive pricing related to the cost of outsourcing the services associated with Reliability Coordinator, as outlined in this document. The LG&E / KU system consists of 5,120 pole miles of transmission lines, 142 substations, 122 transformers, 1,052 breakers, and 339 RTU's.

No Subsidization of Related Costs. Any entity that is either a member of the entity to which the RFP is being sent, or is otherwise responsible for any of the costs associated with the operation of such entity will not, under any circumstances, be expected to contribute to or otherwise subsidize the costs of the service provider providing services to LG&E under any resulting agreement and, further LG&E will be solely responsible for all costs associated with any infrastructure investments that may be reasonably required for the service provider to perform its obligations under such agreement. Any entity in receipt of this RFP will not bear any responsibility for any costs associated with the termination of any resulting agreement, either through mutual agreement of the parties, or by expiration, unless the service provider is otherwise obligated under the agreements for costs and /or the rendering of some performance.

Regional development plans can be optimized. The service provider will develop the base transmission expansion plan for LG&E. This plan will then be used to optimize regional development for all members that choose to participate in the process. This approach presents a real opportunity to reduce overall transmission expansion costs.

Reliability coordination between the RTO region and LG&E Energy Services Inc. will be enhanced. The service provider will assure non-discriminatory assessment and operation of the LG&E system. RTO members will benefit from an increased range of options available to the reliability coordinators in resolving projected overloads in the region.

1.3 Timetable

The following events are tentatively scheduled for this bid:

August 10, 2005	RFP Issued
August 24, 2005	Proposal Deadline by 12:00 p.m. EDT.
August 25, 2005	Emailed Copy of Proposal sent by 10:00 a.m.

LG&E RESERVES THE RIGHT TO CHANGE THE ABOVE SCHEDULE AT ANY TIME WITHOUT NOTICE.

1.4 Confidentiality

This RFP is confidential and for the sole use of supplier's preparation of a Proposal. By supplier's acceptance hereof, supplier agrees:

1.4.1 Not to disclose, copy or distribute this RFP in whole or in part to persons other than supplier's employees and agents who are authorized by nature of their duties to receive such information.
1.4.2 To return any LG&E confidential or proprietary materials upon LG&E's request.
1.4.3 Not to use any information in this RFP or any other materials related to the business affairs or procedures of LG&E and of its affiliates for supplier's advantage, other than in performance of this RFP.
1.4.4 Suppliers who intend to use subcontractors will be required to have such subcontractors execute non-disclosure agreements prior to work being done by subcontractor.
1.4.5 Suppliers who seek to negotiate possible sub-contract arrangements with LG&E's existing subcontractors will be held accountable for any breach of the non-disclosure agreements that they have signed with LG&E.

1.5 Disclaimer

This RFP is not an offer to enter into a Contract but is merely a request for the supplier to submit information. Expenses incurred in responding to this request are the responsibility of the supplier. All materials submitted become the property of LG&E. LG&E reserves the right to modify, reject or use without limitation any or all of the ideas from submitted information. LG&E reserves the right to discontinue the RFP process at any time for any reason whatsoever. The finalist's response to this RFP will become part of the final contract if awarded. Wherever there is a conflict between supplier's responses to this RFP and the terms and conditions contained in any contract subsequently entered into by the parties, the terms and conditions of the contract shall prevail. LG&E has no obligation to disclose the results of the RFP process or to disclose why particular supplier(s) were selected to participate in the contract negotiations process.

1.6 Pre-bid Questions

All operational, technical, business and contractual questions regarding this RFP and the scope contained herein shall be submitted in writing via email. Questions shall be sent to Tony Moir at tony.moir@lgeenergy.com.

No pre-bid conference meeting will be held.

Specific details on LG&E's strategies will not be disclosed. Questions and answers/clarifications given to potential respondents on any aspect of this RFP will be published and distributed to all suppliers invited to submit information.

1.7 Duration of Offer

Proposals must be valid for a minimum of 90 days following the submission of responses to this RFP.

1.8 Response Instructions

All Proposals must contain a table of contents delineating responses to each section. Proposals must be organized to include all responses including attachments as outlined in Section 3. Each section of your response must contain all items in the sequence identified. An authorized official must sign Proposals. The Proposal must also provide the names, titles, phone numbers, and email addresses of those

individuals with authority to negotiate and contractually bind the company. LG&E may use this information to obtain clarification of information provided. Please provide:

1. Notify Tony Moir via phone or email immediately if RFP contents are incomplete.
2. All responses to this RFP must correspond with the sequence outlined in section 3, which includes attachments.
3. A total of two (2) hard copies and one (1) electronic copy (in a format that can be edited and sent via email, and in MS Office (Word/Excel/PowerPoint) applications) of the response in the sequence outlined shall be submitted. With the exception of insurance certificates, .PDF files are not acceptable. Please keep the number of files on the electronic copy to a minimum, preferably only one (1) per application for ease of distribution to the evaluation committee. You may also submit supplemental hardcopy material such as brochures, etc. (3 copies of each).
4. One (1) of the two (2) hard copies shall be unbound in a format made ready for photocopying for ease of reproduction by LG&E.
5. You may submit additional information in a separate document, which you feel, may help LG&E evaluate your Proposal; however, it is understood that such information is not a replacement for any component of this RFP.
6. Fax responses will not be accepted.
7. No advance notification of Award will be given.

Responses to the RFP must be received no later than 12:00 PM, August 24, 2005 Eastern Daylight Time to be considered. Two (2) hard copies and one (1) e-mailed copy shall be sent to:

Tony Moir
Sourcing Leader
LG&E Energy Services Inc.
820 West Broadway
Louisville, Kentucky 40202
502-627-3428
tony.moir@lgeenergy.com

If your Proposal is hand carried, it must be delivered to the first floor (8th Street) mailroom, Broadway Office Complex at 820 West Broadway, Louisville, Kentucky 40202. Late Proposals will be rejected.

Your Proposal must be returned in a sealed envelope or container. The attached green and white label must be used for returning your Proposal to LG&E.

Any prospective supplier, who receives this RFP and either; chooses not to respond or; submits an incomplete Proposal, will be disqualified from consideration.

1.9 Disqualification

Under no circumstances (except those noted above) are respondents to contact any LG&E employee with regards to this RFP or any of the information contained herein. Respondents are strictly forbidden from visiting LG&E locations or approaching any LG&E current provider or subcontractor for any information specific to the account. Violations of this provision will subject the respondent to immediate disqualification.

An evaluation committee will perform the evaluation of written Proposals. During this time, LG&E may initiate discussions with suppliers who submit responses or who are potentially submitting responses for the purpose of clarifying aspects of the Proposals; however, Proposals may be evaluated without such discussions. Suppliers shall not initiate discussions.

2. Business Objective and Scope of Work/Service Requirements.

LG&E desires to obtain lump sum pricing for the cost of outsourcing the services associated with Reliability Coordinator, as outlined below. The LG&E / KU system consists of 5,120 pole miles of transmission lines, 142 substations, 122 transformers, 1,052 breakers, and 339 RTU's.

It should be noted that the information contained in this section, "Business Objective and Scope of Work/Service Requirements" will serve as the basis for a contract. Any contract entered into pursuant to this RFP will reflect LG&E's requirement for a strong regulatory out provision. The contract term will begin March 1, 2006 provided that LG&E acquires all appropriate regulatory approvals allowing it to perform its obligations under such contract; the receipt of the regulatory approvals being a condition precedent to the commencement of any contract. Items listed below may be modified or provisions added at LG&E's discretion. Contractor will be notified of any procedural changes and will be allowed sufficient time for implementation. However, all items listed in this section will be required and in place upon contract execution unless negotiated otherwise.

OPERATIONS FUNCTIONS

Function – Operating Reliability
Definition
Ensures the real-time operating reliability of the interconnected bulk electric transmission systems within a Reliability Authority Area.
Tasks
1. Enforce operational reliability requirements
2. Monitor all reliability-related parameters within the Reliability Authority Area, including generation dispatch and transmission maintenance plans
3. Direct revisions to transmission maintenance plans as required and as permitted by agreements
4. Request revisions to generation maintenance plans as required and as permitted by agreements
5. Develop Interconnection Reliability Operating Limits (to protect from instability and cascading outages).
6. Perform reliability analysis (actual and contingency) for the Reliability Authority Area
7. Approve or deny bilateral schedules from the reliability perspective
8. Assist in determining Interconnected Operations Services requirements for balancing generation and load, and transmission reliability (e.g., reactive requirements, location of operating reserves).
9. Identify, communicate, and direct actions to relieve reliability threats and limit violations in the Reliability Authority Area
10. Direct implementation of emergency procedures
11. Direct and coordinate System Restoration

OPERATIONS PLANNING FUNCTIONS

Function – Planning Reliability
Definition
Ensures a long-term (generally one year and beyond) plan is available for adequate resources and transmission within a Planning Authority Area. It integrates and assesses the plans from the Transmission Planners and Resource Planners within the Planning Authority Area to ensure those plans meet the reliability standards, and develops and recommends solutions to plans that do not meet those standards.
Tasks
1. Develop and maintain transmission and resource (demand and capacity) system models to evaluate transmission system performance and resource adequacy.

2. Maintain and apply methodologies and tools for the analysis and simulation of the transmission systems in the assessment and development of transmission expansion plans and the analysis and development of resource adequacy plans.
3. Define and collect or develop information required for planning purposes, including:
a. Transmission facility characteristics and ratings,
b. Demand and energy end-use customer forecasts, capacity resources, and demand response programs,
c. Generator unit performance characteristics and capabilities, and
d. Long-term capacity purchases and sales.
4. Evaluate plans for customer requests for transmission service.
a. Evaluate responses to long-term (generally one year and beyond) transmission service requests.
b. Review transmission facility plans required to integrate new (end-use customer, generation, and transmission) facilities into the interconnected bulk electric systems.
5. Review and determine TTC values (generally one year and beyond) as appropriate.
6. Assess, develop, and document resource and transmission expansion plans.
a. Integrate and verify that the respective plans for the Planning Authority Area meet reliability standards.
b. Identify and report on potential transmission system and resource adequacy deficiencies, and provide alternate plans that mitigate these deficiencies.
7. Provide analyses and reports as required on the long-term resource and transmission plans for the Planning Authority Area.
8. Monitor transmission expansion plan and resource plan implementation.
9. Coordinate projects requiring transmission outages that can impact reliability and firm transactions.
10. Evaluate the impact of revised transmission and generator in-service dates on resource and transmission adequacy.

Responsible Entity – Planning Authority
Relationships with other Responsible Entities
1. Collects information as appropriate, including:
a. Transmission facility characteristics and ratings from the Transmission Owners, Transmission Planners, Transmission Operators, and others.
b. Demand and energy end-use customer forecasts, capacity resources, and demand response programs from Load-Serving Entities and Resource Planners.
c. Generator unit performance characteristics and capabilities from Generator Owners and others.
d. Long-term capacity purchases and sales from Transmission Service Providers.
2. Receives requests for long-term transmission service from Transmission Planners and provides the resulting plans to Transmission Service Providers and Transmission Owners.
3. Provides transmission facility plans required to integrate new (end-use customer, generation, and transmission) facilities into the interconnected bulk electric systems to the Transmission Owners, Generator Owners, and other requesters.
4. Coordinates TTC values (generally one year and beyond) with Transmission Planners and neighboring Planning Authorities.
5. Integrates and verifies that the respective plans of the Resource Planners and Transmission Planners meet reliability standards.
6. Coordinates the plans for the interconnection of facilities[1] to the bulk electric systems within its Planning Authority Area with Transmission Planners and Resource Planners.
7. Coordinates as appropriate with resource suppliers outside of the Planning Authority Area.
8. Coordinates transmission system protection and control, including special protection systems, with Transmission Planners, other Planning Authorities, Generator Owners, Generator Operators, Transmission Owners, Transmission Operators, Reliability Authorities, and Distribution Providers.
9. Coordinates with its related Reliability Authority(ies) and other Planning Authorities on reliability issues, as appropriate.

[1] Generators, transmission lines, and end-use customer equipment

Function – Interchange
Definition
Authorizes implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures Interchange Transactions are properly identified for reliability assessment purposes.
Tasks
1. Determine valid, balanced, Interchange Schedules (validation of sources and sinks, transmission arrangements, interconnected operations services, etc.).
2. Verify ramping capability of the source and sink Balancing Authority Areas for requested Interchange Schedules
3. Collect and disseminate Interchange Transaction approvals, changes, and denials
4. Authorize implementation of Interchange Transactions
5. Enter Interchange Transaction information into Reliability Assessment Systems (e.g., the Interchange Distribution Calculator in the Eastern Interconnection)
6. Maintain record of individual Interchange Transactions

Responsible Entity – Interchange Authority
Relationships with other Responsible Entities
Ahead of Time
1. Verifies ramping capability for requested Interchange Schedules with Balancing Authorities.
2. Receives requests from Purchasing-Selling Entities to implement Interchange Transactions.
3. Submits all Interchange Transaction requests to the Reliability Authorities, Balancing Authorities, and Transmission Service Providers for approvals.
4. Receives confirmation from Transmission Service Providers of transmission arrangement(s).
5. Receives confirmation from Balancing Authorities of the ability to meet ramping requirements for submitted Interchange Schedules.
6. Receives information from Balancing Authorities of expected Interconnected Operations Services deployments that result in an Interchange Transaction (for example, an Interchange Schedule that is enabled by reducing load in a Balancing Authority Area, which frees up resources.)
7. Informs Purchasing-Selling Entities on implementation of load-provided Interconnected Operations Services that were bid into the market that result in an Interchange Transaction.
8. Provides approved, valid, and balanced Interchange Schedules to the Balancing Authorities for implementation.
Real Time
9. Provides Transmission Service Providers with the requested Interchange Transactions received from Purchasing Selling Entities using that Transmission Service Providers' transmission system.
10. Receives curtailments and redispatch implementation from Reliability Authorities.
11. Informs Transmission Service Providers, Purchasing-Selling Entities, Reliability Authorities, and Balancing Authorities of Interchange Schedule Implementations and Curtailments.
12. Receives information on Interchange Schedule interruptions due to generation loss or load interruption from the Balancing Authorities.
After the hour
13. Maintains and provides records of individual Interchange Transactions for the Balancing Authorities.

Function – Transmission Planning
Definition
Develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority Area

Tasks

Develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within a portion of the Planning Authority Area.

Tasks

1. Maintain transmission system models (steady-state, dynamics, and short circuit) and apply appropriate tools for the development of transmission plans.
2. Define and collect transmission information and transmission facility characteristics and ratings.
3. Develop plans within defined voltage and stability limits and within appropriate facility thermal ratings.
4. Define system protection and control needs and requirements, including special protection systems (remedial action schemes), to meet reliability standards.
5. Determine TTC values[2] as appropriate.
6. Notify others of any planned transmission changes that may impact their facilities.
7. Evaluate and plan for transmission service and interconnection requests beyond one year.
8. Develop and report, as appropriate, on its transmission expansion plan for assessment and compliance with reliability standards.
9. Monitor and report, as appropriate, on its transmission expansion plan implementation.

Responsible Entity – Transmission Planner

Relationships with other Responsible Entities

1. Provides transmission information, as appropriate, to planning and operating entities and service entities.
2. Coordinates and collects data as appropriate for system modeling, and plans transmission system modifications and expansion for Load-Serving Entities, Generator Owners, and Distribution Providers with other Transmission Planners, Transmission Owners, and Transmission Service Providers.
a. Coordinates its transmission models with its Planning Authority.
b. Notifies Generator Owners and Transmission Owners of any planned transmission changes that may impact their facilities.
c. Coordinates with Resource Planners on the deliverability of new and proposed generation facilities, as appropriate.
3. Coordinates with Transmission Service Providers, Transmission Owners, Reliability Authorities, Planning Authorities, and other Transmission Planners on system limitations, transmission adequacy plans, and the determination of TTC values as appropriate.
4. Coordinates with its Planning Authority, other Planning Authorities, and other Transmission Planners within its Planning Authority Area on reliability issues, as appropriate, including
a. Develops and reports its transmission expansion plan to its Planning Authority for assessment and compliance with reliability standards.
b. Works with its Planning Authority to identify potential alternative solutions, including solutions proposed by stakeholders, to meet interconnected bulk electric system requirements.
c. Reports on transmission expansion plan implementation to its Planning Authority.

2.1 Summary of RFP Requirements

All Proposals must also include the following to be considered complete:

- Service providers shall describe all partnerships/arrangements included in the Proposal for subcontracting any aspect of the work.
- Service providers shall include detailed and firm pricing in Attachment F.
- All items in Sections 2 above and Sections 3 and 4 below.

---

[2] TTC is the total transfer capability and refers to the amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines (or paths) between those areas under specified system conditions.

- A transition plan to take over the work on or about March 1, 2006

3 Company Information and Sequence of Proposal

3.1 Proposed Solution

Provide a description of services for the proposed solution to meet LG&E's business objective as described in Section 2. Successful service providers will be working with LG&E to develop acceptable forms for all related reports, work schedules, transition plans, etc.

3.2 Conditions of Bid

In submitting a response to this RFP, respondent acknowledges and accepts the following conditions by initialing each sub-paragraph in Attachment A.

3.3 Service Provider Contact Information

In Attachment B, please provide contact information of the authorized person making this Proposal and any alternate person with like such authority whom LG&E should contact in the event of questions or clarifications.

3.4 Company Profile

Briefly complete your company profile information as listed in Attachment C and include a copy of your current insurance certificate. Also provide a separate Attachment C and insurance certificate for each subcontractor included in your Proposal.

3.5 Support for Minority and Women-Owned Businesses

It is LG&E policy to promote and increase participation of MBE/WBE's in its purchasing and contractual business. Maximum practicable opportunity shall be given to MBE/WBE's to participate as LG&E suppliers, but in order to achieve this goal LG&E encourages additional opportunities for MBE/WBE's by requiring participation plans from suppliers who are not MBE/WBE firms. In Attachment D, please indicate which business classification your company falls into. A description of each business classification is provided. If your firm currently or intends to use minority sub-contractors or suppliers in the performance of this work, please indicate so in the space provided on Attachment D.

3.5 Use of Union Labor

Also in Attachment D, please indicate whether your company will use union or non-union labor.

3.7 Bid Clarifications and/or Exceptions

Your Proposal shall conform to in all respects with the applicable specifications, terms and conditions referred to in this RFP and the attached proposed contract, including the General or Professional Services Agreement. Submission of a Proposal constitutes your company's commitment that it can provide the services in this RFP and acceptance of the General or Professional Services Agreement. An inability to provide an individual service(s) will not eliminate your firm from consideration. Any deviations from or exceptions to this RFP and the attached contract shall be clearly stated in your Proposal using the form titled "BID CLARIFICATIONS AND/OR EXCEPTIONS" in Attachment E. If there are not such exceptions, please state so. An award of a contract will not take place until there are executed terms and conditions

between the parties. If a contract is awarded, any exceptions taken after announcing the award will not be considered.

3.8 Pricing

PRICING AND FEES SHALL BE SUMMARIZED IN ATTACHMENT F. Pricing shall be submitted on a lump sum basis for each of contract periods identified in Attachment F.

The price shall be firm for the duration of this contract. Identify assumptions made regarding LG&E's environment that would impact the cost. The bid price(s) shall include all costs to service provider, including taxes (if applicable) and profit.

Prospective contractors are invited to submit other pricing options for consideration by the evaluation committee. All final pricing agreed to in the contract will be based on an understanding of how all costs are derived.

LG&E reserves the right to accept other than the lowest priced Proposal and to accept or reject any Proposal in whole or in part, or to reject all Proposals with or without notice or reasons, and if no Proposal is accepted, to abandon the work or to have the work performed in such other manner as LG&E may elect.

Any firm doing business with LG&E will be required to meet LG&E's supplier certification requirements.

LG&E makes no guarantee or promise as to the amount of work to be performed under the proposed Contract, nor does it convey an exclusive right to the Contractor to perform work of the type or nature set forth in the proposed Contract.

3.9 Confidentiality Agreement

As part of this RFP and proposal response, all LG&E prospective contractors are required to read, agree to, sign, and return the Confidentiality Agreement, which is enclosed as part of this RFP.

4 Other Services

4.1 Additional Services

Please provide detail on any additional or unique services provided by your organization. Generic information without detail will be excluded from the analysis. Any fees associated with any extraordinary services should be clearly listed separately as an appendix to your Proposal.

Enclosure: Green Address Label.

Attachment A
CONDITIONS OF BID

In submitting a response to this RFP, respondent acknowledges and accepts the following conditions, and makes the following representations. **Please initial (blue ink) each sub-paragraph in each box below in your response.**

A-1 **Ownership of Proposals** – All Proposals in response to this RFP are to be the sole property of LG&E, Louisville, Kentucky.

A-2 **Oral Contracts** – Any alleged oral Contracts or arrangements made by a respondent with any employee of LG&E will be superceded by the written Contract.

A-3 **Amending or Canceling Request**- LG&E reserves the right to amend or cancel this RFP, at any time, if it is in the best interest of LG&E.

A-4 **Rejection for Default or Misrepresentation** – LG&E reserves the right to reject the Proposal of any supplier that is in default of any prior contract or for misrepresentation.

A-5 **Clerical Errors in Awards** – LG&E reserves the right to correct inaccurate awards resulting from its clerical errors.

A-6 **Rejection of Qualified Proposals** – Proposals are subject to rejection in whole or in part if they limit or modify any of the terms and/or specifications of the RFP.

A-7 **Presentation of Supporting Evidence** – If requested, respondent(s) shall present evidence of experience, ability and financial standing necessary to satisfactorily meet the requirements set forth in the RFP or those implied in the Proposal.

A-8 **Consistency in Submissions** – The hardcopy submission of the Proposal will prevail in the case of a discrepancy between the electronic and hardcopy version of the documents.

A-9 **Changes to Proposals** – No additions or other changes to the original Proposal will be allowed after submittal. While changes are not permitted, clarification at the request of LG&E may be required at the sole expense of the respondent.

A-10 **Collusion** – In submitting a Proposal, the respondent implicitly states that the Proposal in not made in connection with any competing respondent submitting a separate response to the RFP, and is in all respects fair and without collusion or fraud.

A-11 **Costs** – LG&E shall not be liable for any cost incurred in the preparation of this RFP.

A-12 **Subcontractors** – The use of subcontractors must be clearly identified and explained in the Proposal. The prime contractor shall be wholly responsible for the performance of the contract in its entirety whether or not subcontractors are used. Subcontractors shall be bound by the terms and conditions of this RFP. The prime contractor shall indemnify and hold LG&E harmless from any and all activities related to the services provided by the subcontractor(s) under this contract.

A-13 **Legal Compliance**- In submitting a Proposal, the respondent warrants that it is legally authorized to do business in the state of Kentucky, is in compliance with all applicable laws and regulations, is not prohibited from doing business with LG&E by law, order, regulation, or otherwise, and the person submitting the Proposal on behalf of the supplier is authorized by the supplier to bind it to the terms of the Proposal.

Attachment B
SERVICE PROVIDER INFORMATION

A. SERVICE PROVIDER'S COMPANY NAME ______________________________

B. SERVICE PROVIDER'S MAILING ADDRESS ______________________________

____

C. SERVICE PROVIDER'S PHYSICAL ADDRESS(if different from above)______________________________

____

D. PRIMARY CONTACT NAME ______________________________

E. TELEPHONE NUMBER ______________________________

F. ALTERNATE PHONE NUMBER______________________________

G. FAX NUMBER ______________________________

H. EMAIL ADDRESS ______________________________

I. RFP # ____________________

J. DUN & BRADSTREET NUMBER ____________________

K. TAX IDENTIFICATION NUMBER ____________________

L. PROVIDE A CURRENT CERTIFICATE OF INSURANCE ____________

M. RECENT OR PENDING MERGERS, ACQUISITIONS OR IPO'S ____________________

Attachment D
BUSINESS CLASSIFICATION

Identify which category(s) your company falls into (see following page for classification definitions). Attach any certificates verifying your company as a Small Business, Small Disadvantaged Business, Minority Business Enterprise (MBE), Woman-Owned Business Enterprise (WBE), Disabled-Owned Business, Veteran-Owned Business.

______ Large Business – Over 500 people or dominant in field
______ Small Business – Less than 500 people and not dominant in field
______ Small Disadvantaged Business – Less than 500 people, not dominant in field and meeting criteria on next page
______ Minority Business Enterprise
______ Woman-Owned Business Enterprise
______ Disabled Owned Business
______ Veteran Owned Business

USE OF UNION LABOR:

__________ **Non-Union Labor will be used.**

__________ **Union Labor will be used**
(List any and all local unions involved and labor contract expiration dates)

______________________ **Local No.** ______________________ **Exp. Date** ______________________

______________________ **Local No.** ______________________ **Exp. Date** ______________________

______________________ **Local No.** ______________________ **Exp. Date** ______________________

Please indicate any MBE/WBE firms which you intend to use as subcontractors or suppliers as part of your Proposal.

BUSINESS CLASSIFICATION DESCRIPTIONS

A) Small Business

Defined as a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on government contracts, and qualified as a small business under the criteria and size standards in 13 CFR Part 121 (see 19.102). Such a concern is "not dominant in its field of operation" when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

GSA (General Services Administration) Federal Acquisition Regulation (FAR) Part 19

B) Small Disadvantaged Business

Defined as a small business concern that is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business that has at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals and that has its management and daily business controlled by one or more such individuals, This term also means small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned by one of these entities, that has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and that meets the requirements of 13 CFR 124.

GSA (General Services Administration) Federal Acquisition Regulation (FAR) Part 19

C) Minority Business Enterprise

Defined as a for profit enterprise, regardless of size, physically located in the United States or its trust territories, which is owned, operated and controlled by minority group members. "Minority group members:" are U.S. citizens who are African-American, Hispanic American, Native American, Asian-Pacific American, and Asian-Indian American. "Ownership" by minority individuals means business is at least 51% owned by such individuals or, in the case of a publicly owned business, at least 51% of the stock is owned by one or more such individuals. Further, the management and daily business operations are controlled by those minority group members.

KMSDC (Kentucky Minority Supplier Development Council)

D) Woman-Owned Business

Defined as a business that is at least 51% owned by a woman or women who also control and operate it. "Control" in this context means being actively involved in the day-to-day management.

GSA (General Services Administration)

E) Large Business

Defined as more than 500 employees.

GSA (General Services Administration)

Attachment E
BID CLARIFICATIONS AND/OR EXCEPTIONS

1. Service provider offers the following clarifications and/or exceptions taken to any requirement or provision of this RFP and any proposed modifications or replacement language for each clarification or exception (If none, so state.):

Service provider understands that unless itemized above, no other clarifications or exceptions to this Request for Proposal are taken by the Service provider.

Attachment F
PRICING SUMMARIES

Please provide a summary of your pricing proposal for all services related to the delivery of your solution. Pricing shall be submitted on lump sum basis for each of the following contract length periods and include all costs to LG&E:

2 year $__________ (cost per year)

5 year $__________ (cost per year)

10 year $__________ (cost per year)

RECIPROCAL CONFIDENTIALITY AGREEMENT

This **Reciprocal Confidentiality Agreement** (this "Agreement") is entered this 10th day of August, 2005 by and among ______________________________, and **LG&E Energy Services, Inc.**, (individually, each shall be referred to herein as a "Party" and, collectively, as the "Parties") in connection with the Parties' consideration of a business alliance (the "Opportunity"). As a condition to showing, furnishing, or making available information in respect of the Opportunity to each other, the Parties, respectively, require and agree, as set forth below, to treat confidential such information, and all other information that each of the other Parties or any of its employees, officers, directors, shareholders, or legal or financial advisors (collectively, "Representatives") show, furnish or make available (collectively, the "Confidential Information").

For purposes hereof, "Confidential Information" shall also include, (i) the fact of and existence of the Parties consideration of the Opportunity, (ii) the fact of and the substance of the Parties' discussions concerning the Opportunity, and (iii) all studies, analyses, and projections of the Parties concerning the Opportunity; irrespective of whether any of the above are shown, furnished, or made available to either of the other Parties.

The Parties acknowledge that the Confidential Information is being furnished solely in connection with their consideration of the Opportunity. The Parties agree that the Confidential Information shall be treated as "secret" and "confidential," and used solely for the purpose of considering the Opportunity throughout the period commencing January 28, 2005 (the "Confidentiality Period").

During the Confidentiality Period, no portion of the Confidential Information shall be disclosed by a Party to any person or entity other than: (i) such of its affiliates, directors, officers, employees, agents, representatives, and legal and financial advisors whose knowledge and evaluation of the Confidential Information shall be reasonably necessary for a thorough investigation by such Party of the Opportunity; or (ii) to the extent a Party or such other persons or entities shall be legally compelled to make such disclosure by any court or other governmental agency or instrumentality having jurisdiction over them (in which event the Party shall provide the other Party with reasonable prior notice of such compelled disclosure so that such latter Party may, in its discretion, seek a protective order with respect to such disclosure, or waive compliance with the provisions hereof); or (iii) to such affiliates as may be directly involved in some aspect of the Opportunity; or (iv) another Party to this Agreement.

The Parties shall inform all of their affiliates, directors, officers, employees, agents, representatives, and legal and financial advisors (collectively, the "Party Representatives") of the confidentiality covenants set forth herein when showing, furnishing, or making available Confidential Information to Party Representatives. Each Party shall be responsible for the use or disclosure of any Confidential Information by any of its Party Representatives during the Confidentiality Period.

The Confidential Information shall not include any information which is in the public domain as of the date of its disclosure to a Party hereunder. For purposes of this Confidentiality Agreement, information which is in the public domain shall include, without limitation: (a) any information which is or becomes generally available to the public other than by reason of a disclosure by the applicable Party or any Party Representative in violation of this Confidentiality Agreement; (b) any information which is or was made available to a Party by a source other than one of the other Parties, provided the former Party had no reason to believe the source of such information was under a contractual obligation to such latter Party or any of its affiliates not to make such disclosure; (c)

information which was known to a Party prior to disclosure by one of the other Parties, as reasonably documented in the former Party's corporate records, or (d) any information which is or was independently acquired or developed by a Party without violating any of its covenants set forth in this Agreement.

All Confidential Information in a Party's or its Party Representatives' possession (including without limitation, all copies thereof) which is not then in the public domain shall be promptly returned or destroyed by such Party should it have no interest in the Opportunity, or should the other Party request its return in writing at any time, in which case, the Party required to return Confidential Information may destroy the same in lieu of its return.

During the Confidentiality Period, a Party shall not entice, solicit, or induce, directly or indirectly, any of another Party's officers or employees who have been involved in consideration of the Opportunity, to leave their employment in order to accept employment with such other Party hereto.

The Parties understand that none of them is hereby making any representations or warranties as to the completeness or accuracy of any Confidential Information, and that any such representations and warranties shall be made by a Party solely in one or more signed definitive agreements with respect to the Opportunity, and then subject to the provisions thereof.

The Parties agree that they, respectively, may not have an adequate remedy at law by reason of any breach by a Party or its Party Representatives of the covenants set forth in this Agreement, and that, in addition to all other remedies available at law or in equity, a Party shall be entitled to injunctive relief from any such breach. This Agreement shall be governed by the laws of the Commonwealth of Kentucky, exclusive of the conflicts of law rules of that state.

It is understood and agreed that this Agreement creates no obligation to enter into any Opportunity or any agreement relating to an Opportunity, and that no contract or agreement providing for any Opportunity shall be deemed to exist unless and until a final definitive agreement has been executed and delivered.

WITNESS the signatures of the authorized representatives of each of the undersigned as of the date first written above.

LG&E Energy Services Inc.

By:________________________
Name (Print):__________________
Title: ________________________

____
Entity Name

By: ________________________
Name (Print): __________________
Title: ________________________

IMPORTANT NOTICE TO

SERVICE PROVIDER
It is imperative that this label be posted on the envelope or box submitting your quotation.

CONFIDENTIAL
SEALED BID
DO NOT OPEN
RFQ:

Closing Date: August 24, 2005
From: ____________________

TO: TONY MOIR
CORPORATE PURCHASING
LG&E ENERGY SERVICES INC.
820 WEST BROADWAY
LOUISVILLE KY 40202

Form SD 768 Rev. 4/97

Contract No. 00048801

Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

Van M. Wardlaw, P.E.
Vice President
Electric System Operations

September 23, 2005

Mr. Mark S. Johnson
Director, Transmission
LG&E Energy, LLC
119 N. Third Street
Louisville, Kentucky 40202

Dear Mr. Johnson:

This Letter Agreement between the Tennessee Valley Authority ("TVA") and Louisville Gas and Electric Company and Kentucky Utilities Company ("LG&E/KU") will evidence our mutual intent to negotiate in good faith a Reliability Coordination Agreement ("RCA") under which TVA would act as LG&E/KU's designated Reliability Coordinator and provide other reliability-related services to ensure compliance with the applicable reliability coordination policies and procedures as defined by the North American Electric Reliability Council, any successor organization thereto, and the applicable regional reliability councils. This Letter Agreement also enables TVA to commence certain activities necessary to prepare TVA to provide Reliability Coordination ("RC") services to LG&E/KU.

Upon execution of this Letter Agreement, TVA shall begin preliminary work to enable TVA to incorporate LG&E/KU into the TVA Reliability Area. Such work shall include, but is not limited to, the preparation of engineering studies, the development of applicable computer systems and communication links, and other tasks associated with the provision of RC services. TVA shall formulate workplans, identifying specific tasks and timelines, and shall provide such workplans and associated estimated budgets to LG&E/KU for review and approval. Upon the receipt of written approvals from LG&E/KU, TVA shall perform the tasks set forth in approved workplans.

Upon approval of any workplan budget, LG&E/KU shall pay TVA the estimated budget amount for that workplan as a deposit for the work. The cost of the work to be performed by TVA hereunder shall be based on the time spent by qualified TVA personnel at their standard hourly rates (including applicable overheads), which shall not exceed $75 per hour, plus out-of-pocket costs for any materials consumed in performing such work. TVA shall not be obligated to incur and LG&E/KU shall not be obligated to pay costs in excess of the estimated budget amount per workplan, except by mutual agreement evidenced in the form of a written addendum to the applicable LG&E/KU approval. Following execution of the RCA, TVA shall apply any deposit

Printed on recycled paper

amounts to the charges to be paid by LG&E/KU under the RCA. In the event that a mutually acceptable RCA is not executed by April 1, 2006, any remaining deposits held by TVA exceeding the cost of the work performed by TVA shall be promptly refunded to LG&E/KU.

TVA and LG&E/KU anticipate negotiating a mutually acceptable Reliability Coordination Agreement to be executed and implemented by April 1, 2006. This Letter Agreement is merely an expression of mutual intent with respect to the proposed RCA and does not constitute a binding agreement between the parties with respect to the proposed RCA. Neither TVA nor LG&E/KU shall bring any claim or action against the other as a result of failure to agree to execute a binding RCA.

If this is acceptable, please sign and date all copies of this Letter Agreement and return two (2) copies to me.

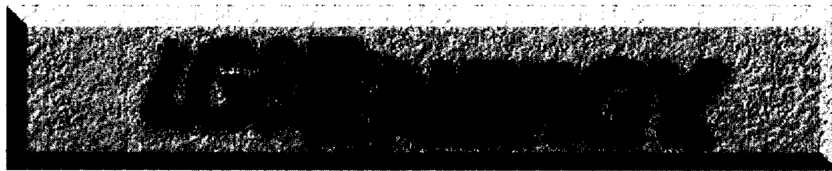
Sincerely,

Van M. Wardlaw, P.E.

Accepted and agreed to as of the 27 day of Sept., 2005.

Louisville Gas and Electric Company
Kentucky Utilities Company

By:
Mark S. Johnson
Director, Transmission



Request for Proposal

No. 3045

Services
For

LG&E Energy Services Inc.

CONFIDENTIAL INFORMATION

This document, including any exhibits or attachments, is solely for use by employees of LG&E Energy LLC and those employees or agents of suppliers invited to submit Proposals with a need to know. Not to be disclosed to or used by any other person without the express written consent of LG&E Energy LLC.

Issued By:

LG&E Energy Services Inc.
820 West Broadway
Louisville, Kentucky 40202

Issue Date:
August 22, 2005

Proposal Due Date:
September 8, 2005

Table of Contents

Section			Page
1	Introduction		3
	1.1	Corporate Overview	3
	1.2	Background and RFP Goals	3-4
	1.3	Timetable	4
	1.4	Confidentiality	5
	1.5	Disclaimer	5
	1.6	Prebid Questions	5
	1.7	Duration of Offer	5
	1.8	Response Instructions	5-6
	1.9	Disqualification	6
2	Business Objective and Scope of Work/Service Requirements		7-10
	2.1	Summary of RFP Requirements	
3	Company Information		10-12
	3.1	Proposed Solution	
	3.2	Conditions of Bid	
	3.3	Service provider Contact Information	
	3.4	Company Profile	
	3.5	Support for MBE/WBE	
	3.6	Use of Union Labor	
	3.7	Bid Clarifications and/or Exceptions	
	3.8	Pricing	
	3.9	Confidentiality Agreement	
4	Other Services		
Attachment A		CONDITIONS OF BID	13
Attachment B		SERVICE PROVIDER INFORMATION	14
Attachment C		BUSINESS CLASSIFICATION	14
Attachment D		BID CLARIFICATIONS AND/OR EXCEPTIONS	17
Attachment E		PRICING SUMMARY	18
Confidentiality Agreement			19-20

1 Introduction

1.1 Corporate Overview

LG&E Energy LLC is a diversified energy services company and is a member of E.ON AG, headquartered in Düsseldorf, Germany. LG&E Energy LLC ("LG&E"), headquartered in Louisville, Kentucky, operates in domestic and international markets with businesses in power generation; project development; retail gas and electric utility services; and asset-based energy marketing. LG&E Energy LLC, through its subsidiaries, Louisville Gas and Electric ("Louisville"), Kentucky Utilities ("KU"), and Western Kentucky Energy ("WKE") provides electric and gas service throughout the state of Kentucky and in seven counties in Virginia and is one of the US's lowest-cost energy providers and an industry innovator. Louisville and KU own certain electric transmission facilities which are the subject of this RFP. LG&E Energy Services Inc., another subsidiary of LG&E Energy LLC provides support functions for Louisville Gas & Electric, KU, and WKE (LG&E Energy LLC and its affiliates collectively referred to as "LG&E"). Our mission is to provide exceptional value to our customers and shareholders as we move toward the era of competition in the energy industry.

1.2 Background and RFP Goals

LG&E would like to receive proposals from qualified bidders regarding the costs, terms and conditions under which qualified bidders would provide certain services to LG&E as provided for herein. Specifically, LG&E is seeking proposals regarding the outsourcing of certain transmission tariff administration and independent oversight services associated with Louisville and KU's legal obligation to provide open access transmission service and comply with requirements imposed by the Federal Energy Regulatory Commission ("FERC"), as outlined in this document.

LG&E proposes that the service provider would act as an Independent Transmission Organization ("ITO") for the company, and would perform the functions outlines below.

The Louisville / KU transmission system consists of 5,120 pole miles of transmission lines, 142 substations, 122 transformers, 1,052 breakers, and 339 RTU's.

LG&E is currently a transmission owning member of the Midwest Independent Transmission System Operator, Inc. ("MISO"). LG&E's membership in the MISO is currently under investigation by the Kentucky Public Service Commission ("KPSC"). In that proceeding, LG&E has presented testimony that the costs of its membership in MISO outweigh the benefits for Kentucky electric customers. Accordingly, LG&E seeks to investigate alternatives to the provision of certain services currently provided to the company by MISO. Should LG&E receive acceptable responses to this RFP, LG&E would choose a bidder with whom to negotiate regarding the specifics of the provision of such services, subject to the limitations and discretion retained by the company as provided for herein.

Bidders should note that the final consummation of a binding contract between any bidder and LG&E to perform such services is subject to regulatory approvals by the FERC and the KPSC.

Bidders should also consult legal counsel regarding the regulatory consequences for such bidders of providing such services to LG&E. LG&E provides no express or implied warranty regarding the regulatory consequences associated with the provision of such services by any bidder to LG&E.

Operational Control of Transmission System. Louisville/KU currently operates a NERC-certified control area subject to the security coordination of the MISO. LG&E is proposing that Louisville/KU will retain operational control over the transmission system, but will follow the directives of the ITO (consistent with the role of such party as tariff administrator and an independent oversight authority as provided for herein).

Relationship Between ITO and Transmission Provider. As an owner of transmission facilities subject to the jurisdiction of FERC, Louisville/KU is required to provide open access transmission service, or to have these services provided by an independent party. LG&E proposes that Louisville/KU will be the owner-Transmission Provider under a new open access transmission tariff, but will sub-contract key functions to the ITO. The ITO will be responsible for administration of, and certain responsibilities under, the open access tariff. LG&E seeks to contract with the ITO in order that it may meet its open access obligations through performance of key functions by an independent party.

Services Agreement and Governing Contracts. The arrangement between LG&E and the ITO will be specified by contract ("Services Agreement"). LG&E has also issued an RFP for Reliability Coordination ("RC") service to be performed by a third party, and foresees contract arrangements between the RC, the ITO and LG&E.

The Services Agreement will constitute a filed rate schedule subject to the jurisdiction of the FERC.

The Services Agreement will provide that LG&E/KU shall retain the right to file amendments to the Services Agreement, subject to FERC approval, no earlier than two years after the Agreement's effective date.

Independence of Bidders. Bidders must demonstrate to the satisfaction of LG&E that they are not affiliated with LG&E, or any market participant, consistent with the current rules of the FERC. LG&E requests that bidders demonstrate that they will be able to meet any requirements which FERC may impose necessary for the bidder's independent administration of the company's open access transmission tariff and other functions set out herein.

Standards of Conduct. Bidders must agree to abide by FERC regulations regarding Standards of Conduct, which require separation of operations between power sales and merchant functions, and prohibit transmission information from being shared with market participants (other than in limited controlled circumstances). Bidders should seek advice of legal counsel regarding such restrictions.

<u>No Subsidization of Related Costs.</u> Any entity that is either a member of the entity to which the RFP is being sent, or is otherwise responsible for any of the costs associated with the operation of such entity will not, under any circumstances, be expected to contribute to or otherwise subsidize the costs of the service provider providing services to LG&E under any resulting agreement and, further LG&E will be solely responsible for all costs associated with any infrastructure investments that may be reasonably required for the service provider to perform its obligations under the Service Agreement. Any entity in receipt of this RFP will not bear any responsibility for any costs associated with the termination of any agreement to which LG&E is currently a party, either through mutual agreement of the parties, or by expiration, unless the service provider is otherwise obligated under agreement(s) for costs and /or the rendering of some performance.

1.3 Timetable

The following events are tentatively scheduled for this bid:

August 22, 2005	RFP Issued
September 8, 2005	Proposal Deadline by 12:00 p.m. EDT.
September 9, 2005	Emailed Copy of Proposal sent by 10:00 a.m.

LG&E RESERVES THE RIGHT TO CHANGE THE ABOVE SCHEDULE AT ANY TIME WITHOUT NOTICE.

1.4 Confidentiality

This RFP is confidential and for the sole use of supplier's preparation of a Proposal. By supplier's acceptance hereof, supplier agrees:

1.4.1 Not to disclose, copy or distribute this RFP in whole or in part to persons other than supplier's employees and agents who are authorized by nature of their duties to receive such information.
1.4.2 To return any LG&E confidential or proprietary materials upon LG&E's request.
1.4.3 Not to use any information in this RFP or any other materials related to the business affairs or procedures of LG&E and of its affiliates for supplier's advantage, other than in performance of this RFP.
1.4.4 Suppliers who intend to use subcontractors will be required to have such subcontractors execute non-disclosure agreements prior to work being done by subcontractor.
1.4.5 Suppliers who seek to negotiate possible sub-contract arrangements with LG&E's existing subcontractors will be held accountable for any breach of the non-disclosure agreements that they have signed with LG&E.

1.5 Disclaimer

This RFP is not an offer to enter into a Contract but is merely a request for the supplier to submit information and proposals. Expenses incurred in responding to this request are the responsibility of the supplier. All materials submitted become the property of LG&E. LG&E reserves the right to modify, reject or use without limitation any or all of the ideas from submitted information. LG&E reserves the right to discontinue the RFP process at any time for any reason whatsoever. The finalist's response to this RFP will become part of the final contract if awarded. Wherever there is a conflict between supplier's responses to this RFP and the terms and conditions contained in any contract subsequently entered into by the parties, the terms and conditions of the contract shall prevail. LG&E has no obligation to disclose the results of the RFP process or to disclose why particular supplier(s) were selected to participate in the contract negotiations process.

1.6 Pre-bid Questions

All operational, technical, business and contractual questions regarding this RFP and the scope contained herein shall be submitted in writing via email. Questions shall be sent to Tony Moir at tony.moir@lgeenergy.com.

No pre-bid conference meeting will be held.

Specific details on LG&E's strategies will not be disclosed. Questions and answers/clarifications given to potential respondents on any aspect of this RFP will be published and distributed to all suppliers invited to submit information.

1.7 Duration of Offer

Proposals must be valid for a minimum of 90 days following the submission of responses to this RFP.

1.8 Response Instructions

All Proposals must contain a table of contents delineating responses to each section. Proposals must be organized to include all responses including attachments as outlined in Section 3. Each section of your response must contain all items in the sequence identified. An authorized official must sign Proposals. The Proposal must also provide the names, titles, phone numbers, and email addresses of those

individuals with authority to negotiate and contractually bind the company. LG&E may use this information to obtain clarification of information provided. Please provide:

1. Notify Tony Moir via phone or email immediately if RFP contents are incomplete.
2. All responses to this RFP must correspond with the sequence outlined in section 3, which includes attachments.
3. A total of two (2) hard copies and one (1) electronic copy (in a format that can be edited and sent via email, and in MS Office (Word/Excel/PowerPoint) applications) of the response in the sequence outlined shall be submitted. With the exception of insurance certificates, .PDF files are not acceptable. Please keep the number of files on the electronic copy to a minimum, preferably only one (1) per application for ease of distribution to the evaluation committee. You may also submit supplemental hardcopy material such as brochures, etc. (3 copies of each).
4. One (1) of the two (2) hard copies shall be unbound in a format made ready for photocopying for ease of reproduction by LG&E.
5. You may submit additional information in a separate document, which you feel, may help LG&E evaluate your Proposal; however, it is understood that such information is not a replacement for any component of this RFP.
6. Fax responses will not be accepted.
7. No advance notification of Award will be given.

Responses to the RFP must be received no later than 12:00 PM, September 8, 2005 Eastern Daylight Time to be considered. Two (2) hard copies and one (1) e-mailed copy shall be sent to:

Tony Moir
Sourcing Leader
LG&E Energy Services Inc.
820 West Broadway
Louisville, Kentucky 40202
502-627-3428
tony.moir@lgeenergy.com

If your Proposal is hand carried, it must be delivered to the first floor (8th Street) mailroom, Broadway Office Complex at 820 West Broadway, Louisville, Kentucky 40202. Late Proposals will be rejected.

Your Proposal must be returned in a sealed envelope or container. The attached green and white label must be used for returning your Proposal to LG&E.

Any prospective supplier, who receives this RFP and either; chooses not to respond or; submits an incomplete Proposal, will be disqualified from consideration.

1.9 Disqualification

Under no circumstances (except those noted above) are respondents to contact any LG&E employee with regards to this RFP or any of the information contained herein. Respondents are strictly forbidden from visiting LG&E locations or approaching any LG&E current provider or subcontractor for any information specific to the account. Violations of this provision will subject the respondent to immediate disqualification.

An evaluation committee will perform the evaluation of written Proposals. During this time, LG&E may initiate discussions with suppliers who submit responses or who are potentially submitting responses for the purpose of clarifying aspects of the Proposals; however, Proposals may be evaluated without such discussions. Suppliers shall not initiate discussions.

2. Scope of Work & Services

LG&E desires to obtain proposals for ITO services as outlined herein.

It should be noted that the of "ITO FUNCTIONS AND SERVICES" contained in this section, "Business Objective and Scope of Work/Service Requirements" will serve as the basis forthe Services Contract.

Bidders should note that any contract entered into pursuant to this RFP will subject to the approval of the FERC, and will contain provisions granting LG&E the discretion to nullify the contract should regulatory approvals be denied, withheld, or granted on terms unacceptable to LG&E.

The Service Contract term will begin March 1, 2006, subject to receipt of all appropriate regulatory approvals. Items listed below may be modified or provisions added at LG&E's discretion. Contractors will be notified of any procedural changes and will be allowed sufficient time for implementation. However, all items listed in this section will be required and in place upon contract execution unless negotiated otherwise.

ITO FUNCTIONS AND SERVICES

Function -- Tariff Administration

Description

Administer the terms and conditions of LG&E/KU's FERC-approved Open Access Transmission Tariff ("OATT"). The OATT will be based upon the *pro forma* tariff adopted by the Commission originally in Order Nos. 888 and 889 *et seq.* The OATT will be updated to include Rate Schedules and Attachments reflecting current FERC requirements (for example, generation interconnection procedures). The OATT will also reflect that the ITO will have independent authority to administer the tariff, and that reliability coordination services will be provided by an independent third party.

Function – Evaluate Transmission Service Requests ("TSRs")

Tasks

1. Evaluate Transmission Service Requests ("TSRs") presented by potential and existing transmission customers who seek to purchase transmission service on the LG&E transmission system.

2. Process and evaluate (grant or deny) all TSRs, including those transactions associated with network service and existing point-to-point service agreements, on a non-discriminatory basis consistent with the Tariff and all applicable legal and good utility practice.

2. Document all transmission service requests under the Tariff, the disposition of such requests, and any supporting data required to support the decision with respect to such requests.

3. With respect to long term service requests, coordinate with LG&E transmission personnel for the purpose of managing and conducting, as required, system impacts studies ("SIS"). If an SIS indicates transmission upgrades are required on LG&E's transmission system, the requesting Transmission Customer may request a Facilities Study. The ITO will provide the Transmission Customer with the Facilities Study Agreement if an SIS indicates that upgrades are needed, and will manage the process of . The ITO will coordinate the Facilities Study and prepare the initial draft of the Facilities Study report, and the ITO will finalize the Facilities Study after review and comment by LG&E.

4. Upon satisfactory completion of the SIS and requisite Facilities Studies, the ITO, together with LG&E/KU, shall execute a Transmission Service Agreement providing for service to the customer and payment for service to LG&E/KU.

Function -- OASIS Administration

Definition

Respondent will administer LG&E/KU's Open Access Same-Time Information System ("OASIS") node for purposes of processing and evaluating TSRs and ensuring compliance with LG&E's obligation to publicly post transmission-related information pursuant to the Commission's OASIS regulations.

Tasks

1. Perform the duties of a Responsible Party as defined in the Commission's OASIS regulations, 18 C.F.R. § 37.5; and post information required to be on the Transmission Provider's OASIS under the Commission's OASIS regulations, 18 C.F.R. § 37.6.

2. As the Transmission Provider, LG&E will be responsible for providing bidder with the information necessary to comply with the posting requirements.

Function -- TTC and ATC Calculation

Definition

Respondent shall calculate Total Transmission Capability ("TTC") and Available Transmission Capability ("ATC") in accordance with applicable provisions of the OATT. ATC will be calculated by the bidder on a Control Area-to-Control Area basis for the Transmission Provider's Control Area interfaces. Bidder will be responsible for ensuring that ATC values are calculated on a nondiscriminatory basis.

Function -- Transmission Scheduling

Definition

Bidder shall act as the single contact for Transmission Customers scheduling transactions into, out of, or through LG&E's Control Area.

Function -- Generation Interconnection

Definition

Respondent shall process all generation interconnection requests and perform generation interconnection impact studies in a nondiscriminatory manner in accordance with the Large Generator Interconnection Process ("LGIP") and Interconnection Study Criteria. The ITO will have authority to interpret and apply the guidelines, and shall have responsibility for administration of the LGIP, including queuing of interconnection requests, completion of specified studies associated with interconnection requests, and development of the transmission system modeling process, software, and assumptions used to evaluate requests to interconnect to the Transmission System.

Function -- Administration of a Stakeholder Process

Definition

The ITO will facilitate a quarterly Stakeholder Conference of LG&E/KU transmission customers, interconnection customers, wholesale customers, affected transmission providers, and similarly qualified third parties within the LG&E/KU Control Area ("Tariff Participants"). Stakeholders, including the Transmission Provider, may submit comments and suggestions to the ITO, who will make them publicly available to all interested parties.

All Operating Procedures governing the exercise of the ITO's responsibilities are subject to comment and review in the open stakeholder process. The ITO shall coordinate regarding the Operating Procedures with LG&E/KU and other stakeholders before the ITO begins its functions.

2.1 Other RFP Requirements

All Proposals must include the following to be considered complete:

- Service providers shall describe all partnerships/arrangements included in the Proposal for subcontracting any aspect of the work.
- Service providers shall include detailed and firm pricing in Attachment F.
- Service providers shall provide a work plan and a descriptive proposal outlining their approach to providing the services set out herein, as well as any critical terms and conditions pursuant to which they will provide such services.
- All items in Sections 2 above and Sections 3 and 4 below.
- A transition plan to take over the work on or about March 1, 2006

3 Company Information and Sequence of Proposal

3.1 Proposed Solution

Provide a description of services for the proposed solution to meet LG&E's business objective as described in Section 2. Successful service providers will be working with LG&E to develop acceptable forms for all related reports, work schedules, transition plans, etc.

3.2 Conditions of Bid

In submitting a response to this RFP, respondent acknowledges and accepts the conditions for qualification set out above, and the following conditions in Attachment A, each of subparagraph of which shall be initialed by respondent

3.3 Service Provider Contact Information

In Attachment B, please provide contact information of the authorized person making this Proposal and any alternate person with like such authority whom LG&E should contact in the event of questions or clarifications.

3.4 Company Profile

Briefly complete your company profile information as listed in Attachment C and include a copy of your current insurance certificate. This material should include information demonstrating the independence of the respondent bidder. Also provide a separate Attachment C and insurance certificate for each subcontractor included in your Proposal.

3.5 Support for Minority and Women-Owned Businesses

It is LG&E policy to promote and increase participation of MBE/WBE's in its purchasing and contractual business. Maximum practicable opportunity shall be given to MBE/WBE's to participate as LG&E suppliers, but in order to achieve this goal LG&E encourages additional opportunities for MBE/WBE's by requiring participation plans from suppliers who are not MBE/WBE firms. In Attachment D, please indicate which business classification your company falls into. A description of each business classification is provided. If your firm currently or intends to use minority sub-contractors or suppliers in the performance of this work, please indicate so in the space provided on Attachment D.

3.5 Use of Union Labor

Also in Attachment D, please indicate whether your company will use union or non-union labor.

3.7 Bid Clarifications and/or Exceptions

Your Proposal shall conform to in all respects with the applicable specifications, terms and conditions referred to in this RFP and the attached proposed contract, including the General or Professional Services Agreement. Submission of a Proposal constitutes your company's commitment that it can provide the services in this RFP and acceptance of the General or Professional Services Agreement. An inability to provide an individual service(s) will not eliminate your firm from consideration. Any deviations from or exceptions to this RFP and the attached contract shall be clearly stated in your Proposal using the form titled "BID CLARIFICATIONS AND/OR EXCEPTIONS" in Attachment E. If there are not such exceptions, please state so. An award of a contract will not take place until there are executed terms and conditions between the parties. If a contract is awarded, any exceptions taken after announcing the award will not be considered.

3.8 Pricing

PRICING AND FEES SHALL BE SUMMARIZED IN ATTACHMENT F. Pricing shall be submitted on a lump sum basis for each of contract periods identified in Attachment F.

The price shall be firm for the duration of this contract. Identify assumptions made regarding LG&E's environment that would impact the cost. The bid price(s) shall include all costs to service provider, including taxes (if applicable) and profit.

Prospective contractors are invited to submit other pricing options for consideration by the evaluation committee. All final pricing agreed to in the contract will be based on an understanding of how all costs are derived.

LG&E reserves the right to accept other than the lowest priced Proposal and to accept or reject any Proposal in whole or in part, or to reject all Proposals with or without notice or reasons, and if no Proposal is accepted, to abandon the work or to have the work performed in such other manner as LG&E may elect.

Any firm doing business with LG&E will be required to meet LG&E's supplier certification requirements.

LG&E makes no guarantee or promise as to the amount of work to be performed under the proposed Contract, nor does it convey an exclusive right to the Contractor to perform work of the type or nature set forth in the proposed Contract.

3.9 Confidentiality Agreement

As part of this RFP and proposal response, all LG&E prospective contractors are required to read, agree to, sign, and return the Confidentiality Agreement, which is enclosed as part of this RFP.

4 Other Services

4.1 Additional Services

Please provide detail on any additional or unique services provided by your organization. Generic information without detail will be excluded from the analysis. Any fees associated with any extraordinary services should be clearly listed separately as an appendix to your Proposal.

Enclosure: Green Address Label.

Attachment A
CONDITIONS OF BID

In submitting a response to this RFP, respondent acknowledges and accepts the following conditions, and makes the following representations. **Please initial (blue ink) each sub-paragraph in each box below in your response.**

A-1 **Ownership of Proposals** – All Proposals in response to this RFP are to be the sole property of LG&E, Louisville, Kentucky.

A-2 **Oral Contracts** – Any alleged oral Contracts or arrangements made by a respondent with any employee of LG&E will be superceded by the written Contract.

A-3 **Amending or Canceling Request**- LG&E reserves the right to amend or cancel this RFP, at any time, if it is in the best interest of LG&E.

A-4 **Rejection for Default or Misrepresentation** – LG&E reserves the right to reject the Proposal of any supplier that is in default of any prior contract or for misrepresentation.

A-5 **Clerical Errors in Awards** – LG&E reserves the right to correct inaccurate awards resulting from its clerical errors.

A-6 **Rejection of Qualified Proposals** – Proposals are subject to rejection in whole or in part if they limit or modify any of the terms and/or specifications of the RFP.

A-7 **Presentation of Supporting Evidence** – If requested, respondent(s) shall present evidence of experience, ability and financial standing necessary to satisfactorily meet the requirements set forth in the RFP or those implied in the Proposal.

A-8 **Consistency in Submissions** – The hardcopy submission of the Proposal will prevail in the case of a discrepancy between the electronic and hardcopy version of the documents.

A-9 **Changes to Proposals** – No additions or other changes to the original Proposal will be allowed after submittal. While changes are not permitted, clarification at the request of LG&E may be required at the sole expense of the respondent.

A-10 **Collusion** – In submitting a Proposal, the respondent implicitly states that the Proposal in not made in connection with any competing respondent submitting a separate response to the RFP, and is in all respects fair and without collusion or fraud.

A-11 **Costs** – LG&E shall not be liable for any cost incurred in the preparation of this RFP.

A-12 **Subcontractors** – The use of subcontractors must be clearly identified and explained in the Proposal. The prime contractor shall be wholly responsible for the performance of the contract in its entirety whether or not subcontractors are used. Subcontractors shall be bound by the terms and conditions of this RFP. The prime contractor shall indemnify and hold LG&E harmless from any and all activities related to the services provided by the subcontractor(s) under this contract.

A-13 **Legal Compliance**- In submitting a Proposal, the respondent warrants that it is legally authorized to do business in the state of Kentucky, is in compliance with all applicable laws and regulations, is not prohibited from doing business with LG&E by law, order, regulation, or otherwise, and the person submitting the Proposal on behalf of the supplier is authorized by the supplier to bind it to the terms of the Proposal.

Attachment B
SERVICE PROVIDER INFORMATION

A. SERVICE PROVIDER'S COMPANY NAME ______________________________

B. SERVICE PROVIDER'S MAILING ADDRESS ______________________________

____

C. SERVICE PROVIDER'S PHYSICAL ADDRESS(if different from above)______________________________

____

D. PRIMARY CONTACT NAME ______________________________

E. TELEPHONE NUMBER ______________________________

F. ALTERNATE PHONE NUMBER______________________________

G. FAX NUMBER ______________________________

H. EMAIL ADDRESS ______________________________

I. RFP # ______________________________

J. DUN & BRADSTREET NUMBER ______________________________

K. TAX IDENTIFICATION NUMBER ______________________________

L. PROVIDE A CURRENT CERTIFICATE OF INSURANCE ______________

M. RECENT OR PENDING MERGERS, ACQUISITIONS OR IPO'S ______________________________

Attachment C
BUSINESS CLASSIFICATION

Identify which category(s) your company falls into (see following page for classification definitions). Attach any certificates verifying your company as a Small Business, Small Disadvantaged Business, Minority Business Enterprise (MBE), Woman-Owned Business Enterprise (WBE), Disabled-Owned Business, Veteran-Owned Business.

______ Large Business – Over 500 people or dominant in field
______ Small Business – Less than 500 people and not dominant in field
______ Small Disadvantaged Business – Less than 500 people, not dominant in field and meeting criteria on next page
______ Minority Business Enterprise
______ Woman-Owned Business Enterprise
______ Disabled Owned Business
______ Veteran Owned Business

USE OF UNION LABOR:

__________ **Non-Union Labor will be used.**

__________ **Union Labor will be used**
(List any and all local unions involved and labor contract expiration dates)

____________________ **Local No.** ____________________ **Exp. Date** ____________________

____________________ **Local No.** ____________________ **Exp. Date** ____________________

____________________ **Local No.** ____________________ **Exp. Date** ____________________

Please indicate any MBE/WBE firms which you intend to use as subcontractors or suppliers as part of your Proposal.

BUSINESS CLASSIFICATION DESCRIPTIONS

A) Small Business

Defined as a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on government contracts, and qualified as a small business under the criteria and size standards in 13 CFR Part 121 (see 19.102). Such a concern is "not dominant in its field of operation" when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

GSA (General Services Administration) Federal Acquisition Regulation (FAR) Part 19

B) Small Disadvantaged Business

Defined as a small business concern that is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business that has at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals and that has its management and daily business controlled by one or more such individuals, This term also means small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned by one of these entities, that has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and that meets the requirements of 13 CFR 124.

GSA (General Services Administration) Federal Acquisition Regulation (FAR) Part 19

C) Minority Business Enterprise

Defined as a for profit enterprise, regardless of size, physically located in the United States or its trust territories, which is owned, operated and controlled by minority group members. "Minority group members:" are U.S. citizens who are African-American, Hispanic American, Native American, Asian-Pacific American, and Asian-Indian American. "Ownership" by minority individuals means business is at least 51% owned by such individuals or, in the case of a publicly owned business, at least 51% of the stock is owned by one or more such individuals. Further, the management and daily business operations are controlled by those minority group members.

KMSDC (Kentucky Minority Supplier Development Council)

D) Woman-Owned Business

Defined as a business that is at least 51% owned by a woman or women who also control and operate it. "Control" in this context means being actively involved in the day-to-day management.

GSA (General Services Administration)

E) Large Business

Defined as more than 500 employees.

GSA (General Services Administration)

Attachment D
BID CLARIFICATIONS AND/OR EXCEPTIONS

1. Service provider offers the following clarifications and/or exceptions taken to any requirement or provision of this RFP and any proposed modifications or replacement language for each clarification or exception (If none, so state.):

Service provider understands that unless itemized above, no other clarifications or exceptions to this Request for Proposal are taken by the Service provider.

Attachment E
PRICING SUMMARIES

Please provide a summary of your pricing proposal for all services related to the delivery of your solution. Pricing shall be submitted on lump sum basis for each of the following contract length periods and include all costs to LG&E:

2 year $___________ (cost per year)

5 year $___________ (cost per year)

10 year $___________ (cost per year)

RECIPROCAL CONFIDENTIALITY AGREEMENT

This **Reciprocal Confidentiality Agreement** (this "Agreement") is entered this 10th day of August, 2005 by and among ______________________________, and **LG&E Energy Services, Inc.**, (individually, each shall be referred to herein as a "Party" and, collectively, as the "Parties") in connection with the Parties' consideration of a business alliance (the "Opportunity"). As a condition to showing, furnishing, or making available information in respect of the Opportunity to each other, the Parties, respectively, require and agree, as set forth below, to treat confidential such information, and all other information that each of the other Parties or any of its employees, officers, directors, shareholders, or legal or financial advisors (collectively, "Representatives") show, furnish or make available (collectively, the "Confidential Information").

For purposes hereof, "Confidential Information" shall also include, (i) the fact of and existence of the Parties consideration of the Opportunity, (ii) the fact of and the substance of the Parties' discussions concerning the Opportunity, and (iii) all studies, analyses, and projections of the Parties concerning the Opportunity; irrespective of whether any of the above are shown, furnished, or made available to either of the other Parties.

The Parties acknowledge that the Confidential Information is being furnished solely in connection with their consideration of the Opportunity. The Parties agree that the Confidential Information shall be treated as "secret" and "confidential," and used solely for the purpose of considering the Opportunity throughout the period commencing January 28, 2005 (the "Confidentiality Period").

During the Confidentiality Period, no portion of the Confidential Information shall be disclosed by a Party to any person or entity other than: (i) such of its affiliates, directors, officers, employees, agents, representatives, and legal and financial advisors whose knowledge and evaluation of the Confidential Information shall be reasonably necessary for a thorough investigation by such Party of the Opportunity; or (ii) to the extent a Party or such other persons or entities shall be legally compelled to make such disclosure by any court or other governmental agency or instrumentality having jurisdiction over them (in which event the Party shall provide the other Party with reasonable prior notice of such compelled disclosure so that such latter Party may, in its discretion, seek a protective order with respect to such disclosure, or waive compliance with the provisions hereof); or (iii) to such affiliates as may be directly involved in some aspect of the Opportunity; or (iv) another Party to this Agreement.

The Parties shall inform all of their affiliates, directors, officers, employees, agents, representatives, and legal and financial advisors (collectively, the "Party Representatives") of the confidentiality covenants set forth herein when showing, furnishing, or making available Confidential Information to Party Representatives. Each Party shall be responsible for the use or disclosure of any Confidential Information by any of its Party Representatives during the Confidentiality Period.

The Confidential Information shall not include any information which is in the public domain as of the date of its disclosure to a Party hereunder. For purposes of this Confidentiality Agreement, information which is in the public domain shall include, without limitation: (a) any information which is or becomes generally available to the public other than by reason of a disclosure by the applicable Party or any Party Representative in violation of this Confidentiality Agreement; (b) any information which is or was made available to a Party by a source other than one of the other Parties, provided the former Party had no reason to believe the source of such information was under a contractual obligation to such latter Party or any of its affiliates not to make such disclosure; (c)

information which was known to a Party prior to disclosure by one of the other Parties, as reasonably documented in the former Party's corporate records, or (d) any information which is or was independently acquired or developed by a Party without violating any of its covenants set forth in this Agreement.

All Confidential Information in a Party's or its Party Representatives' possession (including without limitation, all copies thereof) which is not then in the public domain shall be promptly returned or destroyed by such Party should it have no interest in the Opportunity, or should the other Party request its return in writing at any time, in which case, the Party required to return Confidential Information may destroy the same in lieu of its return.

During the Confidentiality Period, a Party shall not entice, solicit, or induce, directly or indirectly, any of another Party's officers or employees who have been involved in consideration of the Opportunity, to leave their employment in order to accept employment with such other Party hereto.

The Parties understand that none of them is hereby making any representations or warranties as to the completeness or accuracy of any Confidential Information, and that any such representations and warranties shall be made by a Party solely in one or more signed definitive agreements with respect to the Opportunity, and then subject to the provisions thereof.

The Parties agree that they, respectively, may not have an adequate remedy at law by reason of any breach by a Party or its Party Representatives of the covenants set forth in this Agreement, and that, in addition to all other remedies available at law or in equity, a Party shall be entitled to injunctive relief from any such breach. This Agreement shall be governed by the laws of the Commonwealth of Kentucky, exclusive of the conflicts of law rules of that state.

It is understood and agreed that this Agreement creates no obligation to enter into any Opportunity or any agreement relating to an Opportunity, and that no contract or agreement providing for any Opportunity shall be deemed to exist unless and until a final definitive agreement has been executed and delivered.

WITNESS the signatures of the authorized representatives of each of the undersigned as of the date first written above.

LG&E Energy Services Inc.	______________________ **Entity Name**
By:______________________	By: ______________________
Name (Print):________________	Name (Print): ________________
Title: ______________________	Title: ______________________

IMPORTANT NOTICE TO

SERVICE PROVIDER
It is imperative that this label be posted on the envelope or box submitting your quotation.

CONFIDENTIAL
SEALED BID
DO NOT OPEN
RFQ: 3045

Closing Date: Septmeber 8, 2005
From: ________________

TO: TONY MOIR
CORPORATE PURCHASING
LG&E ENERGY SERVICES INC.
820 WEST BROADWAY
LOUISVILLE KY 40202

Form SD 768 Rev. 4/97

INDEPENDENT TRANSMISSION ORGANIZATION AGREEMENT

BETWEEN

LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY

AND

SOUTHWEST POWER POOL, INC.

TABLE OF CONTENTS

Sections:

Section 1 - Scope of Functions; Standards of Performance.....2

1.1 Functions.....2

1.2 Coordination with Reliability Coordinator.....2

1.3 Expansion.....2

1.4 ITO Performance.....2

1.5 LG&E/KU Performance.....2

Section 2 - Independence.....2

2.1 Key Personnel.....2

2.2 Standards of Conduct Treatment.....3

Section 3 - Compensation, Billing and Payment.....3

Section 4 - Effective Date; Term; Termination; Termination Fees; Transition Assistance Services.....3

4.1 Effective Date; Term.....3

4.2 Mutually-Agreed Termination.....3

4.3 Termination at End of Term.....3

4.4 Termination for Cause.....4

4.4.1 Termination by Either Party.....4

(a) Material Failure or Default.....4
(b) Pattern of Failure.....4
(c) Gross Negligence, Willful Misconduct or Fraud.....4
(d) Material Misrepresentation.....4
(e) Bankruptcy.....4.
(f) Dissolution.....4

4.4.2 Termination by LG&E/KU.....4

4.5 FERC Approval........5

4.6 Return of Materials........5

4.7 Survival........5

4.8 Transition Assistance Services........5

4.8.1 Transition Assistance Period........5

4.8.2 Transition Assistance Services........5

4.8.3 Key Personnel........5

Section 5 - Data Management........5

5.1 Supply of Data........5

5.2 Property of Each Party........6

5.3 Data Integrity........6

5.4 Confidentiality........6

Section 6 - Intellectual Property........6

6.1 Pre-Existing Intellectual Property........6

6.1.1 Exclusion........6

6.2 Jointly-Owned Intellectual Property........6

6.3 ITO Retained Rights........7

6.4 LG&E/KU Retained Rights........7

6.5 ITO Non-Infringement; Indemnification........7

6.6 LG&E/KU Non-Infringement; Indemnification........8

Section 7 - Indemnification........9

7.1 Indemnification by the Parties........9

7.2 No Consequential Damages........9

7.3 Cooperation Regarding Claims....9

Section 8 - Contract Managers; Dispute Resolution....10

8.1 LG&E/KU Contact Manager....10

8.2 ITO Contract Manager....10

8.3 Resolution of Disputes....10

8.3.1 Notice of Dispute....10

8.3.2 Dispute Resolution by Contract Managers....10

8.3.3 Dispute Resolution by Executive Management Representatives....10

8.3.4 Exercise of Remedies at Law or in Equity....10

8.4 Rights Under FPA Unaffected....11

8.5 Statute of Limitations; Continued Performance....11

Section 9 - Insurance....11

9.1 Requirements....11

9.2 Insurance Matters....11

9.3 Compliance....11

Section 10 - Confidentiality....12

10.1 Definition of Confidential Information....12

10.2 Protection of Confidential Information....12

Section 11 - Force Majeure....12

Section 12 - Reporting; Audit....13

12.1 Reporting....13

12.2 Books and Records....13

12.3 Regulatory Compliance....14

Section 13 - Independent Contractor 15

Section 14 - Taxes 15

Section 15 - Notices 15

15.1 Notices 15

15.2 Changes 16

Section 16 - Key Personnel 16

16.1 Key Personnel; Work Conditions 16

16.2 Conduct of Key Personnel and Reporting 16

16.3 Personnel Screening 16

16.4 Security 17

Section 17 - Miscellaneous Provisions 17

17.1 Governing Law 17

17.2 Consent to Jurisdiction 17

17.3 Amendment 17

17.4 Assignment 17

17.5 No Third Party Beneficiaries 17

17.6 Waivers 18

17.7 Severability; Renegotiation 18

17.8 Representations and Warranties 18

17.8.1 Organization 18

17.8.2 Authority 18

17.8.3 Binding Effect 18

17.8.4 Regulatory Approval 18

17.8.5 No Limitation....................19

17.8.6 No Violation or Breach....................19

17.9 Further Assurances....................19

17.10 Entire Agreement....................19

17.11 Good Faith Efforts....................19

17.12 Time of the Essence....................19

17.13 Interpretation....................19

17.14 Joint Effort....................20

17.15 Counterparts....................20

Attachment A - Description of the Functions

Attachment B - List of Key Personnel

INDEPENDENT TRANSMISSION ORGANIZATION AGREEMENT

This Independent Transmission Organization Agreement (this "Agreement") is entered into this ___th day of September, 2005, between Louisville Gas and Electric Company and Kentucky Utilities Company, corporations organized pursuant to the laws of the State of Kentucky (collectively, "LG&E/KU"), and Southwest Power Pool, Inc., an entity organized pursuant to the laws of the State of Arkansas (the "ITO"). LG&E/KU and the ITO may sometimes be individually referred to herein as a "Party" and collectively as the "Parties."

WHEREAS, LG&E/KU owns, among other things, an integrated electric transmission system ("Transmission System"), over which the Midwest Independent Transmission System Operator Inc. ("Midwest ISO") currently provides open access transmission service to customers in the LG&E/KU Control Area (as defined in the LGE&E/KU Open Access Transmission Tariff ("the OATT"));

WHEREAS, as part of LG&E/KU's proposal to withdraw its participation in the Midwest ISO, LG&E/KU desires to provide non-discriminatory open access transmission service pursuant to the OATT;

WHEREAS, LG&E/KU desires to have the ITO perform certain key transmission-related functions under the OATT as set forth herein;

WHEREAS, LG&E/KU will remain the owner of its Transmission System and will bear the ultimate responsibility for the provision of transmission services to Eligible Customers (as defined in the OATT), including the sole authority to amend the OATT;

WHEREAS, the ITO: (i) is a FERC-approved regional transmission organization; (ii) is independent from LG&E/KU; (iii) possesses the necessary competence and experience to perform the functions provided for hereunder; and (iv) is willing to perform such functions under the terms and conditions agreed upon by the Parties as set forth in this Agreement; and

WHEREAS, as part of LG&E/KU's goal to maintain the requisite level of independence in the operation of its Transmission System to prevent any exercise of transmission market power, on September __, 2005, LG&E/KU entered into a Reliability Coordinator Agreement (the "Reliability Coordinator Agreement") with the Tennessee Valley Authority, a NERC-certified reliability coordinator (the "Reliability Coordinator"), pursuant to which the Reliability Coordinator will provide to LG&E/KU certain required reliability functions, including security coordination, transmission planning and regional coordination, identifying and mandating upgrades required to maintain reliability, non-binding recommendations relating to economic transmission system upgrades, and administration of any seams agreements to be entered by LG&E/KU;

NOW THEREFORE, in consideration of the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

Section 1 - Scope of Functions; Standards of Performance.

1.1 Functions. The ITO shall perform the functions described in Attachment A (the "Functions") during the Term in accordance with the terms and conditions of this Agreement.

1.2 Coordination with Reliability Coordinator. In conjunction with its performance of the Functions, the ITO shall coordinate and cooperate with the Reliability Coordinator and provide, subject to the terms and conditions of this Agreement, including the ITO's obligations with respect to Confidential Information in Section 10, any information that the Reliability Coordinator may reasonably request in order to carry out its functions under the Reliability Coordinator Agreement.

1.3 Expansion. Nothing in this Agreement is intended to prevent the ITO from entering into other agreements with one or more third party transmission providers or operators to perform functions for such transmission providers or operators that are the same or similar to the Functions performed hereunder; provided, however, that the ITO does not breach any of its obligations under this Agreement (including its obligations with respect to Confidential Information in Section 10) by entering into or performing any of its obligations under such other agreements; provided, further, that any such other agreements shall provide for LG&E/KU to be reimbursed in an equitable manner for any capital expenditures made pursuant to this Agreement as well as for LG&E/KU's ongoing operations and maintenance expenditures to the extent such capital expenditures and operations and maintenance expenditures are used by the ITO in performing functions under such other agreements.

1.4 ITO Performance. The ITO shall perform its obligations (including the Functions) under this Agreement in accordance with (a) Good Utility Practice (as defined in the OATT), (b) LG&E/KU's specific requirements and operating guidelines (to the extent these are not inconsistent with other requirements specified in this Section 1.4),] (c) the OATT, and (d) all applicable laws and the requirements of federal and state regulatory authorities.

1.5 LG&E/KU Performance. LG&E/KU shall perform its obligations under this Agreement in accordance with Good Utility Practice.

Section 2 - Independence.

2.1 Key Personnel. All Functions shall be performed by employees of the ITO identified in Attachment B (the "Key Personnel"). No Key Personnel shall also be employed by LG&E/KU or any of its Affiliates (as defined in 18 C.F.R. § 35.34(b)(3) of FERC's regulations). The ITO and the Key Personnel shall be, and shall remain throughout the Term, Independent (as defined below) of LG&E/KU, its Affiliates and any Tariff Participant (as defined below). For purposes of this Agreement: (a) "Independent" shall mean that the ITO and the Key Personnel are not subject to the control of LG&E/KU, its Affiliates or any Tariff Participant, and have full decision-making authority to perform all Functions in accordance with the provisions of this Agreement. Any Key Personnel owning securities in LG&E/KU, its Affiliates or any Tariff Participant shall divest such securities within six (6) months of first being assigned to perform

such Functions, provided that nothing in this Section 2.1 shall be interpreted or construed to preclude any such Key Personnel from indirectly owning securities issued by LG&E/KU, its Affiliates or any Tariff Participant through a mutual fund or similar arrangement (other than a fund or arrangement specifically targeted toward the electric industry or the electric utility industry or any segment thereof) under which the Key Personnel does not control the purchase or sale of such securities. Participation by any Key Personnel in a pension plan of LG&E/KU, its Affiliates or any Tariff Participant shall not be deemed to be a direct financial interest if the plan is a defined-benefit plan that does not involve the Key Personnel's ownership of the securities; (b) "Tariff Participant" shall mean LG&E/KU Transmission System customers, interconnection customers, wholesale customers, affected transmission providers, any Market Participant (as defined in 18 C.F.R. § 35.34(a)(2) of FERC's regulations) and similarly qualified third parties within the LG&E/KU Control Area.

2.2 Standards of Conduct Treatment. All Key Personnel shall be treated, for purposes of the FERC's Standards of Conduct, as transmission employees. All restrictions relating to information sharing and other relationships between merchant employees and transmission employees shall apply to the Key Personnel.

Section 3 - Compensation, Billing and Payment.

[COMPENSATION, BILLING AND PAYMENT PROVISIONS WILL BE NEGOTIATED WITH THE ITO]

Section 4 - Effective Date; Term; Termination; Termination Fees; Transition Assistance Services.

4.1 Effective Date; Term. This Agreement shall become effective on the date (the "Effective Date") which is thirty (30) days after FERC's acceptance of this Agreement and shall continue for an initial term of four (4) years from the Effective Date (the "Initial Term"). After the conclusion of the Initial Term, this Agreement shall automatically continue for successive additional one-year terms (each, a "Subsequent Term") unless and until terminated pursuant to the termination provisions hereof. The Initial Term and any Subsequent Terms, together with the Transition Assistance Period, if any, shall collectively be referred to as the "Term."

4.2 Mutually-Agreed Termination. Subject to Section 4.5, this Agreement may be terminated by mutual agreement of the Parties at any time during the Term (other than any Transition Assistance Period).

4.3 Termination at End of Term. Subject to Section 4.5, either Party may terminate this Agreement at the end of the Initial Term or any Subsequent Term upon six (6) months prior written notice to the other Party.

4.4 Termination for Cause.

4.4.1 Termination by Either Party. Subject to Section 4.5, either Party may terminate this Agreement effective immediately upon prior written notice thereof to the other Party if:

(a) Material Failure or Default. The other Party fails, in any material respect, to comply with, observe or perform, or defaults, in any material respect, in the performance of the terms and conditions of this Agreement, and such failure or default remains uncured for thirty (30) days after notice thereof, provided that such failure or default is susceptible to cure and the other Party is exercising reasonable diligence to cure such failure or default;

(b) Pattern of Failure. It determines, in its sole discretion, that there has been a pattern of failure by the other Party to comply with the standards of performance required under this Agreement;

(c) Gross Negligence, Willful Misconduct or Fraud. The other Party commits gross negligence, willful misconduct or fraud in the performance of its obligations under this Agreement;

(d) Material Misrepresentation. Any representation made by the other Party hereunder shall be false or incorrect in any material respect when made and such misrepresentation is not cured within thirty (30) days of such discovery or is incapable of cure;

(e) Bankruptcy. The other Party: (i) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it; (ii) makes an assignment or any general arrangement for the benefit of creditors; (iii) otherwise becomes bankrupt or insolvent (however evidenced); (iv) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets; or (v) is generally unable to pay its debts as they fall due; or

(f) Dissolution. The other Party dissolves or is dissolved or its legal existence is otherwise terminated.

4.4.2 Termination by LG&E/KU. Subject to Section 4.5, LG&E/KU may terminate this Agreement effective immediately upon prior written notice thereof to the ITO if FERC determines that the ITO is not Independent.

4.5 FERC Approval. No termination of this Agreement shall be effective until approved by FERC.

4.6 Return of Materials. Upon any termination of this Agreement or the conclusion of any Transition Assistance Period pursuant to Section 4.8.1, whichever is later, the ITO shall

timely and orderly turn over to LG&E/KU all materials that were prepared or developed prior thereto pursuant to this Agreement, and return or destroy, at the option of LG&E/KU, all Data and other information supplied by LG&E/KU to the ITO or created by the ITO on behalf of LG&E/KU.

4.7 Survival. All provisions of this Agreement which are by their nature or terms intended to survive the termination of this Agreement, including the obligations set forth in Section 7 and Section 10, shall survive termination of this Agreement.

4.8 Transition Assistance Services.

4.8.1 Transition Assistance Period. Commencing on the date this Agreement is terminated and continuing for up to six (6) months thereafter (the "Transition Assistance Period"), the ITO shall (a) provide the Functions (and any replacements thereof or substitutions therefor), to the extent LG&E/KU requests such Functions to be performed during the Transition Assistance Period, and (b) cooperate with LG&E/KU in the transfer of the Functions (collectively, the "Transition Assistance Services").

4.8.2 Transition Assistance Services. The ITO shall, upon LG&E/KU's request, provide the Transition Assistance Services during the Transition Assistance Period at the ITO's actual cost for such services. The quality and level of performance of the Functions by the ITO during the Transition Assistance Period shall not be degraded. After the expiration of the Transition Assistance Period, the ITO shall answer questions from LG&E/KU regarding the Functions on an "as needed" basis at the ITO's then-standard billing rates.

4.8.3 Key Personnel. During the Transition Assistance Period, the ITO shall not terminate, reassign or otherwise remove any Key Personnel without providing LG&E/KU thirty (30) days' prior notice of such termination, reassignment or removal unless such employee (a) voluntarily resigns from the ITO, (b) is dismissed by the ITO for cause, or (c) dies or is unable to work due to his or her disability.

Section 5 - Data Management.

5.1 Supply of Data. During the Term, LG&E/KU shall supply to the ITO, and/or grant the ITO access to all Data that the ITO reasonably requires to perform the Functions. The Parties shall agree upon the initial format and manner in which such Data shall be provided. For purposes of this Agreement, "Data" means all information, text, drawings, diagrams, images or sounds which are embodied in any electronic or tangible medium and which (a) are supplied or in respect of which access is granted to the ITO by LG&E/KU under this Agreement, which shall be LG&E/KU's Data, (b) are prepared, stored or transmitted by the ITO solely on behalf of LG&E/KU, which shall be LG&E/KU's Data; or (c) are compiled by the ITO by aggregating Data owned by LG&E/KU and Data owned by third parties, which shall be ITO's Data.

5.2 Property of Each Party. Each Party acknowledges that the other Party's Data and the other Party's software, base data models and operating procedures for software or base data

models ("Processes") are the property of such other Party and agrees that it will do nothing inconsistent with such ownership, including preserving all intellectual property and/or proprietary rights in such other Party's Data and Processes as provided in Section 6.

5.3 Data Integrity. Each Party shall reasonably assist the other Party in establishing measures to preserve the integrity and prevent any corruption or loss of Data, and the Parties shall reasonably assist each other in the recovery of any corrupted or lost Data. Each Party shall retain and preserve any of the other Party's Data that are supplied to it during the Term, and shall exercise commercially reasonable efforts to preserve the integrity of the other Party's Data that are supplied to it during the Term, in order to prevent any corruption or loss of the other Party's Data.

5.4 Confidentiality. Each Party's Data shall be treated as Confidential Information in accordance with the provisions of Section 10.

Section 6 - Intellectual Property.

6.1 Pre-Existing Intellectual Property. Each Party shall own (and continue to own) all trade secrets, Processes and designs and other intellectual property that it owned prior to entering this Agreement, including any enhancements thereto ("Pre-Existing Intellectual Property"). Each Party acknowledges the ownership of the other Party's Pre-Existing Intellectual Property and agrees that it will do nothing inconsistent with such ownership. Each Party agrees that nothing in this Agreement shall give it any right, title or interest in the other Party's Pre-Existing Intellectual Property, other than the rights set forth in this Agreement. The ITO's Pre-Existing Intellectual Property shall include the ITO Retained Rights set forth in Section 6.3. LG&E/KU's Pre-Existing Intellectual Property shall include LG&E/KU Retained Rights set forth in Section 6.4.

6.1.1 Exclusion. Nothing in this Agreement shall prevent either Party from using general techniques, ideas, concepts and know-how gained by its employees during the performance of its obligations under this Agreement in the furtherance of its normal business, to the extent that it does not result in disclosure of the other Party's Data or any data generated from the other Party's Data or other Confidential Information or an infringement by LG&E/KU or the ITO of any intellectual property right. For the avoidance of doubt, the use by a Party of such general techniques, ideas, concepts and know-how gained by its employees during the performance of its obligations under this Agreement shall not be deemed to be an infringement of the other Party's intellectual property rights so long as such matters are retained in the unaided memories of such employees and any Confidential Information is treated in accordance with the provisions of Section 10.

6.2 Jointly-Owned Intellectual Property. Except for the Data described in Section 5.1, all deliverables, whether software or otherwise, to the extent originated and prepared by the ITO exclusively in connection with the performance of its obligations under this Agreement shall be, upon payment of all amounts that may be due from LG&E/KU to the ITO, jointly owned by LG&E/KU and ITO ("Jointly-Owned Intellectual Property"). Each Party shall have the right to

use the Jointly-Owned Intellectual Property without any right or duty or accounting to the other Party, except as provided in this Section 6.2. Upon the ITO using, transferring or licensing Jointly-Owned Intellectual Property for or to a third party, the ITO shall reimburse LG&E/KU in an equitable manner as determined by the Parties in good faith for the actual amounts paid by LG&E/KU to the ITO that relate to such Jointly-Owned Intellectual Property. Except as stated in the foregoing sentence, the ITO shall have no other obligation to account to LG&E/KU for any such use, transfer, license, disclosure, copying, modifying or enhancing of the Jointly-Owned Intellectual Property. Notwithstanding anything herein to the contrary, LG&E/KU may use the Jointly-Owned Intellectual Property for its internal business purposes, including licensing or transferring its interests therein to a third party for purposes of operating or performing functions in connection with LG&E/KU's transmission business.

6.3 ITO Retained Rights. The ITO shall retain all right, title and interest in its proprietary know-how, concepts, techniques, processes, materials and information that were or are developed entirely independently of this Agreement ("ITO Retained Rights"), whether or not such ITO Retained Rights are embodied in a deliverable, whether software or otherwise originated and prepared by the ITO in connection with the performance of its obligations under this Agreement. With respect to the ITO Retained Rights embodied in any deliverable, whether software or otherwise originated and prepared by the ITO in connection with the performance of its obligations under this Agreement, LG&E/KU is hereby granted a nonexclusive, perpetual, worldwide, royalty-free, fully paid-up license under such ITO Retained Rights to use such deliverable for LG&E/KU's internal business purposes only, including licensing or transferring its interests therein to an Affiliate of LG&E/KU or a third party for purposes of operating or performing functions in connection with LG&E/KU's transmission business.

6.4 LG&E/KU Retained Rights. LG&E/KU shall retain all right, title and interest in its proprietary know-how, concepts, techniques, processes, materials and information that were or are developed entirely independently of this Agreement ("LG&E/KU Retained Rights"), whether or not such LG&E/KU Retained Rights are embodied in a deliverable, whether software or otherwise originated and prepared by LG&E/KU in connection with the performance of its obligations under this Agreement. With respect to LG&E/KU Retained Rights embodied in any software or otherwise originated and prepared by LG&E/KU in connection with the performance of its obligations under this Agreement, the ITO is hereby granted a nonexclusive, worldwide, royalty-free, fully paid-up license under such LG&E/KU Retained Rights to use such deliverable for the ITO's performance of its obligations under this Agreement only; provided that LG&E/KU shall not be liable in any way for the use of or reliance on such ITO Retained Rights by the ITO's Affiliate or third party for any purpose whatsoever.

6.5 ITO Non-Infringement; Indemnification. The ITO warrants to LG&E/KU that all ITO's Data and Processes, ITO Pre-Existing Intellectual Property, ITO Retained Rights, and deliverables prepared, produced or first developed by the ITO in connection with the performance of its obligations under this Agreement shall not infringe on any third party patent, copyright, trade secret or other third party proprietary rights. The ITO shall defend, hold harmless and indemnify LG&E/KU and its Affiliates and their respective employees, officers, directors, principals, owners, partners, shareholders, agents, representatives, consultants and subcontractors (collectively, "LG&E/KU Representatives") from and against all claims, lawsuits,

penalties, awards, judgments, court arbitration costs, attorneys' fees, and other reasonable out-of-pocket costs incurred in connection with such claims or lawsuits based upon the actual or alleged infringement of any of the foregoing rights; provided that LG&E/KU gives prompt written notice of any such claim or action to the ITO, permits the ITO to control the defense of any such claim or action with counsel of its choice, and cooperates with the ITO in the defense thereof; and further provided that such claim or action is not based on any alteration, modification or combination of the deliverable with any item, information or process not provided by the ITO, where there would be no infringement in the absence of such alteration, modification or combination. If any infringement action results in a final injunction against LG&E/KU or the LG&E/KU Representatives with respect to ITO's Data and Processes, ITO Pre-Existing Intellectual Property, ITO Retained Rights or deliverables prepared, produced or first developed by the ITO in connection with the performance of its obligations under this Agreement or in the event the use of such matters or any part thereof, is, in such lawsuit, held to constitute infringement, the ITO agrees that it shall, at its option and sole expense, either (a) procure for LG&E/KU or the LG&E/KU Representatives the right to continue using the infringing matter, or (b) replace the infringing matter with non-infringing items of equivalent functionality or modify the same so that it becomes non-infringing and retains its full functionality. If the ITO is unable to accomplish (a) or (b) above, the ITO shall reimburse LG&E/KU for all costs and fees paid by LG&E/KU to the ITO for the infringing matter. The above constitutes the ITO's complete liability for claims of infringement relating to any of the ITO's Data and Processes, ITO Pre-Existing Intellectual Property, ITO Retained Rights and deliverables prepared, produced or first developed by the ITO in connection with the performance of its obligations under this Agreement.

6.6 LG&E/KU Non-Infringement; Indemnification. LG&E/KU warrants to the ITO that, to its knowledge, all LG&E/KU's Data (except for Data created by the ITO on behalf of LG&E/KU) and Processes, LG&E/KU Pre-Existing Intellectual Property, and LG&E/KU Retained Rights shall not infringe on any third party patent, copyright, trade secret or other third party proprietary rights. LG&E/KU shall defend, hold harmless and indemnify the ITO and its Affiliates and their respective employees, officers, directors, principals, owners, partners, shareholders, agents, representatives, consultants and subcontractors against all claims, lawsuits, penalties, awards, judgments, court costs, and arbitration costs, attorneys' fees, and other reasonable out-of-pocket costs incurred in connection with such claims or lawsuits based upon the actual or alleged infringement of any of the foregoing rights; provided that the ITO gives prompt written notice of any such claim or action to LG&E/KU, permits LG&E/KU to control the defense of any such claim or action with counsel of its choice, and cooperates with LG&E/KU in the defense thereof; and further provided that such claim or action is not based on any alteration, modification or combination of the deliverable with any item, information or process not provided by LG&E/KU to the ITO, where there would be no infringement in the absence of such alteration, modification or combination. The above constitutes LG&E/KU's complete liability for claims of infringement relating to any of the LG&E/KU's Data and Processes, LG&E/KU Pre-Existing Intellectual Property and LG&E/KU Retained Rights.

Section 7 - Indemnification.

7.1 Indemnification by the Parties. Each Party ("Indemnifying Party") shall indemnify, release, defend, reimburse and hold harmless the other Party and its Affiliates, and their respective directors, officers, employees, principals, representatives and agents (collectively, the "Indemnified Parties") from and against any and all claims, demands, liabilities, losses, causes of action, awards, fines, penalties, litigation, administrative proceedings and investigations, costs and expenses, and attorney fees (each, an "Indemnifiable Loss") asserted against or incurred by any of the Indemnified Parties arising out of, resulting from or based upon (a) a breach by the Indemnifying Party of its obligations under this Agreement, (b) the acts or omissions of the Indemnifying Party and its Affiliates and their respective directors, officers, employees, principals, representatives, agents or contractors during the Term, or (c) claims of bodily injury or death of any person or damage to real and/or tangible personal property caused by the negligence or willful misconduct of the Indemnifying Party and its Affiliates and their respective directors, officers, employees, principals, representatives, agents or contractors during the Term.

7.2 No Consequential Damages. Neither Party shall be liable to the other Party for, nor will the measure of damages include, any indirect, incidental, exemplary, punitive, special or consequential damages.

7.3 Cooperation Regarding Claims. If an Indemnified Party receives notice or has knowledge of any Indemnifiable Loss that may result in a claim for indemnification by such Indemnified Party against an Indemnifying Party pursuant to this Section 7, such Indemnified Party shall as promptly as possible give the Indemnifying Party notice of such Indemnifiable Loss, including a reasonably detailed description of the facts and circumstances relating to such Indemnifiable Loss, a complete copy of all notices, pleadings and other papers related thereto, and in reasonable detail the basis for its claim for indemnification with respect thereto. Failure to promptly give such notice or to provide such information and documents shall not relieve the Indemnifying Party from the obligation hereunder to respond to or defend the Indemnified Party against such Indemnifiable Loss unless such failure shall materially diminish the ability of the Indemnifying Party to respond to or to defend the Indemnified Party against such Indemnifiable Loss. The Indemnifying Party, upon its acknowledgment in writing of its obligation to indemnify the Indemnified Party in accordance with this Section 7, shall be entitled to assume the defense or to represent the interest of the Indemnified Party with respect to such Indemnifiable Loss, which shall include the right to select and direct legal counsel and other consultants, appear in proceedings on behalf of such Indemnified Party and to propose, accept or reject offers of settlement, all at its sole cost. If and to the extent that any such settlement is reasonably likely to involve injunctive, equitable or prospective relief or materially and adversely affect the Indemnified Party's business or operations other than as a result of money damages or other money payments, then such settlement will be subject to the reasonable approval of the Indemnified Party. Nothing herein shall prevent an Indemnified Party from retaining its own legal counsel and other consultants and participating in its own defense at its own cost and expense.

Section 8 - Contract Managers; Dispute Resolution.

8.1 LG&E/KU Contract Manager. LG&E/KU shall appoint an individual (the "LG&E/KU Contract Manager") who shall serve as the primary LG&E/KU representative under this Agreement. The LG&E/KU Contract Manager shall (a) have overall responsibility for managing and coordinating the performance of LG&E/KU's obligations under this Agreement, and (b) be authorized to act for and on behalf of LG&E/KU with respect to all matters relating to this Agreement. Notwithstanding the foregoing, the LG&E/KU Contract Manager may, upon notice to the ITO, delegate such of his or her responsibilities to other LG&E/KU employees, as the LG&E/KU Contract Manager deems appropriate.

8.2 ITO Contract Manager. The ITO shall appoint, among the Key Personnel identified in Attachment B, an individual (the "ITO Contract Manager") who shall serve as the primary ITO representative under this Agreement. The ITO Contract Manager shall (a) have overall responsibility for managing and coordinating the performance of ITO obligations under this Agreement, and (b) be authorized to act for and on behalf of the ITO with respect to all matters relating to this Agreement. Notwithstanding the foregoing, the ITO Contract Manager may, upon notice to LG&E/KU, delegate such of his or her responsibilities to other Key Personnel, as the ITO Contract Manager deems appropriate.

8.3 Resolution of Disputes. Any dispute, claim or controversy between the Parties arising out of or relating to this Agreement (each, a "Dispute") shall be resolved in accordance with the procedures set forth in this Section 8.3; provided, however, that this Section 8.3 shall not apply to Disputes arising from or relating to confidentiality or intellectual property rights (in which case either Party shall be free to seek available legal or equitable remedies).

8.3.1 Notice of Dispute. Each Party shall provide written notice to the other party of any Dispute, including a description of the nature of the Dispute.

8.3.2 Dispute Resolution by Contract Managers. Any Dispute shall first be referred to the LG&E/KU Contract Manager and the ITO Contract Manager, who shall negotiate in good faith to resolve the Dispute.

8.3.3 Dispute Resolution by Executive Management Representatives. If the Dispute is not resolved within fifteen (15) days of being referred to the LG&E/KU Contract Manager and the ITO Contract Manager pursuant to Section 8.3.2, then each Party shall have five (5) days to appoint an executive management representative who shall negotiate in good faith to resolve the Dispute.

8.3.4 Exercise of Remedies at Law or in Equity. If the Parties' executive management representatives are unable to resolve the Dispute within thirty (30) days of their appointment, then each Party shall be free to pursue any remedies available to it and to take any action in law or equity that it believes necessary or convenient in order to enforce its rights or cause to be fulfilled any of the obligations or agreements of the other Party.

8.4 Rights Under FPA Unaffected. Nothing in this Agreement is intended to limit or abridge any rights that LG&E/KU may have to file or make application before FERC under Section 205 of the Federal Power Act to revise any rates, terms or conditions of the OATT.

8.5 Statute of Limitations; Continued Performance. The Parties agree to waive the applicable statute of limitations during the period of time that the Parties are seeking to resolve a Dispute pursuant to Sections 8.3.2 and 8.3.3, and the statute of limitations shall be tolled for such period. The Parties shall continue to perform their obligations under this Agreement during the resolution of a Dispute.

Section 9 - Insurance.

9.1 Requirements. The ITO shall provide and maintain during the Term insurance coverage in the form and with minimum limits of liability as specified below, unless otherwise agreed to by the Parties.

9.1.1 Worker's compensation insurance with statutory limits, and employer's liability insurance with limits of not less than $1,000,000.

9.1.2 Commercial general liability or equivalent insurance with a combined single limit of not less than $10,000,000 per occurrence. Such insurance shall include products/completed operations liability, owners protective, blanket contractual liability, personal injury liability and broad form property damage.

9.1.3 Comprehensive automobile liability insurance with a combined single limit of not less than $2,000,000 per occurrence. Such insurance shall include coverage for owned, hired and non-owned automobiles, and contractual liability.

9.1.4 Errors & Omissions Insurance in the amount of $5,000,000.

9.2 Insurance Matters. All insurance coverages required pursuant to Section 9.1 shall (a) be provided by insurance companies that have a Best Rating of A or higher, (b) provide that LG&E/KU is an additional insured (other than the workers' compensation insurance), (c) provide that LG&E/KU will receive at least thirty (30) days written notice from the insurer prior to the cancellation or termination of or any material change in any such insurance coverages, and (d) include waivers of any right of subrogation of the insurers thereunder against LG&E/KU. Certificates of insurance evidencing that the insurance required by Section 9.1 is in force shall be delivered by the ITO to LG&E/KU prior to the Effective Date.

9.3 Compliance. The ITO shall not commence performance of any Functions until all of the insurance required pursuant to Section 9.1 is in force, and the necessary documents have been received by LG&E/KU pursuant to Section 9.2. Compliance with the insurance provisions in Section 9 is expressly made a condition precedent to the obligation of LG&E/KU to make payment for any Functions performed by the ITO under this Agreement. The minimum insurance requirements set forth above shall not vary, limit or waive the ITO's legal or contractual responsibilities or liabilities under this Agreement.

Section 10 - Confidentiality.

10.1 Definition of Confidential Information. For purposes of this Agreement, "Confidential Information" shall mean, in respect of each Party, all information and documentation of such Party, whether disclosed to or accessed by the other Party in connection with this Agreement; provided, however, that the term "Confidential information" shall not include information that: (a) is independently developed by the recipient, as demonstrated by the recipient's written records, without violating the disclosing Party's proprietary rights; (b) is or becomes publicly known (other than through unauthorized disclosure); (c) is disclosed by the owner of such information to a third party free of any obligation of confidentiality; (d) is already known by the recipient at the time of disclosure, as demonstrated by the recipient's written records, and the recipient has no obligation of confidentiality other than pursuant to this Agreement or any confidentiality agreements between the Parties entered into before the Effective Date; or (e) is rightfully received by a Party free of any obligation of confidentiality.

10.2 Protection of Confidential Information. All Confidential Information shall be held in confidence by the recipient to the same extent and in at least the same manner as the recipient protects its own confidential information, and such Confidential Information shall be used only for purposes of performing obligations under this Agreement. Neither Party shall disclose, publish, release, transfer or otherwise make available Confidential Information of, or obtained from, the other Party in any form to, or for the use or benefit of, any person or entity without the disclosing Party's prior written consent. Each Party shall be permitted to disclose relevant aspects of the other Party's Confidential Information to its officers, directors, agents, professional advisors, contractors, subcontractors and employees and to the officers, directors, agents, professional advisors, contractors, subcontractors and employees of its Affiliates, to the extent that such disclosure is reasonably necessary for the performance of its duties and obligations or the determination, preservation or exercise of its rights and remedies under this Agreement; provided, however, that the recipient shall take all reasonable measures to ensure that Confidential Information of the disclosing Party is not disclosed or duplicated in contravention of the provisions of this Agreement by such officers, directors, agents, professional advisors, contractors, subcontractors and employees. The obligations in this Section 10 shall not restrict any disclosure pursuant to any local, state or federal governmental agency or authority if such release is necessary to comply with valid laws, governmental regulations or final orders of regulatory bodies or courts; provided that the recipient shall give prompt notice to the disclosing Party in reasonable time to exercise whatever legal rights the disclosing Party may have to prevent or limit such disclosure. Further, the recipient shall cooperate with the disclosing Party in preventing or limiting such disclosure.

Section 11 - Force Majeure.

11.1 Neither Party shall be liable to the other Party for any failure or delay of performance hereunder due to causes beyond such Party's reasonable control, which by the exercise of reasonable due diligence such Party is unable, in whole or in part, to prevent or overcome (a "Force Majeure"), including acts of God, act of the public enemy, fire, explosion, vandalism, cable cut, storm or other catastrophes, weather impediments, national emergency,

insurrections, riots, wars or any law, order, regulation, direction, action or request of any government or authority or instrumentality thereof. Neither Party shall be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure, except for the obligation to pay any amount when due, provided that the affected Party:

11.1.1 gives notice to the other Party of the event or circumstance giving rise to the event of Force Majeure;

11.1.2 affords the other Party reasonable access to information about the event or circumstances giving rise to the event of Force Majeure;

11.1.3 takes commercially reasonable steps to restore its ability to perform its obligations hereunder as soon as reasonably practicable, provided that the affected Party shall not be obligated to take any steps that are not otherwise in accordance with Good Utility Practice; and

11.1.4 exercises commercially reasonable efforts to perform its obligations hereunder.

Section 12 - Reporting; Audit.

12.1 Reporting. The ITO shall make regular reports to FERC and LG&E/KU's retail regulators as may be required by applicable law and regulations or as may be requested by such authorities.

12.2 Books and Records. The ITO shall maintain full and accurate books and records pertinent to this Agreement, and the ITO shall maintain such books and records for three (3) years following the expiration or early termination of this Agreement or longer if necessary to resolve a pending Dispute. LG&E/KU will have the right, at reasonable times and under reasonable conditions, to inspect and audit, or have an independent third party inspect and audit, the ITO's operations and books to (a) ensure compliance with this Agreement, (b) verify any cost claims or other amounts due hereunder, and (c) validate the ITO's internal controls with respect to the performance of the Functions. The ITO shall maintain an audit trail, including all original transaction records, of all financial and non-financial transactions resulting from or arising in connection with this Agreement as may be necessary to enable LG&E/KU or the independent third party, as applicable, to perform the foregoing activities. LG&E/KU shall be responsible for any costs and expenses incurred in connection with any such inspection or audit, unless such inspection or audit discovers that LG&E/KU was charged inappropriate or incorrect costs and expenses, in which case, the ITO shall be responsible for a percentage of the costs and expenses incurred in connection with such inspection or audit equal to the percentage variance by which LG&E/KU was charged inappropriate or incorrect costs and expenses. The ITO shall provide reasonable assistance necessary to enable LG&E/KU or an independent third party, as applicable, and shall not be entitled to charge LG&E/KU for any such assistance. Amounts incorrectly or inappropriately invoiced by the ITO to LG&E/KU, whether discovered prior to or

subsequent to payment by LG&E/KU, shall be adjusted or reimbursed to LG&E/KU by the ITO within twenty (20) days of notification by LG&E/KU to the ITO of the error in the invoice.

12.3 Regulatory Compliance. The ITO shall comply with all requests by LG&E/KU to the extent considered reasonably necessary by LG&E/KU to comply with the Sarbanes-Oxley Act or other regulatory requirements. Notwithstanding the generality of the foregoing, the ITO shall provide to LG&E/KU, at LG&E/KU's request, all reports reasonably deemed necessary or desirable by LG&E/KU to support the review, audit and preparation of audit reports relating to the Functions and LG&E/KU's financial statements and reports, including (a) providing LG&E/KU with an executed copy of a report and opinion, from independent auditors of national reputation engaged and compensated by the ITO, of an examination in accordance with SAS No. 70, Type II, of the ITO's controls and systems relating to the performance of the Functions, as of and for the six (6)-month period ending at the end of the first (1st) and third (3rd) calendar quarter of each year of the Term, which shall be delivered not later than forty-five (45) days after the end of each such quarter, and (b) providing to LG&E/KU (and exercising commercially reasonable efforts to do so within twenty (20) days of LG&E/KU's request, but in no event more than thirty (30) days from said request) a certificate of an officer of the ITO certifying that there has been no change in such controls and systems or the effective operation of such controls and systems since the date of the most recent opinion of such independent auditors. The report, in its form and preparation, shall follow all SAS No. 70 guidelines and must be comprehensive and cover all significant controls executed by the ITO in connection with its systems and processes underlying the Functions. Additionally, the report must contain an opinion of the independent auditor that concludes that the ITO's description of controls pertaining to the processes and systems underlying the performance of the Functions presents fairly, in all material respects, the relevant aspects of the ITO's controls that had been placed into operation as of the end of each reporting period and whether, in the opinion of the independent auditor, the controls were suitably designed to provide reasonable assurance that the control objectives set forth by the ITO would be achieved if the described controls were complied with satisfactorily. In addition, the report shall state whether, in the opinion of the independent auditor, the controls tested by the independent auditor were operating with sufficient effectiveness to provide reasonable, but not absolute, assurance that the control objectives specified by the ITO were achieved during the reporting period. Such report and opinion shall have no significant or material exceptions or qualifiers. If the ITO is unable to timely deliver to LG&E/KU an unqualified opinion or certification, the ITO shall: (i) provide LG&E/KU, on the date such opinion or certificate is delivered or due to be delivered, with a written statement describing the circumstances giving rise to any delay in delivering such opinion or certificate or any qualification to such opinion or certificate; (ii) immediately take such actions as shall be necessary to resolve such circumstances and deliver an unqualified opinion or certificate as promptly as practicable thereafter; and (iii) permit LG&E/KU and its external auditors to perform such procedures and testing of the ITO's controls and processes as are reasonably necessary for their assessment of the operating effectiveness of the ITO controls and of LG&E/KU's internal controls. In addition, the ITO expressly agrees that prior to or at the time of any significant or material change to any internal process or financial control of the ITO that would or might impact the Functions performed for or on behalf of LG&E/KU or that would, or might, have a significant or material effect on such process's mitigation of risk or upon the integrity of LG&E/KU's financial reporting or disclosures, it shall notify LG&E/KU and provide full details of the change so as to enable

LG&E/KU to review the change and evaluate its impact on its internal controls and financial reporting. LG&E/KU shall have the right to provide all such reports, opinions and certifications delivered hereunder to its attorneys, accountants and other advisors, who shall be entitled to rely thereon.

Section 13 - Independent Contractor.

The ITO shall be and remain during the Term an independent contractor with respect to LG&E/KU, and nothing contained in this Agreement shall be (a) construed as inconsistent with that status, or (b) deemed or construed to create the relationship of principal and agent or employer and employee, between the ITO and LG&E/KU or to make either the ITO or LG&E/KU partners, joint ventures, principals, fiduciaries, agents or employees of the other Party for any purpose. Neither Party shall represent itself to be an agent, partner or representative of the other Party. Neither Party shall commit or bind, nor be authorized to commit or bind, the other Party in any manner, without such other Party's prior written consent. Personnel employed, provided or used by any Party in connection herewith will not be employees of the other Party in any respect. Each Party shall have full responsibility for the actions or omissions of its employees and shall be responsible for their supervision, direction and control.

Section 14 - Taxes.

Each Party shall be responsible for the payment of its own taxes, including taxes based on its net income, employment taxes of its employees, taxes on any property it owns or leases, and sales, use, gross receipts, excise, value-added or other transaction taxes.

Section 15 - Notices.

15.1 Notices. All notices, requests, consents and other communications hereunder shall be in writing, signed by the Party giving such notice or communication, and shall be hand-delivered or sent by certified mail, postage prepaid, return receipt requested, by nationally recognized courier, to the other Party at the address set forth below, and shall be deemed given upon the earlier of the date delivered or the date delivery is refused.

If to LG&E/KU:

Louisville Gas and Electric Company
____
____
Facsimile: (___) ___-____

And

Kentucky Utilities Company
____
____
Facsimile: (___) ___-____

If to the ITO:

Southwest Power Pool, Inc.

____

____

Facsimile: (___) ___-____

15.2 Changes. Either Party may, from time to time, change the names, addresses, facsimile numbers or other notice information set out in Section 15.1 by notice to the other Party in accordance with the requirements of Section 15.1.

Section 16 - Key Personnel; Work Conditions.

16.1 Key Personnel. All Key Personnel shall be properly certified and licensed, if required by law, and be qualified and competent to perform the Functions. The ITO shall provide LG&E/KU prior written notice of the replacement of any Key Personnel.

16.2 Conduct of Key Personnel and Reporting. The ITO agrees to require that the Key Personnel comply with the ITO's employee code of conduct, a current copy of which has been provided to LG&E/KU. The ITO may amend its employee code of conduct at any time, provided that the ITO shall promptly provide the LG&E/KU Contract Manager with a copy of the amended employee code of conduct. If any Key Personnel commits fraud or engages in material violation of the ITO's employee code of conduct, the ITO shall promptly notify LG&E/KU as provided above and promptly remove any such Key Personnel from the performance of the Functions.

16.3 Personnel Screening. The ITO shall be responsible for conducting, in accordance with applicable law (including the Fair Credit Reporting Act, The Fair and Accurate Credit Transactions Act, and Title VII of the Civil Rights Act of 1964), adequate pre-deployment screening of the Key Personnel prior to commencing performance of the Functions. By deploying Key Personnel under this Agreement, the ITO represents that it has completed the Screening Measures (as defined below) with respect to such Key Personnel. To the extent permitted by applicable law, the term "Screening Measures" shall include, at a minimum, a background check including: (a) a Terrorist Watch Database Search; (b) a Social Security Number trace; (c) motor vehicle license and driving record check; and (d) a criminal history check, including, a criminal record check for each county/city and state/country in the employee's residence history for the maximum number of years permitted by law, up to seven (7) years. Unless prohibited by law, if, prior to or after assigning a Key Personnel to perform the Functions, the ITO learns of any information that the ITO considers would adversely affect such Key Personnel's suitability for the performance of the Functions (including based on information discovered from the Screening Measures), the ITO shall not assign the Key Personnel to the Functions or, if already assigned, promptly remove such Key Personnel from performing the Functions and immediately notify LG&E/KU of such action.

16.4 Security. LG&E/KU shall have the option of barring from LG&E/KU's property any Key Personnel whom LG&E/KU determines is not suitable in accordance with the applicable laws pursuant to Sections 16.1 through 16.3.

Section 17 - Miscellaneous Provisions.

17.1 Governing Law. This Agreement and the rights and obligations of the Parties hereunder shall be governed by and construed in accordance with the laws of Kentucky, without giving effect to its conflicts of law rules.

17.2 Consent to Jurisdiction. All Disputes by any Party in connection with or relating to this Agreement or any matters described or contemplated in this Agreement shall be instituted in the courts of the State of Kentucky or of the United States sitting in the State of Kentucky. Each Party irrevocably submits, for itself and its properties, to the exclusive jurisdiction of the courts of the State of Kentucky and of the United States sitting in the State of Kentucky in connection with any such Dispute. Each Party irrevocably and unconditionally waives any objection or defense that it may have based on improper venue or *forum non conveniens* to the conduct of any proceeding in any such courts. This provision does not adversely affect FERC's jurisdiction of this Agreement.

17.3 Amendment. This Agreement shall not be varied or amended unless such variation or amendment is agreed to by the Parties in writing and accepted by FERC. The Parties explicitly agree that neither Party shall unilaterally petition to FERC pursuant to the provisions of Sections 205 or 206 of the Federal Power Act to amend this Agreement or to request that FERC initiate its own proceeding to amend this Agreement.

17.4 Assignment. Any assignment of this Agreement or any interest herein or delegation of all or any portion of a Party's obligations, by operation of law or otherwise, by either Party without the other Party's prior written consent shall be void and of no effect; provided, however, that the ITO's consent will not be required for LG&E/KU to assign this Agreement to (a) an affiliate or (b) a successor entity that acquires all or substantially all of LG&E/KU's Transmission System whether by merger, consolidation, reorganization, sale, spin-off or foreclosure; provided, further, that such successor entity agrees to assume all of LG&E/KU's obligations hereunder from and after the date of such assignment. As a condition to the effectiveness of such assignment (i) LG&E/KU shall promptly notify the ITO of such assignment, (ii) the successor entity shall provide a confirmation to the ITO of its assumption of LG&E/KU's obligations hereunder, and (iii) LG&E/KU shall promptly reimburse the ITO, upon receipt of an invoice from the ITO, for any one-time incremental costs reasonably incurred by the ITO as a result of such assignment. For the avoidance of doubt, nothing herein shall preclude LG&E/KU from transferring any or all of its transmission facilities to another entity or disposing of or acquiring any other transmission assets.

17.5 No Third Party Beneficiaries. Except as otherwise expressly provided in this Agreement, this Agreement is made solely for the benefit of the Parties and their successors and permitted assigns and no other person shall have any rights, interest or claims hereunder or

otherwise be entitled to any benefits under or on account of this Agreement as third party beneficiary or otherwise.

17.6 Waivers. No waiver of any provision of this Agreement shall be effective unless it is signed by the Party against which it is sought to be enforced. The delay or failure by either Party to exercise or enforce any of its rights under this Agreement shall not constitute or be deemed a waiver of that Party's right thereafter to enforce those rights, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right.

17.7 Severability; Renegotiation. The invalidity or unenforceability of any portion or provision of this Agreement shall in no way affect the validity or enforceability of any other portion or provision herein. If any provision of this Agreement is found to be invalid, illegal or otherwise unenforceable, the same shall not affect the other provisions hereof or the whole of this Agreement and shall not render invalid, illegal or unenforceable this Agreement or any of the remaining provisions of this Agreement. If any provision of this Agreement or the application thereof to any person, entity or circumstance, is held by a court or regulatory authority of competent jurisdiction to be invalid, void or unenforceable, or if a modification or condition to this Agreement is imposed by such court or regulatory authority, the Parties shall in good faith negotiate such amendment or amendments to this Agreement as will restore the relative benefits and obligation of the Parties immediately prior to such holding, modification or condition.

17.8 Representations and Warranties. Each Party represents and warrants to the other Party as of the date hereof as follows:

17.8.1 Organization. It is duly organized, validly existing and in good standing under the laws of the State in which it was organized, and has all the requisite power and authority to own and operate its material assets and properties and to carry on its business as now being conducted and as proposed to be conducted under this Agreement.

17.8.2 Authority. It has the requisite power and authority to execute and deliver this Agreement and, subject to the procurement of applicable regulatory approvals, to perform its obligations under this Agreement. The execution and delivery of this Agreement by it and the performance of its obligations under this Agreement have been duly authorized by all necessary corporate action required on its part.

17.8.3 Binding Effect. Assuming the due authorization, execution and delivery of this Agreement by the other Party, this Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with its terms, except as the same may be limited by bankruptcy, insolvency or other similar applicable laws affecting creditors' rights generally, and by general principles of equity regardless of whether such principles are considered in a proceeding at law or in equity.

17.8.4 Regulatory Approval. It has obtained or will obtain by the Effective Date, any and all approvals of, and acceptances for filing by, and has given or will give any

notices to, any applicable federal or state authority, including FERC, that are required for it to execute, deliver, and perform its obligations under this Agreement.

17.8.5 No Litigation. There are no actions at law, suits in equity, proceedings, or claims pending or, to its knowledge, threatened against it before or by any federal, state, foreign or local court, tribunal, or governmental agency or authority that might materially delay, prevent, or hinder the performance by such entity of its obligations hereunder.

17.8.6 No Violation or Breach. The execution, delivery and performance by it of its obligations under this Agreement do not and shall not: (a) violate its organizational documents; (b) violate any applicable law, statute, order, rule, regulation or judgment promulgated or entered by any applicable federal or state authority, which violation could reasonably be expected to materially adversely affect the performance of its obligations under this Agreement; or (c) result in a breach of or constitute a default of any material agreement to which it is a party.

17.9 Further Assurances. Each Party agrees that it shall execute and deliver such further instruments, provide all information, and take or forbear such further acts and things as may be reasonably required or useful to carry out the purpose of this Agreement and are not inconsistent with the provisions of this Agreement.

17.10 Entire Agreement. This Agreement and the Attachments hereto set forth the entire agreement between the Parties with respect to the subject matter hereof, and supersede all prior agreements, whether oral or written, related to the subject matter of this Agreement. The terms of this Agreement and the Attachments hereto are controlling, and no parole or extrinsic evidence, including to prior drafts and drafts exchanged with any third parties, shall be used to vary, contradict or interpret the express terms, and conditions of this Agreement.

17.11 Good Faith Efforts. Each Party agrees that it shall in good faith take all reasonable actions necessary to permit it and the other Party to fulfill their obligations under this Agreement. Where the consent, agreement or approval of any Party must be obtained hereunder, such consent, agreement or approval shall not be unreasonably withheld, delayed or conditioned. Where a Party is required or permitted to act, or omit to act, based on its opinion or judgment, such opinion or judgment shall not be unreasonably exercised. To the extent that the jurisdiction of any federal or state authority applies to any part of this Agreement or the transactions or actions covered by this Agreement, each Party shall cooperate with the other Party to secure any necessary or desirable approval or acceptance of such authorities of such part of this Agreement or such transactions or actions.

17.12 Time of the Essence. With respect to all duties, obligations and rights of the Parties, time shall be of the essence in this Agreement.

17.13 Interpretation. Unless the context of this Agreement otherwise clearly requires:

17.13.1 all defined terms in the singular shall have the same meaning when used in the plural and vice versa;

17.13.2 the terms "hereof," "herein," "hereto" and similar words refer to this entire Agreement and not to any particular Section, Attachment or any other subdivision of this Agreement;

17.13.3 references to "Section" or "Attachment" refer to this Agreement, unless specified otherwise;

17.13.4 references to any law, statute, rule, regulation, notification or statutory provision shall be construed as a reference to the same as it applies to this Agreement and may have been, or may from time to time be, amended, modified or re-enacted;

17.13.5 references to "includes," "including" and similar phrases shall mean "including, without limitation;"

17.13.6 the captions, section numbers and headings in this Agreement are included for convenience of reference only and shall not in any way affect the meaning or interpretation of this Agreement;

17.13.7 "or" may not be mutually exclusive, and can be construed to mean "and" where the context requires there to be a multiple rather than an alternative obligation; and

17.13.8 references to a particular entity include such entity's successors and assigns to the extent not prohibited by this Agreement.

17.14 Joint Effort. Preparation of this Agreement has been a joint effort of the Parties and the resulting document shall not be construed more severely against one of the Parties than against the other and no provision in this Agreement is to be interpreted for or against any Party because that Party or its counsel drafted such provision. Each Party acknowledges that in executing this Agreement its has relied solely on its own judgment, belief and knowledge, and such advice as it may have received from its own counsel, and it has not been influenced by any representation or statement made by the other Party or its counsel not contained in this Agreement.

17.15 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument, binding upon LG&E/KU and the ITO, notwithstanding that LG&E/KU and the ITO may not have executed the same counterpart.

The Parties have caused this Independent Transmission Organization Agreement to be executed by their duly authorized representatives as of the dates shown below.

LOUISVILLE GAS AND ELECTRIC COMPANY

____
Name:
Title:
Date:

KENTUCKY UTILITIES COMPANY

____
Name:
Title:
Date:

SOUTHWEST POWER POOL, INC.

____
Name:
Title:
Date:

ATTACHMENT A
TO THE INDEPENDENT TRANSMISSION ORGANIZATION AGREEMENT

DESCRIPTION OF THE FUNCTIONS

The Functions are as follows:

[TBD]

ATTACHMENT B
TO THE INDEPENDENT TRANSMISSION ORGANIZATION AGREEMENT

LIST OF KEY PERSONNEL

[To be provided by the ITO]

RELIABILITY COORDINATOR AGREEMENT

BETWEEN

LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY

AND

TENNESSEE VALLEY AUTHORITY

TABLE OF CONTENTS

Sections:

Section 1 - Scope of Functions; Standards of Performance.....2

1.1 Functions.....2

1.2 Coordination with Independent Transmission Organization.....2

1.3 Expansion.....2

1.4 Reliability Coordinator Performance.....2

1.5 LG&E/KU Performance.....3

Section 2 - Independence.....3

2.1 Key Personnel.....3

2.2 Standards of Conduct Treatment.....3

Section 3 - Compensation, Billing and Payment.....3

Section 4 - Effective Date; Term; Termination; Termination Fees; Transition Assistance Services.....4

4.1 Effective Date; Term.....4

4.2 Mutually-Agreed Termination.....4

4.3 Termination at End of Term.....4

4.4 Termination for Cause.....4

4.4.1 Termination by Either Party.....4

(a) Material Failure or Default.....4
(b) Pattern of Failure.....4
(c) Gross Negligence, Willful Misconduct or Fraud.....4
(d) Material Misrepresentation.....4
(e) Bankruptcy.....5
(f) Dissolution.....5

4.4.2 Termination by LG&E/KU.....5

(a) Not Independent.....5
(b) No Certification.....5

4.5 FERC Approval.....5

4.6 Return of Materials.....5

4.7 Survival.....5

4.8 Transition Assistance Services.....5

4.8.1 Transition Assistance Period.....5

4.8.2 Transition Assistance Services.....6

4.8.3 Key Personnel.....6

Section 5 - Data Management.....6

5.1 Supply of Data.....6

5.2 Property of Each Party.....6

5.3 Data Integrity.....6

5.4 Confidentiality.....7

Section 6 - Intellectual Property.....7

6.1 Pre-Existing Intellectual Property.....7

6.1.1 Exclusion.....7

6.2 Jointly-Owned Intellectual Property.....7

6.3 Reliability Coordinator Retained Rights.....8

6.4 LG&E/KU Retained Rights.....8

6.5 Reliability Coordinator Non-Infringement; Indemnification.....8

6.6 LG&E/KU Non-Infringement; Indemnification.....9

Section 7 - Indemnification 10

7.1 Indemnification by the Parties 10

7.2 No Consequential Damages 10

7.3 Cooperation Regarding Claims 10

Section 8 - Contract Managers; Dispute Resolution 11

8.1 LG&E/KU Contact Manager 11

8.2 Reliability Coordinator Contract Manager 11

8.3 Resolution of Disputes 11

8.3.1 Notice of Dispute 11

8.3.2 Dispute Resolution by Contract Managers 11

8.3.3 Dispute Resolution by Executive Management Representatives 11

8.3.4 Exercise of Remedies at Law or in Equity 11

8.4 Rights Under FPA Unaffected 12

8.5 Statute of Limitations; Continued Performance 12

Section 9 - Insurance 12

9.1 Requirements 12

9.2 Insurance Matters 12

9.3 Compliance 12

Section 10 - Confidentiality 13

10.1 Definition of Confidential Information 13

10.2 Protection of Confidential Information 13

Section 11 - Force Majeure 14

Section 12 - Reporting; Audit 14

12.1 Reporting....14

12.2 Books and Records....14

12.3 Regulatory Compliance....15

Section 13 - Independent Contractor....16

Section 14 - Taxes....16

Section 15 - Notices....16

15.1 Notices....16

15.2 Changes....17

Section 16 - Key Personnel....17

16.1 Key Personnel; Work Conditions....17

16.2 Conduct of Key Personnel and Reporting....17

16.3 Personnel Screening....17

16.4 Security....18

Section 17 - Miscellaneous Provisions....18

17.1 Governing Law....18

17.2 Consent to Jurisdiction....18

17.3 Amendment....18

17.4 Assignment....18

17.5 No Third Party Beneficiaries....19

17.6 Waivers....19

17.7 Severability; Renegotiation....19

17.8 Representations and Warranties....19

17.8.1 Organization....19

17.8.2 Authority....20

17.8.3 Binding Effect....20

17.8.4 Regulatory Approval....20

17.8.5 No Limitation....20

17.8.6 No Violation or Breach....20

17.9 Further Assurances....20

17.10 Entire Agreement....20

17.11 Good Faith Efforts....20

17.12 Time of the Essence....21

17.13 Interpretation....21

17.14 Joint Effort....21

17.15 Counterparts....22

Attachment A - Description of the Functions

Attachment B - List of Key Personnel

RELIABILITY COORDINATOR AGREEMENT

This Reliability Coordinator Agreement (this "Agreement") is entered into this ___th day of September, 2005, between Louisville Gas and Electric Company and Kentucky Utilities Company, corporations organized pursuant to the laws of the State of Kentucky (collectively, "LG&E/KU"), and Tennessee Valley Authority, a federal government corporation created by the Tennessee Valley Authority Act of 1933 (16 U.S.C. §§ 831 *et seq.*) (the "Reliability Coordinator"). LG&E/KU and the Reliability Coordinator may sometimes be individually referred to herein as a "Party" and collectively as the "Parties."

WHEREAS, LG&E/KU owns, among other things, an integrated electric transmission system ("Transmission System"), over which the Midwest Independent Transmission System Operator Inc. ("Midwest ISO") currently provides open access transmission service to customers in the LG&E/KU Control Area (as defined in the LGE&E/KU Open Access Transmission Tariff ("the OATT"));

WHEREAS, as part of LG&E/KU's proposal to withdraw its participation in the Midwest ISO, LG&E/KU desires to provide non-discriminatory open access transmission service pursuant to the OATT;

WHEREAS, LG&E/KU desires to have the Reliability Coordinator perform certain key reliability functions under the OATT, including: (i) security coordination (as defined in the relevant North American Electric Reliability Council ("NERC") Version 0 standards); (ii) transmission planning and regional coordination; (iii) approving LG&E/KU's maintenance schedules; (iv) identifying and mandating upgrades required to maintain reliability; (v) non-binding recommendations relating to economic transmission system upgrades; and (vi) administration of any seams agreements;

WHEREAS, LG&E/KU desires to have the Reliability Coordinator perform all functions identified for reliability coordinators under Policy 9 and Appendices 9B-9D of NERC's Operating Policies;

WHEREAS, LG&E/KU will retain all remaining NERC obligations, including obligations associated with its status as Control Area operator and the provider of transmission services under the OATT, and will take action necessary to protect reliability of the Transmission System, including circumstances where such action is necessary to protect, prevent or manage emergency situations;

WHEREAS, the Reliability Coordinator is: (i) a federal government corporation charged with providing electric power, flood control, navigational control, agricultural and industrial development, and other services to a region including Tennessee and parts of six contiguous states; and (ii) certified as a reliability coordinator by NERC;

WHEREAS, the Reliability Coordinator is independent from LG&E/KU, possesses the necessary competence and experience to perform the functions provided for hereunder and is willing to perform such functions under the terms and conditions agreed upon by the Parties as set forth in this Agreement; and

WHEREAS, as part of LG&E/KU's goal to maintain the requisite level of independence in the operation of its Transmission System to prevent any exercise of transmission market power, LG&E/KU intends to enter into a Independent Transmission Organization Agreement (the "Independent Transmission Organization Agreement") with [______] (the "Independent Transmission Organization"), pursuant to which the Independent Transmission Organization will provide to LG&E/KU certain key transmission-related functions under the OATT.

NOW THEREFORE, in consideration of the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

Section 1 - Scope of Functions; Standards of Performance.

1.1 Functions. The Reliability Coordinator shall perform the functions described in Attachment A (the "Functions") during the Term in accordance with the terms and conditions of this Agreement.

1.2 Coordination with Independent Transmission Organization. In conjunction with its performance of the Functions, the Reliability Coordinator shall coordinate and cooperate with the Independent Transmission Organization and provide, subject to the terms and conditions of this Agreement, including the Reliability Coordinator's obligations with respect to Confidential Information in Section 10, any information that the Independent Transmission Organization may reasonably request in order to carry out its functions under the Independent Transmission Organization Agreement.

1.3 Expansion. Nothing in this Agreement is intended to prevent the Reliability Coordinator from entering into other agreements with one or more third party transmission providers or operators to perform functions for such transmission providers or operators that are the same or similar to the Functions performed hereunder; provided, however, that the Reliability Coordinator does not breach any of its obligations under this Agreement (including its obligations with respect to Confidential Information in Section 10) by entering into or performing any of its obligations under such other agreements; provided, further, that any such other agreements shall provide for LG&E/KU to be reimbursed in an equitable manner for any capital expenditures made pursuant to this Agreement as well as for LG&E/KU's ongoing operations and maintenance expenditures to the extent such capital expenditures and operations and maintenance expenditures are used by the Reliability Coordinator in performing functions under such other agreements.

1.4 Reliability Coordinator Performance. The Reliability Coordinator shall perform its obligations (including the Functions) under this Agreement in accordance with (a) the NERC functional model, (b) Good Utility Practice, (c) all applicable reliability criteria, policies,

standards, rules, regulations and other requirements of NERC and any applicable regional reliability council or their successors, (d) LG&E/KU's specific reliability requirements and operating guidelines (to the extent these are not inconsistent with other requirements specified in this Section 1.4), (e) the OATT, and (f) all applicable laws and the requirements of federal and state regulatory authorities.

1.5 LG&E/KU Performance. LG&E/KU shall perform its obligations under this Agreement in accordance with (a) the NERC functional model and (b) Good Utility Practice.

Section 2 - Independence.

2.1 Key Personnel. All Functions shall be performed by employees of the Reliability Coordinator identified in Attachment B (the "Key Personnel"). No Key Personnel shall also be employed by LG&E/KU or any of its Affiliates (as defined in 18 C.F.R. § 35.34(b)(3) of FERC's regulations). The Reliability Coordinator and the Key Personnel shall be, and shall remain throughout the Term, Independent (as defined below) of LG&E/KU, its Affiliates and any Tariff Participant (as defined below). For purposes of this Agreement: (a) "Independent" shall mean that the Reliability Coordinator and the Key Personnel are not subject to the control of LG&E/KU, its Affiliates or any Tariff Participant, and have full decision-making authority to perform all Functions in accordance with the provisions of this Agreement. Any Key Personnel owning securities in LG&E/KU, its Affiliates or any Tariff Participant shall divest such securities within six (6) months of first being assigned to perform such Functions, provided that nothing in this Section 2.1 shall be interpreted or construed to preclude any such Key Personnel from indirectly owning securities issued by LG&E/KU, its Affiliates or any Tariff Participant through a mutual fund or similar arrangement (other than a fund or arrangement specifically targeted toward the electric industry or the electric utility industry or any segment thereof) under which the Key Personnel does not control the purchase or sale of such securities. Participation by any Key Personnel in a pension plan of LG&E/KU, its Affiliates or any Tariff Participant shall not be deemed to be a direct financial interest if the plan is a defined-benefit plan that does not involve the Key Personnel's ownership of the securities; (b) "Tariff Participant" shall mean LG&E/KU Transmission System customers, interconnection customers, wholesale customers, affected transmission providers, any Market Participant (as defined in 18 C.F.R. § 35.34(a)(2) of FERC's regulations) and similarly qualified third parties within the LG&E/KU Control Area.

2.2 Standards of Conduct Treatment. All Key Personnel shall be treated, for purposes of the FERC's Standards of Conduct, as transmission/reliability employees. All restrictions relating to information sharing and other relationships between merchant employees and transmission/reliability employees shall apply to the Key Personnel.

Section 3 - Compensation, Billing and Payment.

[COMPENSATION, BILLING AND PAYMENT PROVISIONS WILL BE NEGOTIATED WITH TVA]

Section 4 - Effective Date; Term; Termination; Termination Fees; Transition Assistance Services.

4.1 Effective Date; Term. This Agreement shall become effective on the date (the "Effective Date") which is thirty (30) days after FERC's acceptance of this Agreement and shall continue for an initial term of four (4) years from the Effective Date (the "Initial Term"). After the conclusion of the Initial Term, this Agreement shall automatically continue for successive additional one-year terms (each, a "Subsequent Term") unless and until terminated pursuant to the termination provisions hereof. The Initial Term and any Subsequent Terms, together with the Transition Assistance Period, if any, shall collectively be referred to as the "Term."

4.2 Mutually-Agreed Termination. Subject to Section 4.5, this Agreement may be terminated by mutual agreement of the Parties at any time during the Term (other than any Transition Assistance Period).

4.3 Termination at End of Term. Subject to Section 4.5, either Party may terminate this Agreement at the end of the Initial Term or any Subsequent Term upon six (6) months prior written notice to the other Party.

4.4 Termination for Cause.

4.4.1 Termination by Either Party. Subject to Section 4.5, either Party may terminate this Agreement effective immediately upon prior written notice thereof to the other Party if:

(g) Material Failure or Default. The other Party fails, in any material respect, to comply with, observe or perform, or defaults, in any material respect, in the performance of the terms and conditions of this Agreement, and such failure or default remains uncured for thirty (30) days after notice thereof, provided that such failure or default is susceptible to cure and the other Party is exercising reasonable diligence to cure such failure or default;

(h) Pattern of Failure. It determines, in its sole discretion, that there has been a pattern of failure by the other Party to comply with the standards of performance required under this Agreement;

(i) Gross Negligence, Willful Misconduct or Fraud. The other Party commits gross negligence, willful misconduct or fraud in the performance of its obligations under this Agreement;

(j) Material Misrepresentation. Any representation made by the other Party hereunder shall be false or incorrect in any material respect when made and such misrepresentation is not cured within thirty (30) days of such discovery or is incapable of cure;

(k) Bankruptcy. The other Party: (i) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it; (ii) makes an assignment or any general arrangement for the benefit of creditors; (iii) otherwise becomes bankrupt or insolvent (however evidenced); (iv) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets; or (v) is generally unable to pay its debts as they fall due; or

(l) Dissolution. The other Party dissolves or is dissolved or its legal existence is otherwise terminated.

4.4.2 Termination by LG&E/KU. Subject to Section 4.5, LG&E/KU may terminate this Agreement effective immediately upon prior written notice thereof to the Reliability Coordinator if:

(m) Not Independent. FERC determines that the Reliability Coordinator is not Independent; or

(n) No Certification. The Reliability Coordinator: (i) fails to obtain certification from the East Central Area Reliability Coordination Agreement ("ECAR") as a reliability coordinator; or (ii) loses its NERC or ECAR certification once obtained.

4.5 FERC Approval. No termination of this Agreement shall be effective until approved by FERC.

4.6 Return of Materials. Upon any termination of this Agreement or the conclusion of any Transition Assistance Period pursuant to Section 4.8.1, whichever is later, the Reliability Coordinator shall timely and orderly turn over to LG&E/KU all materials that were prepared or developed prior thereto pursuant to this Agreement, and return or destroy, at the option of LG&E/KU, all Data and other information supplied by LG&E/KU to the Reliability Coordinator or created by the Reliability Coordinator on behalf of LG&E/KU.

4.7 Survival. All provisions of this Agreement which are by their nature or terms intended to survive the termination of this Agreement, including the obligations set forth in Section 7 and Section 10, shall survive termination of this Agreement.

4.8 Transition Assistance Services.

4.8.1 Transition Assistance Period. Commencing on the date this Agreement is terminated and continuing for up to six (6) months thereafter (the "Transition Assistance Period"), the Reliability Coordinator shall (a) provide the Functions (and any replacements thereof or substitutions therefor), to the extent LG&E/KU requests such Functions to be performed during the Transition Assistance Period, and (b) cooperate

with LG&E/KU in the transfer of the Functions (collectively, the "Transition Assistance Services").

4.8.2 Transition Assistance Services. The Reliability Coordinator shall, upon LG&E/KU's request, provide the Transition Assistance Services during the Transition Assistance Period at the Reliability Coordinator's actual cost for such services. The quality and level of performance of the Functions by the Reliability Coordinator during the Transition Assistance Period shall not be degraded. After the expiration of the Transition Assistance Period, the Reliability Coordinator shall answer questions from LG&E/KU regarding the Functions on an "as needed" basis at the Reliability Coordinator's then-standard billing rates.

4.8.3 Key Personnel. During the Transition Assistance Period, the Reliability Coordinator shall not terminate, reassign or otherwise remove any Key Personnel without providing LG&E/KU thirty (30) days' prior notice of such termination, reassignment or removal unless such employee (a) voluntarily resigns from the Reliability Coordinator, (b) is dismissed by the Reliability Coordinator for cause, or (c) dies or is unable to work due to his or her disability.

Section 5 - Data Management.

5.1 Supply of Data. During the Term, LG&E/KU shall supply to the Reliability Coordinator, and/or grant the Reliability Coordinator access to all Data that the Reliability Coordinator reasonably requires to perform the Functions. The Parties shall agree upon the initial format and manner in which such Data shall be provided. For purposes of this Agreement, "Data" means all information, text, drawings, diagrams, images or sounds which are embodied in any electronic or tangible medium and which (a) are supplied or in respect of which access is granted to the Reliability Coordinator by LG&E/KU under this Agreement, which shall be LG&E/KU's Data, (b) are prepared, stored or transmitted by the Reliability Coordinator solely on behalf of LG&E/KU, which shall be LG&E/KU's Data; or (c) are compiled by the Reliability Coordinator by aggregating Data owned by LG&E/KU and Data owned by third parties, which shall be Reliability Coordinator's Data.

5.2 Property of Each Party. Each Party acknowledges that the other Party's Data and the other Party's software, base data models and operating procedures for software or base data models ("Processes") are the property of such other Party and agrees that it will do nothing inconsistent with such ownership, including preserving all intellectual property and/or proprietary rights in such other Party's Data and Processes as provided in Section 6.

5.3 Data Integrity. Each Party shall reasonably assist the other Party in establishing measures to preserve the integrity and prevent any corruption or loss of Data, and the Parties shall reasonably assist each other in the recovery of any corrupted or lost Data. Each Party shall retain and preserve any of the other Party's Data that are supplied to it during the Term, and shall exercise commercially reasonable efforts to preserve the integrity of the other Party's Data that are supplied to it during the Term, in order to prevent any corruption or loss of the other Party's Data.

5.4 Confidentiality. Each Party's Data shall be treated as Confidential Information in accordance with the provisions of Section 10.

Section 6 - Intellectual Property.

6.1 Pre-Existing Intellectual Property. Each Party shall own (and continue to own) all trade secrets, Processes and designs and other intellectual property that it owned prior to entering this Agreement, including any enhancements thereto ("Pre-Existing Intellectual Property"). Each Party acknowledges the ownership of the other Party's Pre-Existing Intellectual Property and agrees that it will do nothing inconsistent with such ownership. Each Party agrees that nothing in this Agreement shall give it any right, title or interest in the other Party's Pre-Existing Intellectual Property, other than the rights set forth in this Agreement. The Reliability Coordinator's Pre-Existing Intellectual Property shall include the Reliability Coordinator Retained Rights set forth in Section 6.3. LG&E/KU's Pre-Existing Intellectual Property shall include LG&E/KU Retained Rights set forth in Section 6.4.

6.1.1 Exclusion. Nothing in this Agreement shall prevent either Party from using general techniques, ideas, concepts and know-how gained by its employees during the performance of its obligations under this Agreement in the furtherance of its normal business, to the extent that it does not result in disclosure of the other Party's Data or any data generated from the other Party's Data or other Confidential Information or an infringement by LG&E/KU or the Reliability Coordinator of any intellectual property right. For the avoidance of doubt, the use by a Party of such general techniques, ideas, concepts and know-how gained by its employees during the performance of its obligations under this Agreement shall not be deemed to be an infringement of the other Party's intellectual property rights so long as such matters are retained in the unaided memories of such employees and any Confidential Information is treated in accordance with the provisions of Section 10.

6.2 Jointly-Owned Intellectual Property. Except for the Data described in Section 5.1, all deliverables, whether software or otherwise, to the extent originated and prepared by the Reliability Coordinator exclusively in connection with the performance of its obligations under this Agreement shall be, upon payment of all amounts that may be due from LG&E/KU to the Reliability Coordinator, jointly owned by LG&E/KU and Reliability Coordinator ("Jointly-Owned Intellectual Property"). Each Party shall have the right to use the Jointly-Owned Intellectual Property without any right or duty or accounting to the other Party, except as provided in this Section 6.2. Upon the Reliability Coordinator using, transferring or licensing Jointly-Owned Intellectual Property for or to a third party, the Reliability Coordinator shall reimburse LG&E/KU in an equitable manner as determined by the Parties in good faith for the actual amounts paid by LG&E/KU to the Reliability Coordinator that relate to such Jointly-Owned Intellectual Property. Except as stated in the foregoing sentence, the Reliability Coordinator shall have no other obligation to account to LG&E/KU for any such use, transfer, license, disclosure, copying, modifying or enhancing of the Jointly-Owned Intellectual Property. Notwithstanding anything herein to the contrary, LG&E/KU may use the Jointly-Owned Intellectual Property for its internal business purposes, including licensing or transferring its

interests therein to a third party for purposes of operating or performing functions in connection with LG&E/KU's transmission business.

6.3 Reliability Coordinator Retained Rights. The Reliability Coordinator shall retain all right, title and interest in its proprietary know-how, concepts, techniques, processes, materials and information that were or are developed entirely independently of this Agreement ("Reliability Coordinator Retained Rights"), whether or not such Reliability Coordinator Retained Rights are embodied in a deliverable, whether software or otherwise originated and prepared by the Reliability Coordinator in connection with the performance of its obligations under this Agreement. With respect to the Reliability Coordinator Retained Rights embodied in any deliverable, whether software or otherwise originated and prepared by the Reliability Coordinator in connection with the performance of its obligations under this Agreement, LG&E/KU is hereby granted a nonexclusive, perpetual, worldwide, royalty-free, fully paid-up license under such Reliability Coordinator Retained Rights to use such deliverable for LG&E/KU's internal business purposes only, including licensing or transferring its interests therein to an Affiliate of LG&E/KU or a third party for purposes of operating or performing functions in connection with LG&E/KU's transmission business.

6.4 LG&E/KU Retained Rights. LG&E/KU shall retain all right, title and interest in its proprietary know-how, concepts, techniques, processes, materials and information that were or are developed entirely independently of this Agreement ("LG&E/KU Retained Rights"), whether or not such LG&E/KU Retained Rights are embodied in a deliverable, whether software or otherwise originated and prepared by LG&E/KU in connection with the performance of its obligations under this Agreement. With respect to LG&E/KU Retained Rights embodied in any software or otherwise originated and prepared by LG&E/KU in connection with the performance of its obligations under this Agreement, the Reliability Coordinator is hereby granted a nonexclusive, worldwide, royalty-free, fully paid-up license under such LG&E/KU Retained Rights to use such deliverable for the Reliability Coordinator's performance of its obligations under this Agreement only; provided that LG&E/KU shall not be liable in any way for the use of or reliance on such Reliability Coordinator Retained Rights by the Reliability Coordinator's Affiliate or third party for any purpose whatsoever.

6.5 Reliability Coordinator Non-Infringement; Indemnification. The Reliability Coordinator warrants to LG&E/KU that all Reliability Coordinator's Data and Processes, Reliability Coordinator Pre-Existing Intellectual Property, Reliability Coordinator Retained Rights, and deliverables prepared, produced or first developed by the Reliability Coordinator in connection with the performance of its obligations under this Agreement shall not infringe on any third party patent, copyright, trade secret or other third party proprietary rights. The Reliability Coordinator shall defend, hold harmless and indemnify LG&E/KU and its Affiliates and their respective employees, officers, directors, principals, owners, partners, shareholders, agents, representatives, consultants and subcontractors (collectively, "LG&E/KU Representatives") from and against all claims, lawsuits, penalties, awards, judgments, court arbitration costs, attorneys' fees, and other reasonable out-of-pocket costs incurred in connection with such claims or lawsuits based upon the actual or alleged infringement of any of the foregoing rights; provided that LG&E/KU gives prompt written notice of any such claim or action to the Reliability Coordinator, permits the Reliability Coordinator to control the defense of

any such claim or action with counsel of its choice, and cooperates with the Reliability Coordinator in the defense thereof; and further provided that such claim or action is not based on any alteration, modification or combination of the deliverable with any item, information or process not provided by the Reliability Coordinator, where there would be no infringement in the absence of such alteration, modification or combination. If any infringement action results in a final injunction against LG&E/KU or the LG&E/KU Representatives with respect to Reliability Coordinator's Data and Processes, Reliability Coordinator Pre-Existing Intellectual Property, Reliability Coordinator Retained Rights or deliverables prepared, produced or first developed by the Reliability Coordinator in connection with the performance of its obligations under this Agreement or in the event the use of such matters or any part thereof, is, in such lawsuit, held to constitute infringement, the Reliability Coordinator agrees that it shall, at its option and sole expense, either (a) procure for LG&E/KU or the LG&E/KU Representatives the right to continue using the infringing matter, or (b) replace the infringing matter with non-infringing items of equivalent functionality or modify the same so that it becomes non-infringing and retains its full functionality. If the Reliability Coordinator is unable to accomplish (a) or (b) above, the Reliability Coordinator shall reimburse LG&E/KU for all costs and fees paid by LG&E/KU to the Reliability Coordinator for the infringing matter. The above constitutes the Reliability Coordinator's complete liability for claims of infringement relating to any of the Reliability Coordinator's Data and Processes, Reliability Coordinator Pre-Existing Intellectual Property, Reliability Coordinator Retained Rights and deliverables prepared, produced or first developed by the Reliability Coordinator in connection with the performance of its obligations under this Agreement.

6.6 LG&E/KU Non-Infringement; Indemnification. LG&E/KU warrants to the Reliability Coordinator that, to its knowledge, all LG&E/KU's Data (except for Data created by the Reliability Coordinator on behalf of LG&E/KU) and Processes, LG&E/KU Pre-Existing Intellectual Property, and LG&E/KU Retained Rights shall not infringe on any third party patent, copyright, trade secret or other third party proprietary rights. LG&E/KU shall defend, hold harmless and indemnify the Reliability Coordinator and its Affiliates and their respective employees, officers, directors, principals, owners, partners, shareholders, agents, representatives, consultants and subcontractors against all claims, lawsuits, penalties, awards, judgments, court costs, and arbitration costs, attorneys' fees, and other reasonable out-of-pocket costs incurred in connection with such claims or lawsuits based upon the actual or alleged infringement of any of the foregoing rights; provided that the Reliability Coordinator gives prompt written notice of any such claim or action to LG&E/KU, permits LG&E/KU to control the defense of any such claim or action with counsel of its choice, and cooperates with LG&E/KU in the defense thereof; and further provided that such claim or action is not based on any alteration, modification or combination of the deliverable with any item, information or process not provided by LG&E/KU to the Reliability Coordinator, where there would be no infringement in the absence of such alteration, modification or combination. The above constitutes LG&E/KU's complete liability for claims of infringement relating to any of the LG&E/KU's Data and Processes, LG&E/KU Pre-Existing Intellectual Property and LG&E/KU Retained Rights.

Section 7 - Indemnification.

7.1 Indemnification by the Parties. Each Party ("Indemnifying Party") shall indemnify, release, defend, reimburse and hold harmless the other Party and its Affiliates, and their respective directors, officers, employees, principals, representatives and agents (collectively, the "Indemnified Parties") from and against any and all claims, demands, liabilities, losses, causes of action, awards, fines, penalties, litigation, administrative proceedings and investigations, costs and expenses, and attorney fees (each, an "Indemnifiable Loss") asserted against or incurred by any of the Indemnified Parties arising out of, resulting from or based upon (a) a breach by the Indemnifying Party of its obligations under this Agreement, (b) the acts or omissions of the Indemnifying Party and its Affiliates and their respective directors, officers, employees, principals, representatives, agents or contractors during the Term, or (c) claims of bodily injury or death of any person or damage to real and/or tangible personal property caused by the negligence or willful misconduct of the Indemnifying Party and its Affiliates and their respective directors, officers, employees, principals, representatives, agents or contractors during the Term.

7.2 No Consequential Damages. Neither Party shall be liable to the other Party for, nor will the measure of damages include, any indirect, incidental, exemplary, punitive, special or consequential damages.

7.3 Cooperation Regarding Claims. If an Indemnified Party receives notice or has knowledge of any Indemnifiable Loss that may result in a claim for indemnification by such Indemnified Party against an Indemnifying Party pursuant to this Section 7, such Indemnified Party shall as promptly as possible give the Indemnifying Party notice of such Indemnifiable Loss, including a reasonably detailed description of the facts and circumstances relating to such Indemnifiable Loss, a complete copy of all notices, pleadings and other papers related thereto, and in reasonable detail the basis for its claim for indemnification with respect thereto. Failure to promptly give such notice or to provide such information and documents shall not relieve the Indemnifying Party from the obligation hereunder to respond to or defend the Indemnified Party against such Indemnifiable Loss unless such failure shall materially diminish the ability of the Indemnifying Party to respond to or to defend the Indemnified Party against such Indemnifiable Loss. The Indemnifying Party, upon its acknowledgment in writing of its obligation to indemnify the Indemnified Party in accordance with this Section 7, shall be entitled to assume the defense or to represent the interest of the Indemnified Party with respect to such Indemnifiable Loss, which shall include the right to select and direct legal counsel and other consultants, appear in proceedings on behalf of such Indemnified Party and to propose, accept or reject offers of settlement, all at its sole cost. If and to the extent that any such settlement is reasonably likely to involve injunctive, equitable or prospective relief or materially and adversely affect the Indemnified Party's business or operations other than as a result of money damages or other money payments, then such settlement will be subject to the reasonable approval of the Indemnified Party. Nothing herein shall prevent an Indemnified Party from retaining its own legal counsel and other consultants and participating in its own defense at its own cost and expense.

Section 8 - Contract Managers; Dispute Resolution.

8.1 LG&E/KU Contract Manager. LG&E/KU shall appoint an individual (the "LG&E/KU Contract Manager") who shall serve as the primary LG&E/KU representative under this Agreement. The LG&E/KU Contract Manager shall (a) have overall responsibility for managing and coordinating the performance of LG&E/KU's obligations under this Agreement, and (b) be authorized to act for and on behalf of LG&E/KU with respect to all matters relating to this Agreement. Notwithstanding the foregoing, the LG&E/KU Contract Manager may, upon notice to the Reliability Coordinator, delegate such of his or her responsibilities to other LG&E/KU employees, as the LG&E/KU Contract Manager deems appropriate.

8.2 Reliability Coordinator Contract Manager. The Reliability Coordinator shall appoint, among the Key Personnel identified in Attachment B, an individual (the "Reliability Coordinator Contract Manager") who shall serve as the primary Reliability Coordinator representative under this Agreement. The Reliability Coordinator Contract Manager shall (a) have overall responsibility for managing and coordinating the performance of Reliability Coordinator obligations under this Agreement, and (b) be authorized to act for and on behalf of the Reliability Coordinator with respect to all matters relating to this Agreement. Notwithstanding the foregoing, the Reliability Coordinator Contract Manager may, upon notice to LG&E/KU, delegate such of his or her responsibilities to other Key Personnel, as the Reliability Coordinator Contract Manager deems appropriate.

8.3 Resolution of Disputes. Any dispute, claim or controversy between the Parties arising out of or relating to this Agreement (each, a "Dispute") shall be resolved in accordance with the procedures set forth in this Section 8.3; provided, however, that this Section 8.3 shall not apply to Disputes arising from or relating to confidentiality or intellectual property rights (in which case either Party shall be free to seek available legal or equitable remedies).

8.3.1 Notice of Dispute. Each Party shall provide written notice to the other party of any Dispute, including a description of the nature of the Dispute.

8.3.2 Dispute Resolution by Contract Managers. Any Dispute shall first be referred to the LG&E/KU Contract Manager and the Reliability Coordinator Contract Manager, who shall negotiate in good faith to resolve the Dispute.

8.3.3 Dispute Resolution by Executive Management Representatives. If the Dispute is not resolved within fifteen (15) days of being referred to the LG&E/KU Contract Manager and the Reliability Coordinator Contract Manager pursuant to Section 8.3.2, then each Party shall have five (5) days to appoint an executive management representative who shall negotiate in good faith to resolve the Dispute.

8.3.4 Exercise of Remedies at Law or in Equity. If the Parties' executive management representatives are unable to resolve the Dispute within thirty (30) days of their appointment, then each Party shall be free to pursue any remedies available to it and to take any action in law or equity that it believes necessary or convenient in order to

enforce its rights or cause to be fulfilled any of the obligations or agreements of the other Party.

8.4 Rights Under FPA Unaffected. Nothing in this Agreement is intended to limit or abridge any rights that LG&E/KU may have to file or make application before FERC under Section 205 of the Federal Power Act to revise any rates, terms or conditions of the OATT.

8.5 Statute of Limitations; Continued Performance. The Parties agree to waive the applicable statute of limitations during the period of time that the Parties are seeking to resolve a Dispute pursuant to Sections 8.3.2 and 8.3.3, and the statute of limitations shall be tolled for such period. The Parties shall continue to perform their obligations under this Agreement during the resolution of a Dispute.

Section 9 - Insurance.

9.1 Requirements. The Reliability Coordinator shall provide and maintain during the Term insurance coverage in the form and with minimum limits of liability as specified below, unless otherwise agreed to by the Parties.

9.1.1 Worker's compensation insurance with statutory limits, and employer's liability insurance with limits of not less than $1,000,000.

9.1.2 Commercial general liability or equivalent insurance with a combined single limit of not less than $10,000,000 per occurrence. Such insurance shall include products/completed operations liability, owners protective, blanket contractual liability, personal injury liability and broad form property damage.

9.1.3 Comprehensive automobile liability insurance with a combined single limit of not less than $2,000,000 per occurrence. Such insurance shall include coverage for owned, hired and non-owned automobiles, and contractual liability.

9.1.4 Errors & Omissions Insurance in the amount of $5,000,000.

9.2 Insurance Matters. All insurance coverages required pursuant to Section 9.1 shall (a) be provided by insurance companies that have a Best Rating of A or higher, (b) provide that LG&E/KU is an additional insured (other than the workers' compensation insurance), (c) provide that LG&E/KU will receive at least thirty (30) days written notice from the insurer prior to the cancellation or termination of or any material change in any such insurance coverages, and (d) include waivers of any right of subrogation of the insurers thereunder against LG&E/KU. Certificates of insurance evidencing that the insurance required by Section 9.1 is in force shall be delivered by the Reliability Coordinator to LG&E/KU prior to the Effective Date.

9.3 Compliance. The Reliability Coordinator shall not commence performance of any Functions until all of the insurance required pursuant to Section 9.1 is in force, and the necessary documents have been received by LG&E/KU pursuant to Section 9.2. Compliance with the insurance provisions in Section 9 is expressly made a condition precedent to the

obligation of LG&E/KU to make payment for any Functions performed by the Reliability Coordinator under this Agreement. The minimum insurance requirements set forth above shall not vary, limit or waive the Reliability Coordinator's legal or contractual responsibilities or liabilities under this Agreement.

Section 10 - Confidentiality.

10.1 Definition of Confidential Information. For purposes of this Agreement, "Confidential Information" shall mean, in respect of each Party, all information and documentation of such Party, whether disclosed to or accessed by the other Party in connection with this Agreement; provided, however, that the term "Confidential information" shall not include information that: (a) is independently developed by the recipient, as demonstrated by the recipient's written records, without violating the disclosing Party's proprietary rights; (b) is or becomes publicly known (other than through unauthorized disclosure); (c) is disclosed by the owner of such information to a third party free of any obligation of confidentiality; (d) is already known by the recipient at the time of disclosure, as demonstrated by the recipient's written records, and the recipient has no obligation of confidentiality other than pursuant to this Agreement or any confidentiality agreements between the Parties entered into before the Effective Date; or (e) is rightfully received by a Party free of any obligation of confidentiality.

10.2 Protection of Confidential Information. All Confidential Information shall be held in confidence by the recipient to the same extent and in at least the same manner as the recipient protects its own confidential information, and such Confidential Information shall be used only for purposes of performing obligations under this Agreement. Neither Party shall disclose, publish, release, transfer or otherwise make available Confidential Information of, or obtained from, the other Party in any form to, or for the use or benefit of, any person or entity without the disclosing Party's prior written consent. Each Party shall be permitted to disclose relevant aspects of the other Party's Confidential Information to its officers, directors, agents, professional advisors, contractors, subcontractors and employees and to the officers, directors, agents, professional advisors, contractors, subcontractors and employees of its Affiliates, to the extent that such disclosure is reasonably necessary for the performance of its duties and obligations or the determination, preservation or exercise of its rights and remedies under this Agreement; provided, however, that the recipient shall take all reasonable measures to ensure that Confidential Information of the disclosing Party is not disclosed or duplicated in contravention of the provisions of this Agreement by such officers, directors, agents, professional advisors, contractors, subcontractors and employees. The obligations in this Section 10 shall not restrict any disclosure pursuant to any local, state or federal governmental agency or authority if such release is necessary to comply with valid laws, governmental regulations or final orders of regulatory bodies or courts; provided that the recipient shall give prompt notice to the disclosing Party in reasonable time to exercise whatever legal rights the disclosing Party may have to prevent or limit such disclosure. Further, the recipient shall cooperate with the disclosing Party in preventing or limiting such disclosure.

Section 11 - Force Majeure.

11.1 Neither Party shall be liable to the other Party for any failure or delay of performance hereunder due to causes beyond such Party's reasonable control, which by the exercise of reasonable due diligence such Party is unable, in whole or in part, to prevent or overcome (a "Force Majeure"), including acts of God, act of the public enemy, fire, explosion, vandalism, cable cut, storm or other catastrophes, weather impediments, national emergency, insurrections, riots, wars or any law, order, regulation, direction, action or request of any government or authority or instrumentality thereof. Neither Party shall be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure, except for the obligation to pay any amount when due, provided that the affected Party:

11.1.1 gives notice to the other Party of the event or circumstance giving rise to the event of Force Majeure;

11.1.2 affords the other Party reasonable access to information about the event or circumstances giving rise to the event of Force Majeure;

11.1.3 takes commercially reasonable steps to restore its ability to perform its obligations hereunder as soon as reasonably practicable, provided that the affected Party shall not be obligated to take any steps that are not otherwise in accordance with Good Utility Practice; and

11.1.4 exercises commercially reasonable efforts to perform its obligations hereunder.

Section 12 - Reporting; Audit.

12.1 Reporting. The Reliability Coordinator shall make regular reports to FERC and LG&E/KU's retail regulators as may be required by applicable law and regulations or as may be requested by such authorities.

12.2 Books and Records. The Reliability Coordinator shall maintain full and accurate books and records pertinent to this Agreement, and the Reliability Coordinator shall maintain such books and records for three (3) years following the expiration or early termination of this Agreement or longer if necessary to resolve a pending Dispute. LG&E/KU will have the right, at reasonable times and under reasonable conditions, to inspect and audit, or have an independent third party inspect and audit, the Reliability Coordinator's operations and books to (a) ensure compliance with this Agreement, (b) verify any cost claims or other amounts due hereunder, and (c) validate the Reliability Coordinator's internal controls with respect to the performance of the Functions. The Reliability Coordinator shall maintain an audit trail, including all original transaction records, of all financial and non-financial transactions resulting from or arising in connection with this Agreement as may be necessary to enable LG&E/KU or the independent third party, as applicable, to perform the foregoing activities. LG&E/KU shall be responsible for any costs and expenses incurred in connection with any such inspection or audit, unless such

inspection or audit discovers that LG&E/KU was charged inappropriate or incorrect costs and expenses, in which case, the Reliability Coordinator shall be responsible for a percentage of the costs and expenses incurred in connection with such inspection or audit equal to the percentage variance by which LG&E/KU was charged inappropriate or incorrect costs and expenses. The Reliability Coordinator shall provide reasonable assistance necessary to enable LG&E/KU or an independent third party, as applicable, and shall not be entitled to charge LG&E/KU for any such assistance. Amounts incorrectly or inappropriately invoiced by the Reliability Coordinator to LG&E/KU, whether discovered prior to or subsequent to payment by LG&E/KU, shall be adjusted or reimbursed to LG&E/KU by the Reliability Coordinator within twenty (20) days of notification by LG&E/KU to the Reliability Coordinator of the error in the invoice.

12.3 Regulatory Compliance. The Reliability Coordinator shall comply with all requests by LG&E/KU to the extent considered reasonably necessary by LG&E/KU to comply with the Sarbanes-Oxley Act or other regulatory requirements. Notwithstanding the generality of the foregoing, the Reliability Coordinator shall provide to LG&E/KU, at LG&E/KU's request, all reports reasonably deemed necessary or desirable by LG&E/KU to support the review, audit and preparation of audit reports relating to the Functions and LG&E/KU's financial statements and reports, including (a) providing LG&E/KU with an executed copy of a report and opinion, from independent auditors of national reputation engaged and compensated by the Reliability Coordinator, of an examination in accordance with SAS No. 70, Type II, of the Reliability Coordinator's controls and systems relating to the performance of the Functions, as of and for the six (6)-month period ending at the end of the first (1st) and third (3rd) calendar quarter of each year of the Term, which shall be delivered not later than forty-five (45) days after the end of each such quarter, and (b) providing to LG&E/KU (and exercising commercially reasonable efforts to do so within twenty (20) days of LG&E/KU's request, but in no event more than thirty (30) days from said request) a certificate of an officer of the Reliability Coordinator certifying that there has been no change in such controls and systems or the effective operation of such controls and systems since the date of the most recent opinion of such independent auditors. The report, in its form and preparation, shall follow all SAS No. 70 guidelines and must be comprehensive and cover all significant controls executed by the Reliability Coordinator in connection with its systems and processes underlying the Functions. Additionally, the report must contain an opinion of the independent auditor that concludes that the Reliability Coordinator's description of controls pertaining to the processes and systems underlying the performance of the Functions presents fairly, in all material respects, the relevant aspects of the Reliability Coordinator's controls that had been placed into operation as of the end of each reporting period and whether, in the opinion of the independent auditor, the controls were suitably designed to provide reasonable assurance that the control objectives set forth by the Reliability Coordinator would be achieved if the described controls were complied with satisfactorily. In addition, the report shall state whether, in the opinion of the independent auditor, the controls tested by the independent auditor were operating with sufficient effectiveness to provide reasonable, but not absolute, assurance that the control objectives specified by the Reliability Coordinator were achieved during the reporting period. Such report and opinion shall have no significant or material exceptions or qualifiers. If the Reliability Coordinator is unable to timely deliver to LG&E/KU an unqualified opinion or certification, the Reliability Coordinator shall: (i) provide LG&E/KU, on the date such opinion or certificate is delivered or due to be delivered, with a written statement describing the circumstances giving rise to any delay in delivering such opinion or

certificate or any qualification to such opinion or certificate; (ii) immediately take such actions as shall be necessary to resolve such circumstances and deliver an unqualified opinion or certificate as promptly as practicable thereafter; and (iii) permit LG&E/KU and its external auditors to perform such procedures and testing of the Reliability Coordinator's controls and processes as are reasonably necessary for their assessment of the operating effectiveness of the Reliability Coordinator controls and of LG&E/KU's internal controls. In addition, the Reliability Coordinator expressly agrees that prior to or at the time of any significant or material change to any internal process or financial control of the Reliability Coordinator that would or might impact the Functions performed for or on behalf of LG&E/KU or that would, or might, have a significant or material effect on such process's mitigation of risk or upon the integrity of LG&E/KU's financial reporting or disclosures, it shall notify LG&E/KU and provide full details of the change so as to enable LG&E/KU to review the change and evaluate its impact on its internal controls and financial reporting. LG&E/KU shall have the right to provide all such reports, opinions and certifications delivered hereunder to its attorneys, accountants and other advisors, who shall be entitled to rely thereon.

Section 13 - Independent Contractor.

The Reliability Coordinator shall be and remain during the Term an independent contractor with respect to LG&E/KU, and nothing contained in this Agreement shall be (a) construed as inconsistent with that status, or (b) deemed or construed to create the relationship of principal and agent or employer and employee, between the Reliability Coordinator and LG&E/KU or to make either the Reliability Coordinator or LG&E/KU partners, joint ventures, principals, fiduciaries, agents or employees of the other Party for any purpose. Neither Party shall represent itself to be an agent, partner or representative of the other Party. Neither Party shall commit or bind, nor be authorized to commit or bind, the other Party in any manner, without such other Party's prior written consent. Personnel employed, provided or used by any Party in connection herewith will not be employees of the other Party in any respect. Each Party shall have full responsibility for the actions or omissions of its employees and shall be responsible for their supervision, direction and control.

Section 14 - Taxes.

Each Party shall be responsible for the payment of its own taxes, including taxes based on its net income, employment taxes of its employees, taxes on any property it owns or leases, and sales, use, gross receipts, excise, value-added or other transaction taxes.

Section 15 - Notices.

15.3 Notices. All notices, requests, consents and other communications hereunder shall be in writing, signed by the Party giving such notice or communication, and shall be hand-delivered or sent by certified mail, postage prepaid, return receipt requested, by nationally recognized courier, to the other Party at the address set forth below, and shall be deemed given upon the earlier of the date delivered or the date delivery is refused.

If to LG&E/KU:

Louisville Gas and Electric Company

____

____

Facsimile: (___) ___-____

And

Kentucky Utilities Company

____

____

Facsimile: (___) ___-____

If to the Reliability Coordinator:

Tennessee Valley Authority

____

____

Facsimile: (___) ___-____

15.4 Changes. Either Party may, from time to time, change the names, addresses, facsimile numbers or other notice information set out in Section 15.1 by notice to the other Party in accordance with the requirements of Section 15.1.

Section 16 - Key Personnel; Work Conditions.

16.5 Key Personnel. All Key Personnel shall be properly certified and licensed, if required by law, and be qualified and competent to perform the Functions. The Reliability Coordinator shall provide LG&E/KU prior written notice of the replacement of any Key Personnel.

16.6 Conduct of Key Personnel and Reporting. The Reliability Coordinator agrees to require that the Key Personnel comply with the Reliability Coordinator's employee code of conduct, a current copy of which has been provided to LG&E/KU. The Reliability Coordinator may amend its employee code of conduct at any time, provided that the Reliability Coordinator shall promptly provide the LG&E/KU Contract Manager with a copy of the amended employee code of conduct. If any Key Personnel commits fraud or engages in material violation of the Reliability Coordinator's employee code of conduct, the Reliability Coordinator shall promptly notify LG&E/KU as provided above and promptly remove any such Key Personnel from the performance of the Functions.

16.7 Personnel Screening. The Reliability Coordinator shall be responsible for conducting, in accordance with applicable law (including the Fair Credit Reporting Act, The Fair and Accurate Credit Transactions Act, and Title VII of the Civil Rights Act of 1964), adequate pre-deployment screening of the Key Personnel prior to commencing performance of the

Functions. By deploying Key Personnel under this Agreement, the Reliability Coordinator represents that it has completed the Screening Measures (as defined below) with respect to such Key Personnel. To the extent permitted by applicable law, the term "Screening Measures" shall include, at a minimum, a background check including: (a) a Terrorist Watch Database Search; (b) a Social Security Number trace; (c) motor vehicle license and driving record check; and (d) a criminal history check, including, a criminal record check for each county/city and state/country in the employee's residence history for the maximum number of years permitted by law, up to seven (7) years. Unless prohibited by law, if, prior to or after assigning a Key Personnel to perform the Functions, the Reliability Coordinator learns of any information that the Reliability Coordinator considers would adversely affect such Key Personnel's suitability for the performance of the Functions (including based on information discovered from the Screening Measures), the Reliability Coordinator shall not assign the Key Personnel to the Functions or, if already assigned, promptly remove such Key Personnel from performing the Functions and immediately notify LG&E/KU of such action.

16.8 Security. LG&E/KU shall have the option of barring from LG&E/KU's property any Key Personnel whom LG&E/KU determines is not suitable in accordance with the applicable laws pursuant to Sections 16.1 through 16.3.

Section 17 - Miscellaneous Provisions.

17.1 Governing Law. This Agreement and the rights and obligations of the Parties hereunder shall be governed by and construed in accordance with the laws of Kentucky, without giving effect to its conflicts of law rules.

17.2 Consent to Jurisdiction. All Disputes by any Party in connection with or relating to this Agreement or any matters described or contemplated in this Agreement shall be instituted in the courts of the State of Kentucky or of the United States sitting in the State of Kentucky. Each Party irrevocably submits, for itself and its properties, to the exclusive jurisdiction of the courts of the State of Kentucky and of the United States sitting in the State of Kentucky in connection with any such Dispute. Each Party irrevocably and unconditionally waives any objection or defense that it may have based on improper venue or *forum non conveniens* to the conduct of any proceeding in any such courts. This provision does not adversely affect FERC's jurisdiction of this Agreement.

17.3 Amendment. This Agreement shall not be varied or amended unless such variation or amendment is agreed to by the Parties in writing and accepted by FERC. The Parties explicitly agree that neither Party shall unilaterally petition to FERC pursuant to the provisions of Sections 205 or 206 of the Federal Power Act to amend this Agreement or to request that FERC initiate its own proceeding to amend this Agreement.

17.4 Assignment. Any assignment of this Agreement or any interest herein or delegation of all or any portion of a Party's obligations, by operation of law or otherwise, by either Party without the other Party's prior written consent shall be void and of no effect; provided, however, that the Reliability Coordinator's consent will not be required for LG&E/KU to assign this Agreement to (a) an affiliate or (b) a successor entity that acquires all or

substantially all of LG&E/KU's Transmission System whether by merger, consolidation, reorganization, sale, spin-off or foreclosure; provided, further, that such successor entity agrees to assume all of LG&E/KU's obligations hereunder from and after the date of such assignment. As a condition to the effectiveness of such assignment (i) LG&E/KU shall promptly notify the Reliability Coordinator of such assignment, (ii) the successor entity shall provide a confirmation to the Reliability Coordinator of its assumption of LG&E/KU's obligations hereunder, and (iii) LG&E/KU shall promptly reimburse the Reliability Coordinator, upon receipt of an invoice from the Reliability Coordinator, for any one-time incremental costs reasonably incurred by the Reliability Coordinator as a result of such assignment. For the avoidance of doubt, nothing herein shall preclude LG&E/KU from transferring any or all of its transmission facilities to another entity or disposing of or acquiring any other transmission assets.

17.5 No Third Party Beneficiaries. Except as otherwise expressly provided in this Agreement, this Agreement is made solely for the benefit of the Parties and their successors and permitted assigns and no other person shall have any rights, interest or claims hereunder or otherwise be entitled to any benefits under or on account of this Agreement as third party beneficiary or otherwise.

17.6 Waivers. No waiver of any provision of this Agreement shall be effective unless it is signed by the Party against which it is sought to be enforced. The delay or failure by either Party to exercise or enforce any of its rights under this Agreement shall not constitute or be deemed a waiver of that Party's right thereafter to enforce those rights, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right.

17.7 Severability; Renegotiation. The invalidity or unenforceability of any portion or provision of this Agreement shall in no way affect the validity or enforceability of any other portion or provision herein. If any provision of this Agreement is found to be invalid, illegal or otherwise unenforceable, the same shall not affect the other provisions hereof or the whole of this Agreement and shall not render invalid, illegal or unenforceable this Agreement or any of the remaining provisions of this Agreement. If any provision of this Agreement or the application thereof to any person, entity or circumstance, is held by a court or regulatory authority of competent jurisdiction to be invalid, void or unenforceable, or if a modification or condition to this Agreement is imposed by such court or regulatory authority, the Parties shall in good faith negotiate such amendment or amendments to this Agreement as will restore the relative benefits and obligation of the Parties immediately prior to such holding, modification or condition.

17.8 Representations and Warranties. Each Party represents and warrants to the other Party as of the date hereof as follows:

17.8.1 Organization. It is duly organized, validly existing and in good standing under the laws of the State in which it was organized or applicable Federal law, and has all the requisite power and authority to own and operate its material assets and properties and to carry on its business as now being conducted and as proposed to be conducted under this Agreement.

17.8.2 Authority. It has the requisite power and authority to execute and deliver this Agreement and, subject to the procurement of applicable regulatory approvals, to perform its obligations under this Agreement. The execution and delivery of this Agreement by it and the performance of its obligations under this Agreement have been duly authorized by all necessary corporate action required on its part.

17.8.3 Binding Effect. Assuming the due authorization, execution and delivery of this Agreement by the other Party, this Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with its terms, except as the same may be limited by bankruptcy, insolvency or other similar applicable laws affecting creditors' rights generally, and by general principles of equity regardless of whether such principles are considered in a proceeding at law or in equity.

17.8.4 Regulatory Approval. It has obtained or will obtain by the Effective Date, any and all approvals of, and acceptances for filing by, and has given or will give any notices to, any applicable federal or state authority, including FERC, that are required for it to execute, deliver, and perform its obligations under this Agreement.

17.8.5 No Litigation. There are no actions at law, suits in equity, proceedings, or claims pending or, to its knowledge, threatened against it before or by any federal, state, foreign or local court, tribunal, or governmental agency or authority that might materially delay, prevent, or hinder the performance by such entity of its obligations hereunder.

17.8.6 No Violation or Breach. The execution, delivery and performance by it of its obligations under this Agreement do not and shall not: (a) violate its organizational documents; (b) violate any applicable law, statute, order, rule, regulation or judgment promulgated or entered by any applicable federal or state authority, which violation could reasonably be expected to materially adversely affect the performance of its obligations under this Agreement; or (c) result in a breach of or constitute a default of any material agreement to which it is a party.

17.9 Further Assurances. Each Party agrees that it shall execute and deliver such further instruments, provide all information, and take or forbear such further acts and things as may be reasonably required or useful to carry out the purpose of this Agreement and are not inconsistent with the provisions of this Agreement.

17.10 Entire Agreement. This Agreement and the Attachments hereto set forth the entire agreement between the Parties with respect to the subject matter hereof, and supersede all prior agreements, whether oral or written, related to the subject matter of this Agreement. The terms of this Agreement and the Attachments hereto are controlling, and no parole or extrinsic evidence, including to prior drafts and drafts exchanged with any third parties, shall be used to vary, contradict or interpret the express terms, and conditions of this Agreement.

17.11 Good Faith Efforts. Each Party agrees that it shall in good faith take all reasonable actions necessary to permit it and the other Party to fulfill their obligations under this

Agreement. Where the consent, agreement or approval of any Party must be obtained hereunder, such consent, agreement or approval shall not be unreasonably withheld, delayed or conditioned. Where a Party is required or permitted to act, or omit to act, based on its opinion or judgment, such opinion or judgment shall not be unreasonably exercised. To the extent that the jurisdiction of any federal or state authority applies to any part of this Agreement or the transactions or actions covered by this Agreement, each Party shall cooperate with the other Party to secure any necessary or desirable approval or acceptance of such authorities of such part of this Agreement or such transactions or actions.

17.12 Time of the Essence. With respect to all duties, obligations and rights of the Parties, time shall be of the essence in this Agreement.

17.13 Interpretation. Unless the context of this Agreement otherwise clearly requires:

17.13.1 all defined terms in the singular shall have the same meaning when used in the plural and vice versa;

17.13.2 the terms "hereof," "herein," "hereto" and similar words refer to this entire Agreement and not to any particular Section, Attachment or any other subdivision of this Agreement;

17.13.3 references to "Section" or "Attachment" refer to this Agreement, unless specified otherwise;

17.13.4 references to any law, statute, rule, regulation, notification or statutory provision shall be construed as a reference to the same as it applies to this Agreement and may have been, or may from time to time be, amended, modified or re-enacted;

17.13.5 references to "includes," "including" and similar phrases shall mean "including, without limitation;"

17.13.6 the captions, section numbers and headings in this Agreement are included for convenience of reference only and shall not in any way affect the meaning or interpretation of this Agreement;

17.13.7 "or" may not be mutually exclusive, and can be construed to mean "and" where the context requires there to be a multiple rather than an alternative obligation; and

17.13.8 references to a particular entity include such entity's successors and assigns to the extent not prohibited by this Agreement.

17.14 Joint Effort. Preparation of this Agreement has been a joint effort of the Parties and the resulting document shall not be construed more severely against one of the Parties than against the other and no provision in this Agreement is to be interpreted for or against any Party because that Party or its counsel drafted such provision. Each Party acknowledges that in

executing this Agreement its has relied solely on its own judgment, belief and knowledge, and such advice as it may have received from its own counsel, and it has not been influenced by any representation or statement made by the other Party or its counsel not contained in this Agreement.

17.15 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument, binding upon LG&E/KU and the Reliability Coordinator, notwithstanding that LG&E/KU and the Reliability Coordinator may not have executed the same counterpart.

The Parties have caused this Reliability Coordinator Agreement to be executed by their duly authorized representatives as of the dates shown below.

LOUISVILLE GAS AND ELECTRIC COMPANY

____

Name:
Title:
Date:

KENTUCKY UTILITIES COMPANY

____

Name:
Title:
Date:

TENNESSEE VALLEY AUTHORITY

____

Name:
Title:
Date:

ATTACHMENT A
TO THE RELIABILITY COORDINATOR AGREEMENT

DESCRIPTION OF THE FUNCTIONS

The Functions are as follows:

1. Security Coordination. The Reliability Coordinator will perform the security coordination functions under the Agreement in accordance with (a) the NERC functional model, (b) Good Utility Practice, (c) all applicable reliability criteria, policies, standards, rules, regulations and other requirements of NERC and any applicable regional reliability council or their successors, (d) LG&E/KU's specific reliability requirements and operating guidelines (to the extent these are not inconsistent with other requirements specified in this Section 1), (e) the OATT, and (f) all applicable laws and the requirements of federal and state regulatory authorities.

2. Coordination with the Independent Transmission Organization.

2.1 In conjunction with its performance of the Functions, the Reliability Coordinator will coordinate and cooperate with the Independent Transmission Organization and provide, subject to the terms and conditions of the Agreement (including the Reliability Coordinator's obligations with respect to Confidential Information in Section 10 thereof), any information that the Independent Transmission Organization may reasonably request in order to carry out its functions under the Independent Transmission Organization Agreement.

2.2 The Reliability Coordinator will provide consultation with the Independent Transmission Organization for the Independent Transmission Organization to develop and revise, as appropriate, operating procedures governing its performance of the functions under the Independent Transmission Organization Agreement.

2.3 The Reliability Coordinator will coordinate with the Independent Transmission Organization and LG&E/KU to assist the Independent Transmission Organization in processing and evaluating transmission service requests ("TSRs"), as specified in Attachment L of the OATT, and determining whether upgrades or additions are needed to accommodate such TSRs.

2.3.1 Once the Base Case Model (as defined and provided for in Attachment L of the OATT) process is complete, the Reliability Coordinator will coordinate with the Independent Transmission Organization and LG&E/KU regarding any additional regional model development processes necessary to create regional models from the seasonal and annual models. These models, which are updated quarterly or monthly, will serve as the basis for the annual, seasonal, monthly, or daily Base Case Models for the Transmission System used to evaluate TSRs.

2.3.2 In order to develop the regional models and Base Case Models for the Transmission System, the Reliability Coordinator will provide to the Independent Transmission Organization and other modeling group participants such data and information as may be necessary to prepare and update the models. The Independent Transmission Organization will review the data inputs provided by the Reliability Coordinator to ensure that the data inputs and resulting models are consistent with the Transmission Study Criteria (as defined in Attachment L of the OATT).

2.3.3 The Reliability Coordinator will have the opportunity to review and comment on the initial draft of the Independent Transmission Organization's System Impact Study (as defined in the OATT) report and the Independent Transmission Organization's list of any constrained transmission elements. The Reliability Coordinator will work diligently with the Independent Transmission Organization and LG&E/KU to finalize the required System Impact Study in accordance with the OATT.

2.3.4 The Reliability Coordinator will work diligently with the Independent Transmission Organization and LG&E/KU to finalize the required facilities study in accordance with the OATT. The Independent Transmission Organization will provide the Transmission Customer (as defined in the OATT) with the final Facilities Study report and will respond to requests for work papers supporting the Facilities Study.

3. Maintenance Scheduling. LG&E/KU will propose maintenance schedules to the Reliability Coordinator and the Reliability Coordinator will either approve or deny such maintenance schedules.

4. Transmission Planning Authority.

4.1 The Reliability Coordinator will be responsible for the function of transmission planning reliability which is to encompass the responsibilities assigned to the Planning Authority in the NERC Functional Model[1] except as regards to resource adequacy planning. The Reliability Coordinator's responsibility as Transmission Planning Authority will include:

4.1.1 Reviewing, evaluating, and commenting on LG&E/KU's transmission expansion plans that are intended to eliminate reliability inadequacies or to meet statewide or multi-state transmission planning requirements, and engaging in coordinated transmission planning in accordance with Attachment L of the OATT.

4.1.2 Monitoring LG&E/KU's transmission facility ratings based on access to data reasonably necessary to evaluate such ratings.

---

[1] NERC Functional Model is available at: ftp://www.nerc.com/pub/sys/all_updl/oc/fmrtg/Functional_Model_Version_2.doc; pp. 14-16.

4.1.3 Independently reviewing and approving LG&E/KU's Planning Criteria (as defined in Attachment L of the OATT) to ensure that these criteria are sufficiently defined for Transmission Customers to understand how transmission planning is conducted. If the Reliability Coordinator concludes that additional explanatory detail is required, LG&E/KU will modify the appropriate business practice documents to include the additional detail. The Reliability Coordinator will coordinate with the Independent Transmission Organization to ensure that the final versions of the Planning Criteria are posted on OASIS (as defined in the OATT).

4.1.4 Reviewing and approving LG&E/KU's Base Case Model to ensure that such model reflects annual and seasonal power flows, includes all existing long-term, firm uses of the transmission system, and is consistent with the approved Planning Criteria.

4.1.5 Performing an independent reliability assessment and evaluation of the LG&E/KU's Annual Plan (as defined in the Attachment L of the OATT) using the Planning Criteria and the Base Case Model. As part of this assessment, the Reliability Coordinator will independently evaluate whether: (i) LG&E/KU's Annual Plan complies with the Planning Criteria and the Base Case Model; and (ii) there are upgrade projects in the Annual Plan that are not necessary to meet the Planning Criteria and the Base Case Model. In addition to reviewing the Annual Plan, the Reliability Coordinator may also begin the process of identifying opportunities for regional optimization of the Annual Plan.

4.1.6 Providing LG&E/KU with its conclusions regarding the reliability assessment and evaluation of the Annual Plan, including any outstanding issues that the Reliability Coordinator believes LG&E/KU should address. LG&E/KU will have the opportunity to review the Reliability Coordinator's conclusions and may submit a revised Annual Plan and supporting documentation to the Reliability Coordinator to address any outstanding issues. The Reliability Coordinator will identify any instances where it does not agree with the Annual Plan. The Reliability Coordinator and LG&E/KU will have an affirmative obligation to post information concerning any such disagreement on OASIS. Based on feedback from interested parties, LG&E/KU may revise the Annual Plan.

4.1.7 Once the Annual Plan has been finalized by LG&E/KU, coordinating with the Independent Transmission Organization to ensure that the Annual Plan is posted on OASIS.

4.1.8 Holding a Transmission Planning Conference (as defined in Attachment L of the OATT) to gather input and consider the planning process and LG&E/KU's Annual Plan.

4.1.9 Identifying any instances where it does not agree with LG&E/KU's Annual Plan and providing LG&E/KU with an opportunity to provide any revisions.

4.2 Determination of Base Case Model and Supplemental Upgrades.

4.2.1 The Reliability Coordinator will assess whether a proposed upgrade should be considered a Base Case Model Upgrade (as defined in Attachment N of the OATT) or Supplemental Upgrade (as defined in Attachment N of the OATT), according to the provisions of Attachment N of the OATT.

4.2.2 If the Reliability Coordinator determines that a proposed upgrade or set of upgrades is already in the Base Case Model or will completely eliminate the need of a Base Case Model Upgrade, then the proposed upgrade will not be treated as a Supplemental Upgrade and the cost will be recovered through the Transmission Provider's (as defined in the OATT) transmission rates, including PTP and NITS rates under the OATT, bundled retail rates, and rates charged to grandfathered customers.

4.2.3 If the Reliability Coordinator determines that a proposed upgrade will materially decrease the cost of a Base Case Model Upgrade, then the amount by which the Base Case Model cost is decreased will be recovered through the Transmission Provider's transmission rates, and the remainder of the cost of the proposed upgrades will be recovered as a Supplemental Upgrade under Attachment N of the OATT.

4.2.4 If the Reliability Coordinator determines that a proposed upgrade represents an acceleration of a Base Case Model Upgrade, then the cost of accelerating the Base Case Model Upgrade will be recovered as a Supplemental Upgrade under Attachment N of the OATT.

4.2.5 After a Supplemental Upgrade has been funded and constructed, the Reliability Coordinator will calculate the total MW of capacity created by the Supplemental Upgrade on the upgraded element. The amount of MW will be used to calculate the Unit Rate and the charge for Long-Term Network Resource Service or NRIS, as such terms are defined in Attachment N of the OATT.

ATTACHMENT B
TO THE RELIABILITY COORDINATOR AGREEMENT

LIST OF KEY PERSONNEL

[To be provided by TVA]

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY TO TRANSFER FUNCTIONAL CONTROL OF THEIR TRANSMISSION SYSTEM	)))))	CASE NO: 2005-00471

TESTIMONY OF
MATHEW J. MOREY
ON BEHALF OF LOUISVILLE GAS AND ELECTRIC COMPANY
AND KENTUCKY UTILITIES COMPANY

Filed: November 18, 2005

1 **Q.1. Please state your name, current position, and business address.**

2 A.1. My name is Mathew J. Morey. I am Senior Consultant with Christensen Associates
3 Energy Consulting LLC. My business address is 409 Cambridge Road,
4 Alexandria, Virginia. Christensen Associates Energy Consulting's principal
5 business address is 4610 University Avenue, Suite 700, Madison, Wisconsin.

6 **Q.2. Please describe your education, professional background, and qualifications.**

7 A.2. I received my doctorate in economics and statistics from the University of Illinois
8 in 1977, and taught economics and econometrics for nearly twenty years. During
9 that time, I also worked as a consultant to companies in and regulators of the
10 telephone, natural gas, and electricity industries. I worked as Director of
11 Economics at the Edison Electric Institute from 1996 to 2000. Prior to joining
12 Christensen Associates in 2003, I worked as an independent consultant to
13 companies in the electricity industry both in the U.S. and Canada.

14 **Q.3. Have you previously testified before the Kentucky Public Service**
15 **Commission?**

16 A.3. Yes. I prepared supplemental direct and rebuttal testimony in Case No. 2003-
17 00266 on behalf of Louisville Gas and Electric Company and Kentucky Utilities
18 Company (hereinafter "LG&E/KU" or "Companies") that was filed on September
19 29, 2004, on January 10, 2005 and April 1, 2005.

20 I also prepared and submitted direct and rebuttal testimony to the Kentucky
21 Public Service Commission ("KPSC" or "Commission") on behalf of the
22 Companies in 2003 and 2004 in that same case.

23 **Q.4. What is the purpose of your testimony?**

1 A.4. My testimony supports the Companies' application to this Commission seeking
2 approval of the Companies' withdrawal from the Midwest Independent
3 Transmission System Operator, Inc. ("MISO") and proposed transfer of functional
4 control of their transmission facilities to the Tennessee Valley Authority ("TVA")
5 for reliability coordination purposes and to the Southwest Power Pool ("SPP")
6 Regional Transmission Organization ("RTO") to act as the Companies'
7 Independent Transmission Organization ("ITO"). As my testimony shows, the
8 proposed withdrawal and transfer of functional control of the Companies'
9 transmission facilities will meet the criteria of the statute KRS 278.218 in that it is
10 both for a proper purpose and is consistent with the public interest. The transfer
11 will do no economic harm and will in fact provide quantifiable benefits consistent
12 with those already demonstrated by the Companies' cost-benefit study submitted in
13 the Commission's earlier proceeding investigating the Companies' membership in
14 MISO, Case No. 2003-00266.
15 The Companies seek to continue to satisfy their obligation to ensure
16 Kentucky retail electricity consumers receive reliable service at the lowest
17 reasonable cost. This interest is entirely consistent with the Commission's role as
18 the steward in advancing the Kentucky legacy of low-cost reliable electricity
19 service – nearly the lowest cost service in the nation (from a $/MWh of delivered
20 power perspective). At the same time, in light of the commitment to provide the
21 lowest reasonable cost of service, the Companies must find the least-cost means of
22 fulfilling their obligation to provide non-discriminatory open access to their

1 transmission system under the Federal Energy Regulatory Commission's ("FERC")
2 Order Nos. 888 and 889.

3 In my opinion, all these objectives can best be satisfied through the
4 Companies' exit from MISO and return of operational control to the Companies
5 and functional control for reliability and open access transmission objectives
6 through arrangements with TVA and SPP rather than through continued
7 membership in MISO.

8 **Q.5. Please summarize your findings.**

9 A.5. The Companies' first duty is to provide to their native load customers reliable
10 service at the lowest reasonable cost. Concurrently, under FERC Order Nos. 888
11 and 889, the Companies are required to provide non-discriminatory access to their
12 transmission system for customers engaged in wholesale power transactions. In
13 light of their primary commitment to reliably serve their Kentucky retail load at the
14 lowest reasonable cost, the Companies must determine the lowest cost means to
15 fulfill those federal obligations.

16 Although RTO membership is one possible avenue for implementing non-
17 discriminatory transmission access, it is not the only possible avenue. In particular,
18 an ITO/RC arrangement can also satisfy the objectives of Order Nos. 888 and 889
19 and, in some instances – the Companies being a prime example – can do so at
20 lower cost and with greater net benefits to consumers.

21 Table 1 compares the costs to obtain services through an ITO/RC
22 arrangement (column 2) and the costs to obtain the same or similar services from
23 MISO under Day 1 (column 3) and Day 2 (column 4) market arrangements. In the

1 case of MISO membership under Day 1 and Day 2 market arrangements, no
2 distinction is or can be made between the costs of services to comply with Order
3 Nos. 888 and 889 and reliability coordination services because MISO has not
4 offered them à la carte until the agreement it recently reached with Duke Energy.
5 To obtain Order Nos. 888 and 889 compliance services and reliability coordination
6 services through MISO has been an "all-or-nothing," "take-it-or-leave-it"
7 proposition. Thus, for the Companies as MISO members in Day 1, the cost of this
8 package of services was about $6.0 million per year, $1.0 to $1.5 million more than
9 the expected annual cost under the ITO/RC arrangement. For the Companies
10 operating as MISO members within the Day 2 market, the cost of this package of
11 services has grown to approximately $15.0 million per year, roughly three times the
12 expected annual cost under the ITO/RC arrangement.

13 **Table 1 Costs for LG&E/KU to Obtain ITO and Reliability Coordination Services Under an ITO/RC**
14 **Arrangement Compared to MISO Membership (annually, in millions)**

1	2	3	4
Services	**ITO/RC Arrangement**	**MISO – Day 1 Administrative Fees**	**MISO – Day 2 Administrative Fees**
ITO Services	$3.0	$6.0	$ 15.0
Reliability Coordination Services	$1.5 - $2.0	$6.0	$ 15.0
Total	**$4.5 - $5.0**	**$6.0**	**$ 15.0**

15

16 In addition, as part of the cost-benefit study submitted in Case No. 2003-
17 00266, the Companies estimated that MISO membership in the Day 2 market
18 environment could add an additional $2.0 million per year in costs on top of the
19 administrative fees. Therefore, for the Companies and their retail customers, the
20 ITO/RC construct potentially could save about $10.0 million per year considering

1 just the savings on administrative fees, and could save as much as $12.0 million per
2 year taking into account additional costs beyond administrative fees.
3 The ITO/RC proposal as a means to fulfill Order No. 888 objectives is
4 reasonable for the Companies and their customers because the benefits of
5 membership in an RTO such as MISO – lower power procurement costs and
6 increased off-system sales and margins – are small compared to the costs of
7 membership. The Companies' ITO/RC proposal introduces a degree of flexibility
8 into the division of functions necessary to satisfy Order No. 888 requirements and
9 functions necessary to ensure grid reliability. The concept satisfies Order No. 888
10 requirements at lower cost than does RTO membership, leaves the Companies in
11 control of their transmission and generation assets, and ensures the Commission
12 maintains its regulatory authority and control over retail rates and costs.
13 **Q.6. How is your testimony organized?**
14 A.6. Section 1 explains that the Companies' first duty is to serve Kentucky retail electric
15 customers at the lowest possible cost while concurrently fulfilling FERC's
16 requirement for non-discriminatory open access to the Companies' transmission
17 system. In this regard, Section 2 explains why RTO membership is not needed to
18 achieve these objectives, why an ITO/RC can be an appropriate alternative vehicle
19 for achieving these objectives, and how the ITO/RC approach offers a promising
20 means of strengthening RTOs' incentives for cost and quality control relative to the
21 standard RTO approach, which can result in positive spillover effects to Kentucky
22 retail consumers, even if the Companies are no longer members of MISO. Section
23 3 describes how the Companies' ITO/RC arrangement can enable the Companies to

1 meet reliability standards and compliance with the requirements of Order Nos. 888
2 and 889 at lower cost than continued membership in MISO. Finally, Section 4
3 summarizes the reasons that the Commission should approve the Companies'
4 request to withdraw from MISO and transfer functional control of their
5 transmission facilities to TVA for reliability coordination purposes and to SPP to
6 act as the Companies' ITO.

7 **1. THE COMPANIES' FIRST DUTY IS TO ENSURE THAT KENTUKCY**
8 **ELECTRICITY CONSUMERS CAN OBTAIN RELIABLE DELIVERED**
9 **ENERGY AT THE LOWEST REASONABLE COST.**

10 **Q.7. What is the historical relationship between the Companies and their retail**
11 **customers?**

12 A.7. Historically, the Companies have dispatched their lowest-cost generation to benefit
13 their native load customers. If the Companies can purchase power less expensively
14 than they can produce it, they buy that power for their customers' benefit. The
15 Companies purchase a relatively small amount of energy because the Companies
16 have built, own and operate some of the lowest-cost generation facilities in the
17 nation. The Companies also make off-system sales ("OSS") with their excess
18 generating capacity. In this way, the Companies have ensured that their customers
19 enjoy some of the lowest rates in the nation while optimizing the use of their
20 generation assets by making all the economic trades they can find in the wholesale
21 market. The Companies' duty to serve native load customers requires them to be
22 able on a daily basis to provide available generation capacity sufficient to ensure
23 that customer energy demand is met. This is the Companies' obligation to serve,

1 which can be satisfied at the lowest reasonable cost and risk only if the Companies
2 retain the operational authority necessary to carry out this responsibility.
3 The Companies built their generating facilities to serve their native load
4 customers, and obtained authority to build them pursuant to the Commission's
5 integrated resource planning and certificate of convenience and necessity processes.
6 Historically, the Companies' native load has, in effect, a priority or "first call" on
7 the Companies' generation assets under the Companies' obligation to serve. Had
8 the Companies' generation facilities been relatively more costly than generation in
9 the rest of the Midwest region, there might have been advantages of participating in
10 a wide regional power pool. However, as the Companies amply demonstrated in
11 Case No. 2003-00266, for Kentucky retail customers, the benefits of membership
12 in MISO are clearly outweighed by the costs. Therefore, withdrawal from MISO,
13 transfer of functional control of the Companies' transmission facilities to TVA for
14 reliability coordination purposes and to SPP for satisfying Order Nos. 888 and 889
15 objectives is in the public interest from an economic perspective.

16 **2. RTO MEMBERSHIP IS NOT NEEDED FOR THE COMPANIES TO**
17 **CONTINUE PROVIDING RELIABLE, LOW-COST ENERGY TO THEIR**
18 **RETAIL CUSTOMERS OR TO COMPLY WITH ORDER NOS. 888 AND 889**

19 **Q.8. Is there evidence that RTO membership may not always be the most effective**
20 **means of achieving the objectives of providing reliable, low-cost service to**
21 **Kentucky retail electricity consumers and satisfying the goals of Order Nos.**
22 **888 and 889?**

23 A.8. Yes. With guidance from this Commission, the Companies historically have
24 provided Kentucky retail customers with some of the lowest cost delivered power

1 in the nation. This success story has been accomplished without the assistance of an
2 RTO or of energy markets administered by an RTO. In all likelihood, the
3 Companies can continue this commendable performance without being members of
4 an RTO. At the same time, the Companies, through an ITO/RC arrangement can
5 satisfy the goals of Order Nos. 888 and 889 at a fraction of the cost of RTO
6 membership. In so doing, the Companies will minimize the cost impact on
7 Kentucky retail customers of the Companies' compliance with open transmission
8 access obligations in the wholesale power market.

9 For the Companies and their retail customers, the total value of the several
10 potential benefits arising from open access facilitated by an RTO with centralized
11 control of the transmission system are not necessarily greater than their share of the
12 costs associated with the creation of that institution and the reorganization of the
13 functional responsibilities between an RTO and public utility transmission owners.
14 The evidence on this point has been assiduously presented and defended in Case
15 No. 2003-00266.

16 **Q.9. How are the foregoing cost considerations relevant to the Companies' present**
17 **situation?**

18 A.9. In Kentucky, policy makers have chosen to retain the vertically integrated utility
19 model. They have done so because it has worked very well in an absolute and
20 relative sense compared to what has taken place in other parts of the country.
21 Customers of Louisville Gas and Electric Company and Kentucky Utilities
22 Company have paid and continue to pay some of the lowest prices for delivered
23 power of any consumers in the country. Figure 1 illustrates this point by

1 comparing average revenue for all customer classes for several Midwestern states

2 over the period 1996 to 2003. (Data are from Energy Information Administration,

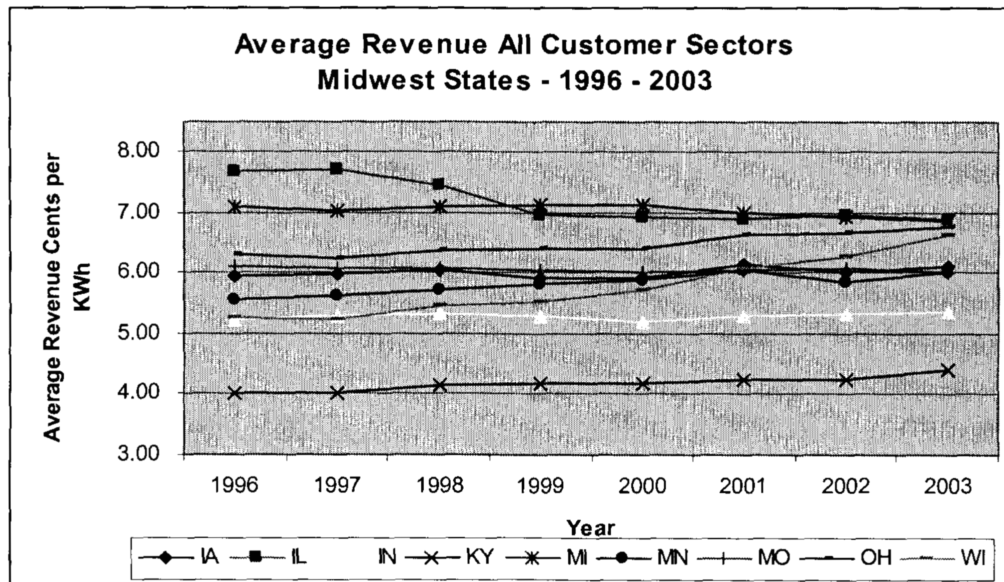
3 http://www.eia.doe.gov/cneaf/electricity/esr/esr_tabs.html, average_price_state.xls,

4 accessed August 29, 2005.) The Companies' customers have paid on average less

5 than 4.5 cents per kWh over this period, averaging 21% less than average revenues

6 in Indiana, the second lowest priced Midwestern state.

7



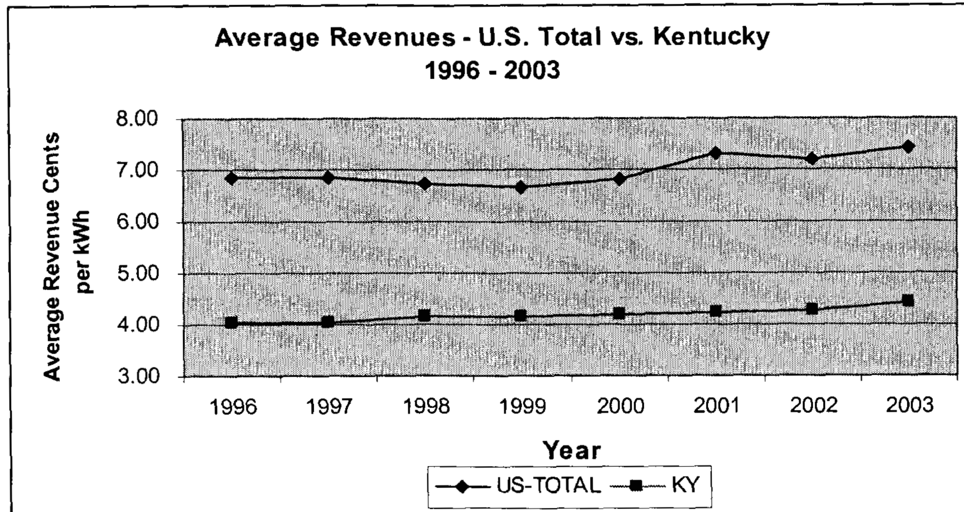
8 **Figure 1 Average Revenue - All Customers Sectors, Midwest States, 1996 - 2003**

9

10 When average revenues in Kentucky are compared to the rest of the U.S. over this same

11 period, the relative success of the vertically integrated utility model in Kentucky is even

12 more striking, as illustrated in Figure 2.



1

2 **Figure 2 Average Revenues - U.S. Total vs. Kentucky, 1996 - 2003**

3

4 **Q.10. Relative to RTO membership, is there a less costly alternative vehicle for**
5 **ensuring Kentucky retail customers continue to receive reliable, low-cost**
6 **energy that enables the Companies to satisfy their obligations as transmission**
7 **providers under Order Nos. 888 and 889?**

8 A.10. I believe that, for some transmission owners such as the Companies, the answer is
9 clearly "yes." This economic alternative is embodied in the ITO/RC approach
10 proposed by the Companies in this filing.

11 **3. AN ITO/RC CAN ACHIEVE ORDER NO. 888 OBJECTIVES AT LOWER**
12 **COST TO THE COMPANIES' KENTUCKY CONSUMERS THAN CAN**
13 **MEMBERSHIP IN MISO**

14 **Q.11. What would be the cost savings to Kentucky retail electricity customers of the**
15 **Companies obtaining Reliability Coordination services and Order No. 888**
16 **services through an ITO/RC construct rather than through membership in**
17 **MISO?**

1 A.11. Based on negotiations ongoing between the Companies and TVA regarding the
2 provision of reliability coordination services and between the Companies and SPP
3 regarding the provision of Order No. 888 services, the cost for an ITO/RC should
4 lie between $4.5 million and $5.0 million per year. In contrast, a conservative
5 estimate of the ultimate cost to the Companies' customers of membership in MISO
6 and obligatory participation in the Day 2 markets that MISO administers lies
7 between $15 million and $17 million per year. A conservative estimate of the cost
8 savings, based on these two sets of costs, would thus be between $10.0 million and
9 $12.0 million per year.

10 **Q.12. What is the basis for your estimate of the cost of the ITO/RC alternative?**

11 A.12. My estimate of the cost of obtaining Reliability Coordination services from TVA is
12 based on a proposal from TVA to the Companies in response to the RFP the
13 Companies issued. The cost of the service will depend on the length of the contract
14 and other details of the services that TVA would provide to the Companies. The
15 exact cost of the Reliability Coordination services has not been determined, but the
16 range is $1.5 to $2.0 million per year. Exact figures for the cost to the Companies
17 to obtain Order Nos. 888 and 889 services from SPP are also not known at this
18 time, but the cost may be no greater than $3.0 million per year. Consequently, the
19 cost of the ITO/RC arrangement should lie in the range of $4.5 to $5.0 million per
20 year.

21 **Q.13. What is the cost evidence available from the Companies' actual experience as**
22 **members of MISO during the period when MISO operated as a Day 1 RTO?**

1 A.13. The Companies, as MISO members during the time MISO was operating as a Day
2 1 RTO in the period from 2002 to early 2005, were paying approximately $6
3 million per year in charges for MISO to provide what was essentially Order No.
4 888 functional services and Reliability Coordination services.

5 **Q.14. What is the basis for your estimate of the costs of the Companies' membership**
6 **in MISO?**

7 A.14. In contrast to the costs of obtaining Order No. 888 services through an ITO/RC
8 arrangement, the cost of the Companies' continued obligatory participation in
9 MISO's Day 2 markets, in order to satisfy Order No. 888 requirements, was
10 estimated in the cost-benefit study prepared by me and submitted to this
11 Commission in Case No. 2003-00266 ("Supplemental Investigation") to lie
12 between $15 million and $17 million per year. This cost consisted of $15 million
13 per year of Administrative Charges under MISO's OATT Schedules 10, 16 and 17;
14 these were costs about which the Companies were reasonably certain. The upper
15 end of the cost range was based on a conservative estimate of $2 million per year in
16 uplift costs (the Companies' share of socialized RTO costs) plus an expectation of a
17 5% underfunding of FTR payments from MISO to the Companies. In other words,
18 according to the Supplemental Investigation, the Companies could fulfill the Order
19 No. 888 requirements through an ITO/RC arrangement for approximately $10 to
20 $12 million per year less than what it was expected to cost the Companies to
21 continue as MISO members in the Day 2 market.

22 **Q.15. In Case No. 2003-00266, did MISO offer an estimate of the net cost of the**
23 **Companies exiting MISO to initiate an ITO/RC?**

1 A.15. Yes. In the second phase of the proceeding, MISO offered four different estimates
2 of the net recurring benefits of the Companies remaining a member of MISO. The
3 first three estimates were fraught with serious errors, as I described in my
4 supplemental rebuttal and additional supplemental rebuttal testimony.

5 **Q.16. What was MISO's estimate of the net cost of transferring functional control**
6 **from the RTO to the ITO/RC arrangement and how does it compare to the**
7 **Companies' estimate?**

8 A.16. The fourth study that MISO submitted to the Commission in the second phase of
9 the Case No. 2003-00266 (referred to as the "March Study") estimated the net cost
10 to the Companies' of exiting the RTO and transferring functional control to an
11 ITO/RC arrangement would be approximately $46 million per year. In sharp
12 contrast, the Companies cost-benefit study submitted in Case No. 2003-00266
13 estimated that leaving MISO and transferring functional control to an ITO/RC
14 arrangement would save the Companies and their customers at least $7 million per
15 year.

16 The difference of approximately $53 million between the two estimates
17 stems primarily from differences in MISO's and the Companies' estimates of four
18 major drivers of the costs and benefits of the option to remain in MISO and the
19 option to exit and operate within an ITO/RC construct – Off System Sales ("OSS")
20 margins, transmission revenues, revenues from Financial Transmission Rights
21 ("FTRs") and power procurement costs to serve native load. Approximately $52
22 million of the difference between MISO's estimate and the Companies' estimate

results from incorrect or implausible assumptions that MISO made in its study regarding these four factors.

Q.17. Please summarize the costs of obtaining Order No. 888 and 889 and reliability coordination services through the ITO/RC arrangement compared to the costs of obtaining those same services through continued MISO membership.

A.17. Table 2 compares the costs to obtain services through an ITO/RC arrangement (column 2) and the costs to obtain the same or similar services from MISO under Day 1 (column 3) and Day 2 (column 4) market arrangements. In the case of MISO membership under Day 1 and Day 2 market arrangements, no distinction is or can be made between the costs of services to comply with Order Nos. 888 and 889 and reliability coordination services because MISO, until the agreement it recently reached with Duke Energy, has not offered them à la carte. To obtain Order Nos. 888 and 889 compliance services and reliability coordination services through MISO has been an "all-or-nothing," "take-it-or-leave-it" proposition. Thus, for the Companies in Day 1, the cost of this package of services was about $6.0 million, $1.0 to $1.5 million more than what it is expected to cost under the ITO/RC arrangement. For the Companies operating within the Day 2 market, the cost of this package of services has grown to approximately $15.0 million per year, roughly three times what it is expected to cost under the ITO/RC arrangement.

1 **Table 2 Costs for LG&E/KU to Obtain ITO and Reliability Coordination Services Under an ITO/RC**
2 **Arrangement Compared to MISO Membership (annually, in millions)**

1	2	3	4
Services	**ITO/RC Arrangement**	**MISO – Day 1 Administrative Fees**	**MISO – Day 2 Administrative Fees**
ITO Services	$3.0	$6.0	$ 15.0
Reliability Coordination Services	$1.5 - $2.0	$6.0	$ 15.0
Total	**$4.5 - $5.0**	**$6.0**	**$ 15.0**

3

4 In addition, as part of the cost-benefit study submitted in Case No. 2003-
5 00266, the Companies estimated that MISO membership in the Day 2 market
6 environment could add an additional $2.0 million per year in costs on top of the
7 MISO Administrative Fees. The cost experience of the Companies operating in the
8 MISO Day 2 market, since it opened April 1 of 2005, has been consistent with the
9 conservative predictions that were made in the Companies' cost-benefit study.
10 Therefore, for the Companies' and their retail customers, the ITO/RC construct
11 potentially could save about $10.0 million per year considering just the savings on
12 Administrative Fees and could save as much as $12.0 million per year considering
13 the additional costs beyond Administrative Fees.

14 The ITO/RC proposal as a means to fulfill Order No. 888 objectives is
15 reasonable for the Companies and their customers because the benefits of
16 membership in an RTO such as MISO – lower power procurement costs and
17 increased off-system sales and margins – are small compared to the costs of
18 membership, as was demonstrated by the Companies in their cost-benefit study
19 submitted in Case No. 2003-00266.

1 The Companies' ITO/RC proposal introduces a degree of flexibility into the division of functions necessary to satisfy Order No. 888 requirements and functions necessary to ensure grid reliability. The concept satisfies Order No. 888 requirements at lower cost than does RTO membership, leaves the Companies in control of their transmission and generation assets, and ensures the Commission maintains its regulatory authority and control over retail rates and costs.

Q.18. Would the exit fee that the Companies are required to pay to leave MISO negate the savings that you predict will inure to the Companies and their customers under an ITO/RC arrangement?

A.18. No. Negotiations between the Companies and MISO on the exact value of the exit fee have resulted in a general agreement about the formula for computing the value of the exit fee, and a significant narrowing of the dollar range of that value. It now appears that the exit fee will not exceed $41 million. With savings of $10 to $12 million per year upon exit, the exit fee would be offset within approximately four years. The savings from exiting MISO and moving to an ITO/RC arrangement will exceed the exit fee by a significant margin in the longer run. The exit fee payment ensures that the Companies have met their obligation under the MISO Transmission Owner's agreement to hold harmless those transmission owners that remain members.

1 **4. THE COMMISSION SHOULD APPROVE THE COMPANIES' REQUEST TO**
2 **WITHDRAW FROM MISO AND TRANSFER FUNCTIONAL CONTROL OF**
3 **ITS TRANSMISSION FACILITIES TO TVA AND SPP UNDER THE ITO/RC**
4 **CONSTRUCT**

5 **Q.19. Please summarize the reasons that the Companies' requests merit Commission**
6 **approval.**

7 A.19. For the Companies and their customers, the Day 2 RTO model is a relatively costly
8 way to satisfy Order No. 888 objectives and obtain Reliability Coordination
9 services. The Companies' proposed ITO/RC model, by contrast, can ensure that
10 Kentucky retail electricity consumers continue to receive reliable service at the
11 lowest reasonable cost, while permitting the Companies to achieve the level of
12 independence necessary to satisfy Order No. 888 at lower cost, and while ensuring
13 that transmission services and rates are transparent, competition in generation is
14 facilitated in wholesale power markets, and reliability is maintained. The
15 Commission's approval of the Companies' request enables the Companies to
16 exercise greater control over their assets and allows the Commission to continue its
17 longstanding complete control over the Companies' costs that go into rates. It
18 reduces the financial risks that the Companies and their customers will be exposed
19 to in the wholesale market, thereby reducing the Companies' costs of risk
20 management that its customers must ultimately bear.

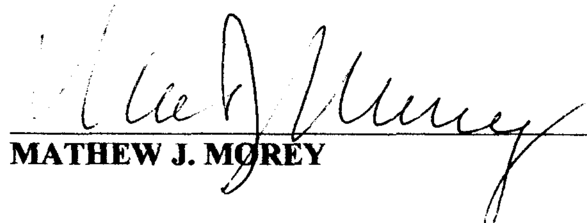
21 **Q.20. Does this conclude your testimony?**

22 A.20. Yes.

VERIFICATION

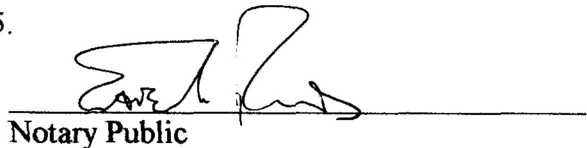
COMMONWEALTH OF VIRGINIA)
) **SS:**
CITY OF ALEXANDRIA)

The undersigned, **Mathew J. Morey**, being duly sworn, deposes and says he is Senior Consultant with Laurits R. Christensen Associates, Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.



MATHEW J. MOREY

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 17th day of November 2005.



Notary Public

My Commission Expires:

Oct 31, 2008

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND)
ELECTRIC COMPANY AND KENTUCKY)
UTILITIES COMPANY TO TRANSFER) CASE NO: 2005-00471
FUNCTIONAL CONTROL OF THEIR)
TRANSMISSION SYSTEM)

TESTIMONY OF
KENT W. BLAKE
DIRECTOR OF STATE REGULATIONS AND RATES
LG&E ENERGY SERVICES INC.

Filed: November 18, 2005

1 **Q. Please state your name, business address and position.**

2 A. My name is Kent W. Blake. My business address is 220 West Main Street, Louisville
3 Kentucky 40202. I am Director of State Regulation and Rates for LG&E Energy
4 Services, Inc. on behalf of Louisville Gas and Electric Company ("LG&E") and
5 Kentucky Utilities Company ("KU") (collectively "LG&E/KU" or "the Companies").
6 A complete statement of my prior work experience is attached to this testimony as
7 Appendix A.

8 **Q. Have you previously testified before this Commission?**

9 A. Yes. I have previously testified before this Commission in rate and certificate
10 proceedings.

11 **Q. What is the purpose of your testimony?**

12 A. I will explain why the Companies' Independent Transmission Organization ("ITO")
13 and Reliability Coordinator ("RC") proposal ("ITO/RC") satisfies the requirements of
14 KRS 278.218, the Kentucky statute governing transfers of functional control of utility
15 assets.

16 **Q. Briefly, what is the Companies' ITO/RC proposal, and why is it subject to the**
17 **requirements of KRS 278.218?**

18 A. Under the ITO/RC proposal, the Companies would withdraw from the Midwest
19 Independent Transmission System Operator, Inc. ("MISO") (assuming that this
20 Commission and the Federal Energy Regulatory Commission ["FERC"] approve),
21 transferring functional control of their transmission system back to themselves and to
22 the Tennessee Valley Authority ("TVA") to the extent necessary for TVA to act as
23 the Companies' RC, and also to the Southwest Power Pool ("SPP") to the extent

1 necessary for SPP to perform its function as the Companies' ITO. The Companies
2 stated in their April 26, 2004 Brief to this Commission in Case No. 2003-00266 that
3 the transfer of functional control that would occur if the Companies exited MISO
4 would indeed be subject to the requirements of KRS 278.218 due to the jurisdictional
5 language contained in KRS 278.218(1):

> 6 No person shall acquire or transfer ownership of or control, or
> 7 the right to control, any assets that are owned by a utility as
> 8 defined under KRS 278.010(3)(a) without prior approval of the
> 9 commission, if the assets have an original book value of one
> 10 million dollars ($1,000,000) or more and:
>
> 11 (a) The assets are to be transferred by the utility for reasons
> 12 other than obsolescence; or
>
> 13 (b) The assets will continue to be used to provide the same or
> 14 similar service to the utility or its customers.

15 The Companies continue to maintain that any exit from MISO would require the
16 Commission's approval under KRS 278.218 because exit will require transfer of the
17 operational control of the Companies' transmission assets from MISO to the
18 Companies, TVA, and SPP.

19 **Q. What are the requirements of KRS 278.218 that the Companies' proposed**
20 **transfer must satisfy to obtain the Commission's approval thereof?**

21 A. KRS 278.218(b) states: "The commission shall grant its approval if the transaction is
22 for a proper purpose and is consistent with the public interest." The Commission has
23 explicated this standard, stating: "This standard establishes a two-step process: first,
24 there must be a showing of no adverse effect on service or rates; and, second, there
25 must be a determination that there will be some benefits."[1] If the Commission does

[1] In the Matter of Application of Kentucky Power Company d/b/a American Electric Power for Approval, to the Extent Necessary, to Transfer Functional Control of Transmission Facilities Located in Kentucky to PJM

1 indeed find that the Companies' proposed transfer of operational control will not
2 result in adverse effects on service or rates, and will in fact provide financial benefits,
3 then the Commission "shall grant its approval" thereof.

4 **Q. How does the Companies' exit from MISO in favor of ITO/RC operation meet**
5 **the KRS 278.218 standard as the Commission has explicated it?**

6 A. As Messrs. Mark S. Johnson, Director of Transmission for LG&E Energy
7 Corporation, and Stuart L. Goza, Reliability Coordinator for TVA, testify today, TVA
8 is a North American Electric Reliability Council ("NERC")-certified reliability
9 coordinator that is eminently well-qualified to act as RC for the Companies. Indeed,
10 TVA already acts as the RC for the East Kentucky Power Cooperative, Inc.
11 ("EKPC") and the Big Rivers Electric Corporation ("BREC"), a fact that the
12 Companies viewed as a substantial benefit because it means TVA is familiar with
13 Kentucky's grid. Moreover, TVA has in place a Joint Reliability Coordination
14 Agreement ("JRCA") with MISO and the Pennsylvania-Jersey-Maryland RTO
15 ("PJM"), which allows each entity to have a view into the systems of the others in
16 order to manage congestion and handle contingencies. In short, TVA's acting as the
17 Companies' RC will not result in any adverse impact on the Companies' transmission
18 system as compared to MISO's stewardship of the Companies' system.

19 With respect to the KRS 278.218 standard's requirement that a proposed
20 transfer do no economic harm and offer at least some potential benefit, Dr. Mathew J.
21 Morey testifies today that the Companies' exit from MISO in favor of the ITO/RC
22 option will result in recurring annual net savings of $10 million to $12 million.
23 Although not identical, these net savings figures are consistent with the Companies'

Interconnection, L.L.C. Pursuant to KRS 278.218, Case No. 2002-00475, Order at 4 (8/25/2003).

1 evidence in Case No. 2003-00266, including Dr. Morey's testimony therein, which
2 showed that the Companies would realize recurring annual net savings by exiting
3 MISO. Moreover, there are net savings even taking into account the exit fee that the
4 Companies must pay MISO upon withdrawal, a fee that is not expected to exceed
5 approximately $41 million (based on the formula for calculating the exit fee agreed to
6 by MISO and the Companies). Assuming that the exit fee falls in that range, and
7 purely as a matter of economics and independent of any rate treatment of the exit fee,
8 the recurring annual net savings of exiting MISO in favor of ITO/RC operation will
9 exceed the exit fee in approximately four years. Given that the Companies will enjoy
10 annually recurring net savings on the order of $10 million to $12 million if they
11 withdraw from MISO and engage TVA as their RC, and SPP as their ITO, the
12 Companies' proposed transfer meets the KRS 278.218 requirement that such transfers
13 do no economic harm and offer at least a potential benefit.

14 **Q. How do the Companies propose to recover the MISO exit fee from their**
15 **customers?**

16 A. The Companies respectfully request that the Commission allow the Companies to
17 establish a regulatory asset in the amount of the MISO exit fee, which asset the
18 Companies will seek authority to amortize during their next base rate case. The
19 Companies further ask the Commission to deem the exit fee prudently incurred
20 because incurring it will result in recurring savings.

21 **Q. What steps should the Commission take in its investigation in Case No. 2003-**
22 **00266?**

1 A. In their Brief, the Companies requested the Commission to issue an order with
2 certain findings of fact. Issuing an order in Case No. 2003-00266 finding that
3 continuing MISO membership is not in the public interest and results in net
4 costs to the Companies and their customers (i.e. (1) the costs of MISO's Day 2
5 energy markets exceed the benefits they provide (if any) and (2) the
6 Companies likely can obtain from other providers comparable reliability
7 coordination and other services at a lower cost and risk level) is an important
8 step the Companies suggest that the Commission should now take. The
9 evidence in Case No. 2003-00266 shows clear net benefits for the Companies
10 and their customers if the Companies are allowed to exit MISO in favor of an
11 alternative such as the ITO/RC proposal contained in the Companies'
12 Application in this case.
13 Such an order would also facilitate FERC's consideration of the Companies'
14 application. The Commission has had the opportunity to review the record of
15 evidence in its investigation, and rendering its opinion thereon from the perspective
16 of Kentucky will be of particular worth to FERC.
17 Finally, the longer that the Companies remain in MISO, the more they and
18 their customers are burdened by unnecessary costs and business risks of operating in
19 the Day-2 markets. Therefore, issuance of an order in the Commission's
20 investigation at this time would facilitate the resolution of this long-standing concern.
21 The Commission can issue the requested order at this time without prejudice
22 to its investigation of and decision on the Companies' application in this proceeding.
23 The Commission can do so by expressly stating in its order in Case No. 2003-000266

1 that its findings of fact do not constitute approval under KRS 278.218 of the
2 Companies' application in this proceeding.

3 **Q. What relief do the Companies request from the Commission in this proceeding?**

4 A. Pursuant to KRS 278.218, the Companies request that the Commission issue an order
5 (1) approving the Companies' Application, transferring functional control of the
6 Companies' transmission facilities over 100 kV from MISO to the Companies, to
7 TVA for reliability coordination purposes, and to SPP for the purposes of acting as
8 the Companies' ITO; (2) allowing the Companies to establish a regulatory asset in the
9 amount of the MISO exit fee; (3) deeming the exit fee prudently incurred because
10 incurring it will result in recurring savings and ultimately lower base rates, and (4)
11 issue the order granting this relief by March 31, 2006.

12 **Q. Does this conclude your testimony?**

13 A. Yes, it does.

APPENDIX A

Kent W. Blake

Director, State Regulation and Rates
LG&E Energy Services Inc.
220 West Main Street
P. O. Box 32010
Louisville, Kentucky 40202
(502) 627-2573

Education

University of Kentucky, B.S. in Accounting, May 1988
Certified Public Accountant, Kentucky, January 1991

Previous Positions

LG&E Energy LLC, Louisville, Kentucky
- 2003 (Sept) – 2004 (Oct) – Director, Regulatory Initiatives
- 2003 (Feb) – 2003 (Sept) – Director, Business Development
- 2002 (Aug) – 2003 (Feb) – Director, Finance and Business Analysis

Mirant Corporation (f.k.a. Southern Company Energy Marketing)
- 2002 (Feb-Aug) – Senior Director, Applications Development
- 2000-2002 – Director, Systems Integration
- 1998-2000 – Trading Controller

LG&E Energy Corp.
- 1997-1998 – Director, Corporate Accounting and Trading Controls

Arthur Andersen LLP
- 1992-1997 – Manager, Audit and Business Advisory Services
- 1990-1992 – Senior Auditor
- 1988-1990 – Audit Staff

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Kent W. Blake**, being duly sworn, deposes and says that he is the Director of State Regulations and Rates for LG&E Energy Services Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Kent W. Blake

KENT W. BLAKE

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18th day of November, 2005.

Tammy J. Elzy (SEAL)
Notary Public

My Commission Expires:

TAMMY J. ELZY
NOTARY PUBLIC
STATE AT LARGE
KENTUCKY
My Commission Expires Nov. 9, 2006

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY TO TRANSFER FUNCTIONAL CONTROL OF THEIR TRANSMISSION SYSTEM	)))))	**CASE NO: 2005-**00471

TESTIMONY OF
SUSAN F. TIERNEY, PH.D.
ANALYSIS GROUP, INC.

On Behalf Of
LOUISVILLE GAS AND ELECTRIC COMPANY AND
KENTUCKY UTILITIES COMPANY

Filed: November 18, 2005

1 **Q. Please state your name, position and business address.**

2 A. My name is Susan Tierney. I am a Managing Principal at Analysis Group Inc., an
3 economics, business and strategy consulting firm. Analysis Group's address is 111
4 Huntington Avenue, Boston, Massachusetts, 02199.

5 **Q. What is your occupation and professional experience?**

6 A. I am a consultant specializing in energy economics and policy. For over 20 years, I
7 have been directly involved in issues that are relevant to this proceeding: economic
8 regulation of utilities, including analysis of traditional retail regulation as well as
9 policies to introduce greater competition into the electric industry; wholesale power
10 market design and analysis; independent system operators ("ISOs") and regional
11 transmission organizations ("RTOs"); and resource planning processes by electric
12 utility companies. I have appeared as a witness before the Federal Energy Regulatory
13 Commission ("FERC"), many state regulatory agencies, arbitration panels and courts,
14 and state and federal legislatures. I also submitted testimony in September 2004 and
15 January 2005 to the Kentucky Public Service Commission ("Commission") in its
16 investigation of Louisville Gas and Electric Company ("LG&E") and Kentucky
17 Utilities Company's ("KU") (collectively, the "Companies") membership in the
18 Midwest Independent Transmission System Operator, Inc. ("MISO"), Case No. 2003-
19 00266.

20 Previously, I consulted at Lexecon Inc. and its predecessor company, The
21 Economics Resource Group. Before that, I served as the Assistant Secretary for
22 Policy at the U.S. Department of Energy and held senior positions in the
23 Massachusetts state government as Secretary of Environmental Affairs;

1 Commissioner of the Department of Public Utilities; Executive Director of the
2 Energy Facilities Siting Council; and Senior Economist for the Executive Office of
3 Energy Resources. Prior to my work in state and federal government, I was an
4 Assistant Professor at the University of California (Irvine). I hold a Ph.D. in regional
5 planning from Cornell University (1980). My resume is attached to my testimony as
6 Attachment A.

7 **Q. What is the purpose and scope of your testimony?**

8 A. The Companies asked me to provide an independent opinion on whether their
9 proposal to withdraw from MISO membership, and to contract with the Tennessee
10 Valley Authority ("TVA") to serve as their North American Electric Reliability
11 Council ("NERC")-certified Reliability Coordinator ("RC") and with the Southwest
12 Power Pool ("SPP") to serve as their Independent Transmission Organization
13 ("ITO"), satisfies the requirements of KRS 278.218 as the Commission has explicated
14 them.

15 **Q. What is the fundamental policy issue facing the Commission in this proceeding?**

16 A. The central question before the Commission is whether to grant the Companies'
17 request to transfer functional control of their transmission facilities back to the
18 Companies, to TVA for RC purposes, and to SPP to enable it to serve as ITO for the
19 Companies. The relevant Kentucky statute, KRS 278.218, states in part: "The
20 commission shall grant its approval if the transaction is for a proper purpose and is
21 consistent with the public interest." As the Commission has explained the "public
22 interest" component of that statutory standard, for a proposed transfer to be approved

1 it must not produce economic or reliability-related harm and must provide some
2 benefits, though those benefits need not be readily quantifiable.

3 **Q. What criteria should the Commission consider when reviewing the Companies'**
4 **request in this case?**

5 A. The four "proper purpose" and "public interest" criteria are:

6 - retail rate impacts on LG&E/KU consumers;
7 - impacts on reliability of the system that serves LG&E and KU consumers;
8 - impacts on the form of the electric industry that provides service to LG&E and
9 KU consumers; and
10 - impacts on the ability of the Commission to regulate in ways that influence the
11 aforementioned factors in the future.

12 I offer these as the key criteria for "proper purpose" and "public interest" based on
13 my experience in regulation of electric and gas utilities. More generally, the opinions
14 in this testimony are based on my training and direct experience in the industry.
15 Previously, I was a state public utility commissioner, and this helped shape my
16 understanding of how states look at certain policy issues, including ones for which
17 there is also a federal interest. My understanding of federal policy goals has been
18 influenced by my past service as Assistant Secretary for Policy in the U.S.
19 Department of Energy and by my current consulting experience in different parts of
20 the country. In these contexts, I am aware of and have long supported the federal
21 policy objective of helping to create the conditions for wholesale competition in the
22 electric industry through assuring the provision of non-discriminatory access to
23 transmission to market participants seeking to take part in regional power markets. I
24 am also aware of and have long supported that states have an important and valid

1 interest in guiding the development and structure and regulation of the electric
2 industries within their jurisdiction, so as to meet the needs of the utilities and
3 customers in their own states. While there is potential tension between these federal
4 and state objectives, there need not be such – as here, where the Companies have
5 proposed to meet state policy objectives for the industry in a way that comports with
6 federal requirements as well.

7 **Q. Does the proposal of the Companies create retail rate impacts that satisfy what is**
8 **required under KRS 278.218 as being in the public interest?**

9 A. Yes. The Commission has stated that the "public interest" requirement of KRS
10 278.218 concerning a proposed transfer of functional control of utility assets
11 "establishes a two-step process: first, there must be a showing of no adverse effect on
12 service or rates; and, second, there must be a determination that there will be some
13 benefits." Based on my careful review of the Companies' ITO/RC proposal, I
14 conclude that it would not require an increase in retail rates. Rather, given the
15 reduced costs of reliability coordination and ITO services that TVA and SPP will
16 provide, respectively, relative to the Companies' remaining in MISO, it is reasonable
17 to assume that retail rates will eventually decrease if the Commission and FERC
18 approve the ITO/RC proposal. This is because there are relatively high
19 administrative costs to the Companies and their retail customers associated with
20 remaining in MISO, compared to having the TVA perform the Companies' RC
21 functions and the SPP perform the Companies' ITO functions. Taking into account
22 the Companies' exit fee for leaving MISO, there will be net savings in a few years. This
23 net positive impact on retail rates would be a savings for LG&E/KU's retail customers, as
24 the changes in these federally-approved charges are passed through to retail consumers.

1 Dr. Morey's testimony today, along with the Companies' evidence in Case
2 No. 2003-00266, more than satisfies me that implementing the ITO/RC proposal will
3 result not only in lower-cost services, but will provide other financial benefits to the
4 Companies and their customers. Therefore, in my opinion, the proposal passes one
5 part of the first prong of the public interest test: no adverse impacts on rates.

6 Q. **Does the Companies' proposal satisfy what is required under KRS 278.218 as**
7 **being in the public interest concerning the reliability of the Companies'**
8 **transmission system?**

9 A. Yes. Again, a second part of the Commission's "public interest" test for
10 administering KRS 278.218 (relating to a proposed transfer of functional control of
11 utility assets) is that there "must be a showing of no adverse effect *on service* or rates;
12 and, second, there must be a determination that there will be some benefits"
13 (emphasis added). My review of the Companies' proposal reveals no signs that the
14 reliability of transmission service to the Companies and their customers will be
15 diminished as a result of leaving MISO. The Companies' original intention in joining
16 MISO was that MISO's primary role relative to the Companies' service to its
17 customers would be to provide reliability and transmission services for the
18 Companies. (This was prior to MISO's evolution towards a Day 2 market.) The
19 proposed transfer of functional control away from MISO and to the Companies, to
20 TVA for reliability coordination purposes, and to SPP to act as the Companies' ITO,
21 will therefore affect customers' service primarily as a function of the reliability of the
22 Companies' transmission system. In that regard, the Companies' ITO/RC proposal
23 certainly meets the KRS 278.218 standard. In my 20-plus years in the electric

1 industry regulation field, I have observed that TVA and SPP are experienced and
2 capable utility organizations that deliver on the reliability assurances they give. The
3 testimonies of Messrs. Johnson and Goza filed with the Commission today give me
4 no reason to expect that the Companies and their customers will experience
5 diminished transmission reliability with TVA and SPP that will match that which they
6 have enjoyed with MISO.

7 Q. **Does the proposal of the Companies also resolve the jurisdictional issues**
8 **presented by the current MISO membership and MISO's FERC energy markets**
9 **tariff?**

10 A. Yes. In addition to the KRS 278.218 requirement that a proposed transfer of
11 functional control must be in the public interest, the statute requires that such a
12 transfer be for a "proper purpose." One such proper purpose is protecting this
13 Commission's ability properly and fully to regulate the Companies. As the
14 Commission itself has expressed in recent months, one of the questions relating to the
15 form of compliance with federal transmission requirements is what effect, if any, it
16 has on the ability of state regulators to continue to influence certain matters
17 traditionally under the supervision of the states. In August 2005, the KPSC expressed
18 concern regarding ratepayer protection and shifts in regulatory authority as reasons
19 for their investigation of Day 2 operations: "The list of issues spawned by the creation
20 of RTOs is growing and the Commission is seemingly faced with ever decreasing
21 authority as FERC addresses new issues regarding RTOs and transmission.
22 Recognizing that RTOs are predominantly federally driven, we are unsure as to how
23 Kentucky's energy policy can incorporate plans to address this issue." These are

1 concerns that I too had flagged for the Commission in my prior testimony in Case No.
2 2003-00266. The ITO/RC proposal unambiguously aligns with the full complement
3 of the Commission's regulatory prerogatives to protect Kentucky customers that the
4 Commission has stated it wants to see continued in the state.

5 Q. **Does the Companies' proposal better conform to the Commonwealth's expressed**
6 **public policy favoring vertically integrated utilities?**

7 A. Yes. Again, KRS 278.218 requires that a proposed transfer of functional control of
8 utility assets be for a "proper purpose." I suggest that one such proper purpose is
9 creating an industry structure that better aligns with the stated public policy of the
10 Commonwealth. Whereas RTOs with centrally administered "Day 2" types of
11 markets have been shown to work well in states and regions that have embraced retail
12 choice and where vertically integrated utilities are not prominent, Kentucky has
13 embraced a policy clearly supportive of maintaining the vertically integrated utility
14 model in the Commonwealth of Kentucky.[1] The ITO/RC proposal fits Kentucky's
15 chosen model well, providing for open and fair transmission access (the ITO role) and
16 securing transmission reliability (the RC role) in a way that conforms with federal
17 policy objects for wholesale markets, while also allowing the vertically-integrated
18 Companies to deploy their resources primarily for the benefit of their retail consumers
19 and maintaining a high degree of oversight by the Commission.

---

[1] In a February 3, 2004 letter to President Bush, Governor Fletcher and eight other southern governors stated that they remained "adamantly opposed" to imposing FERC's Standard Market Design in the south, which is essentially what MISO's EMT puts in place in the Companies' service territory. The governors noted that rate-regulated, vertically integrated utilities have provided and will continue to provide the south with "low rates, appropriate infrastructure investment, and reliable electric delivery service."

1 **Q. What is your recommendation?**

2 A. Because I am confident that the ITO/RC proposal that the Companies present to the
3 Commission in their Application will (1) have beneficial retail rate impacts, (2)
4 ensure the Companies' continued excellent transmission reliability, (3) fit well with
5 the Commonwealth's policy of encouraging vertically integrated utility structures,
6 and (4) better align with the Commission's regulatory prerogatives, I respectfully
7 submit that it meets the statutory requirements of KRS 278.218. I recommend that
8 the Commission approve the Companies' Application.

9 **Q. Does this conclude your testimony?**

10 A. Yes.

ATTACHMENT 1 – RESUME

RESUME OF SUSAN F. TIERNEY, Ph.D.
Managing Principal

Phone: 617-425-8114
Fax: 617-425-8001
stierney@analysisgroup.com

111 Huntington Avenue
Tenth Floor
Boston, MA 02199

Dr. Tierney, a Managing Principal at Analysis Group, is an expert on energy policy and economics, she has consulted to business, government policy makers, and other organizations on energy markets, economic and environmental regulation and strategy, and electric facility projects. Her expert witness and business consulting services have involved electric industry restructuring, market analyses, wholesale and retail market design, contract disputes, asset valuations, regional transmission organizations, generation and transmission projects, energy facility siting, natural gas markets, electric system reliability, and environmental policy and regulation. She has participated as an expert and advisor in civil litigation cases, regulatory proceedings before state and federal agencies, arbitrations, negotiations, mediations, and business consulting engagements.

Prior to joining Analysis Group, she was Senior Vice President at Lexecon, where her practice areas included analysis, strategy and expert witness services in the electricity and natural gas industries, energy policy, public policy and regulations, and environmental economics and policy.

She has also served as the Assistant Secretary for Policy at the U.S. Department of Energy, Secretary for Environmental Affairs in Massachusetts, Commissioner at the Massachusetts Department of Public Utilities, and Executive Director of the Massachusetts Energy Facilities Siting Council. She recently served as chair of the Massachusetts Ocean Management Task Force.

Dr. Tierney has authored numerous articles, speaks frequently at industry conferences, and served as a formal facilitator and expert mediator of disputes. She serves on a number of boards of directors and advisory committees, including the National Commission on Energy Policy. She is chairman of the board of the Energy Foundation and the Energy Innovations Institute; a director of Catalytica Energy Systems Inc., Clean Air-Cool Planet, the North East States Clean Air Foundation, and the Climate Policy Center, and the Policy Advisory Council of the China Sustainable Energy Program. She has taught at the University of California-Irvine, and she earned her Ph.D. and M.A. degrees in regional planning at Cornell University and her B.A. at Scripps College.

EDUCATION

1980	Ph.D. in Regional Planning, Public Policy, Cornell University, Ithaca, NY Dissertation: *Congressional policy making on energy policy issues*
1976	M.A., in Regional Planning, Public Policy, Cornell University, Ithaca, NY
1973	B.A. in Art History, Scripps College, Claremont, CA
1971-72	Studied Political Science, L'Institut d'Etudes Politiques, Paris, France

PROFESSIONAL EXPERIENCE

2003-present	Analysis Group, Inc., Boston, MA Managing Principal
1999-2003	Lexecon, Inc., Cambridge, MA (formerly The Economics Resource Group, Inc.) Senior Vice President
1995-1999	Economics Resource Group, Inc., Cambridge, MA *Principal and Managing Consultant*
1993-1995	U.S. Department of Energy, Washington, DC Assistant Secretary for Policy
1991-1993	Commonwealth of Massachusetts, Executive Office of Environmental Affairs, Boston, MA Secretary of Environmental Affairs
1988-1991	Commonwealth of Massachusetts, Department of Public Utilities, Boston, MA *Commissioner*
1984-1988	Commonwealth of Massachusetts, Energy Facilities Siting Council, Boston, MA Executive Director
1983-1984	Commonwealth of Massachusetts, Executive Office of Energy Resources, Boston, MA Senior Economist
1982-1983	Commonwealth of Massachusetts, Energy Facilities Siting Council, Boston, MA Policy Analyst
1982	National Academy of Sciences, Washington, DC *Researcher*
1978-1982	University of California at Irvine, Irvine, CA Assistant Professor

TESTIMONY ON BEHALF OF CLIENTS

- **Western Massachusetts Electric Company**
  Before the Superior Court Department of Norfolk County, Massachusetts, *Alternative Power Source, Inc., v. Western Massachusetts Electric Company*, Civil Action No. 00-1967, on the allocation of costs related to transmission congestion in wholesale power contract for standard offer service. Expert Report, September 19, 2001; deposition, October 15, 2001; testimony at trial, July 15, 2005.

- **Entergy Louisiana, Inc. and Entergy Gulf States Inc.**
  Before the *Louisiana Public Service Commission*, Application of Entergy Louisiana, Inc. for Approval of the Purchase of Electric Generating Facilities and Entergy Gulf States, Inc. for Authority to Participate in Contract for the Purchase of Capacity and Electric Power, Docket No. U27836, January 21, 2005.

- **Louisville Gas & Electric and Kentucky Utilities Company**
  Before the *Kentucky Public Service Commission*, Investigation Into The Membership of Louisville Gas and Electric Company and Kentucky Utilities Company In The Midwest Independent Transmission System Operator, Inc., Case No. 2003-00266, September 29, 2004; Supplemental Rebuttal Testimony, January 10, 2005; testimony at hearing, June 2005.

- **Pacific Gas & Electric Company**
  Before the *California Public Utilities Commission*, In Re: Order Instituting Investigation into the ratemaking implications for Pacific Gas and Electric Company (PG&E) pursuant to the Commission's Alternative Plan of Reorganization under Chapter 11 of the Bankruptcy Code for PG&E, in the United States Bankruptcy Court, Northern District of California, San Francisco Division, In re Pacific Gas and Electric Company, Investigation 02-04-026, Pre-Filed Testimony, July 23, 2003, Testimony under cross-examination, September 12, 2003.

- **Entergy Louisiana, Inc.**
  Before the *Louisiana Public Service Commission, Entergy Service*, In Re: Application of Entergy Louisiana, Inc., for Authorization to Enter into Certain Contracts for the Purchase of Capacity and Energy, Docket No. U-27136, Rebuttal Testimony, April 25, 2003.

- **Entergy Services Inc.**
  Before the *Federal Energy Regulatory Commission, Entergy Services Inc., et al.*, in support of the application for approval of market-based power purchase agreements under Section 205 of the Federal Power Act. Affidavit, February 28, 2003; Affidavit, March 31, 2003; Testimony, September 2003; Testimony at deposition, November 20, 2003; Rebuttal Testimony, May 11, 2004; Deposition, May 27, 2004, and June 10-11, 2004; Testimony under cross-examination, July 19-23, 26-27, 2004.

- **Pacific Gas and Electric Company/PG&E Corporation**
  Before the *Federal United States Bankruptcy Court, Northern District of California, San Francisco Division*, In Re: Pacific Gas and Electric Company, Debtor, Federal I.D. No. 94-0742640, on the public policy concerns raised by the proposed reorganization plan of PG&E Corporation. Expert report, November 8, 2002; rebuttal report, November 26, 2002.

- **PP&L Global**
  Before the *New York Public Service Commission, Article X Siting Board*, on the economic and environmental benefits of the Kings Park Energy power plant. Prefiled direct testimony (with James Potter, Stephen T. Marron, David J. Kettler, and Thomas Conoscenti), January 2002; rebuttal testimony

(with James Potter, Stephen T. Marron, William C. Miller, Jr., N. Dennis Eryou, and Robert W. Brown), October 23, 2002.

- **Connecticut Light & Power Company**
  Before the *Federal United States District Court, District of Connecticut, Connecticut Light & Power Company v. NRG Power Marketing Inc.*, on their standard offer service wholesale sales agreement. Expert report, August 30, 2002; deposition, September 27, 2002.

- **Pacific Gas and Electric Company/PG&E Corporation**
  Before the *Federal Energy Regulatory Commission, in the Matter of Pacific Gas and Electric Company, PG&E Corporation, on behalf of its Subsidiaries Electric Generation LLC, ETrans LLC, and GTrans LLC,* on the public benefits of the application seeking approval under Section 203 of the Federal Power Act and Section 12 of the Natural Gas Act for various actions relating to restructuring of the company to emerge from bankruptcy, November 30, 2001.

- **Western Massachusetts Electric Company**
  Before the Superior Court Department of Norfolk County, Massachusetts, *Alternative Power Source, Inc., v. Western Massachusetts Electric Company,* Civil Action No. 00-1967, on the allocation of costs related to transmission congestion in wholesale power contract for standard offer service. Expert Report, September 19, 2001; deposition, October 15, 2001.

- **Cross-Sound Cable Company LLC**
  Before the *Connecticut Siting Council,* on the public benefits of the proposed Cross Sound Cable Project's *Application for a Certificate of Environmental Compatibility and Public Need,* Docket No. 208. Prepared direct testimony, July 23, 2001; oral testimony under cross-examination, October 24-26, 29-30, 2001.

- **Sithe New England (Sithe Edgar LLC, Sithe New Boston LLC, Sithe Framingham LLC, Sithe West Medway LLC, Sithe Mystic LLC)**
  Before the *Federal Energy Regulatory Commission, in the Matter of NSTAR Electric & Gas Corp., v. Sithe Edgar LLC, Sithe New Boston LLC, Sithe Framingham LLC, Sithe West Medway LLC, Sithe Mystic LLC, and PG&E Energy Trading,* Docket No. EL01-79-000. Affidavit comparing historical cost recovery by Boston Edison for its portfolio of fossil generation units (pre-divestiture) under rate regulation, versus Sithe's revenue recovery for these same units (post-divestiture) under market prices, June 5, 2001.

- **NRG Energy Inc. and Dynegy Holdings Inc.**
  Before the *Public Utilities Commission of Nevada*, In Re: petition of the Attorney General's Bureau of Consumer Protection to issue an Order staying further proceedings regarding divestiture of Nevada's electric generation assets and to open a docket to consider whether to issue a moratorium on divestiture in Nevada. Supplemental prepared direct testimony on behalf of Valmy Power LLC, April 6, 2001; testimony under cross-examination..

  Before the *Public Utilities Commission of Nevada*, In Re: petition of the Attorney General's Bureau of Consumer Protection to issue an Order staying further proceedings regarding divestiture of Nevada's electric generation assets and to open a docket to consider whether to issue a moratorium on divestiture in Nevada, prepared direct testimony on behalf of Reid Gardner Power LLC and Clark Power LLC, April 3, 2001; testimony under cross-examination.

- **Sithe New England, LLC**
  Before the *Federal Energy Regulatory Commission, In the Matter of Maine Public Utilities Commission and The United Illuminating Company v. ISO New England, Inc.*, affidavit on the role of price "spikes" in compensating generators for the services that they provide in the region, September 7, 2000.

- **Arkansas Electric Distribution Cooperatives**
  Before the *Arkansas Public Service Commission, In the Matter of a Generic Proceeding to Establish Uniform Policies and Guidelines for a Standard Service Package.* Prepared joint reply testimony (with Janet Gail Besser), July 21, 2000; prepared joint surreply testimony (with Janet Gail Besser), August 3, 2000.

- **TransÉnergie U.S.**
  Before the *Connecticut Siting Council*, on the public benefits of the proposed Cross Sound Cable Project. Expert report, July, 2000; prepared direct testimony, September 20, 2000; oral testimony, September 27, 2000; supplemental written testimony, December 7, 2000; oral testimony under cross-examination, December 14, 2000; oral testimony January 9-11, 2001.

- **SCS Energy Corp.**
  Before the *New York State Public Service Commission*, on the economic and environmental impact of a new combined cycle power plant in Queens, NY, June 19, 2000.

- **Reading Municipal Light Department**
  Before the *Massachusetts Energy Facilities Siting Board, Docket No. EFSB 97-4*, on the economics and need for a new natural gas pipeline, June 19, 2000; testimony under cross-examination September 19, 2000, September 21-22, 2000, October 5, 2000, and October 17, 2000.

- **Fitchburg Gas and Electric Light Company**
  Before the *Massachusetts Department of Telecommunications and Energy, Docket D.T.E. 99-66*, on gas and electric company rate design policy, testimony under cross-examination, January 14, 2000.

- **FirstEnergy Corp.**
  Before the *Public Utilities Commission of Ohio*, In the Matter of the Application of FirstEnergy Corp. on behalf of Ohio Edison Company, the Toledo Edison Company, and The Cleveland Electric Illuminating Company: for Approval of an Electric Transition Plan and for Authorization to Recover Transition Revenues (Case No. 99-1212-EL-ETP); for Approval of New Tariffs (Case No. 99-1213-EL-ATA); for Certain Accounting Authority (Case No. 99-1214-EL-AAM), on recovery of transition costs and calculation of the market value of generation assets. Joint testimony (with Dr. Scott T. Jones), December 22, 1999; supplemental testimony (with Dr. Scott T. Jones), April 4, 2000; deposition, April 7, 2000.

- **Sithe New England, LLC**
  Before the *Massachusetts Energy Facilities Siting Board, Docket EFSB 98-10*, in support of an application to construct a 540 MW gas-fired single cycle peaking power plant in Medway, Massachusetts. Prepared direct testimony, April 1999; oral testimony under cross-examination, July 27, 1999.

- **Village of Bergen, et al.**
  Before the *Supreme Court of the State of New York, Index No. 081556*, Affidavit in Response to Defendant's Submission of February 25, 1999, in *Village of Bergen, et al., Plaintiffs, v. Power Authority of the State of New York, Defendant*, March 3, 1999.

Before the *Supreme Court of the State of New York, Index No. 081556,* Affidavit in Support of Petition to Correct Rates, in *Village of Bergen, et al., Plaintiffs, v. Power Authority of the State of New York, Defendant*, October 17, 1996.

- **Sithe New England, LLC**
  Before the *Massachusetts Energy Facilities Siting Board, Docket EFSB 98-7,* in support of an application to construct a 750 MW gas-fired combined cycle power plant at the Fore River Station in Weymouth, Massachusetts (Edgar). Prepared direct testimony, February 10, 1999; oral testimony under cross-examination, July 26, 1999.

- **Sithe New England, LLC**
  Before the *Massachusetts Energy Facilities Siting Board, Docket EFSB 98-8,* in support of an application to construct a 1500 MW gas-fired combined cycle power plant at the Mystic Station in Everett, Massachusetts. Prepared direct testimony, February 10, 1999; oral testimony under cross-examination, May 25, June 2, 1999.

- **U.S. Generating Company**
  Before the *Connecticut Siting Board, Docket No. 189*, on an application to construct a new Lake Road Generating Project, September 1998. Oral testimony under cross-examination .

- **Central Hudson Gas & Electric Corporation**
  Before the *Supreme Court of New York, Index No. 255/1998, CHGE v. West Delaware Hydro Associates,* on issues relating to ratemaking treatment of costs relating to power contracts, April 13, 1998.

- **Sithe New England Holdings, LLC**
  Before the *Massachusetts Department of Telecommunications and Energy and the Massachusetts Energy Facilities Siting Board, Docket Nos. DTE98-84 and EFSB98-5,* on issues pertinent to forecast and supply planning by electric companies, September 14, 1998.

- **Sithe Energies, Inc.**
  Before the *Massachusetts Energy Facilities Siting Board, Docket No. EFSB98-3,* on issues related to the agency's rulemaking establishing a Technology Performance Standard, June 8, 1998.

  Before the *Massachusetts Energy Facilities Siting Board, Docket No. EFSB98-1,* on issues related to the agency's review of project viability as part of its review of power plant applications, March 16, 1998.

- **Pennsylvania Power & Light**
  Rebuttal testimony on codes of conduct governing affiliate relations. *Pennsylvania Public Utility Commission, Docket Nos. A-122050F0003, A-120650F0006,* testimony under cross-examination, February 17, 1998.

  Rebuttal testimony on rate unbundling and rate design issues, on consumer protection issues. *Pennsylvania Public Utility Commission, Docket No. R-00973954,* testimony under cross-examination, August 5, 1997.

Before the *Pennsylvania Public Utility Commission, Docket No. R-00973954,* on rate design, April 1, 1997.

- **Nextel Communications**
  Before the *Massachusetts Department of Public Utilities, Docket 95-59-B,* on telecommunications facility matters, testimony under cross-examination, January 1997.

- **Arizona Public Service Company**
  Before the *Arizona Corporation Commission, Docket No. U-0000-95-506,* on integrated resource planning and competition, October 1996.

- **U.S. Generating Company**
  Before the *Massachusetts Energy Facilities Siting Board, Docket 96-4,* on an application to construct a new Millennium power generating facility, testimony under cross-examination, October 1996.

- **MCI Communications, Inc.**
  Before the *Massachusetts Department of Public Utilities*, in the NYNEX interconnection docket. Opening up the Local Exchange Market to Competition: Common Themes with Retail Competition in Electricity and Natural Gas Industries, August 30, 1996.

- **Intercontinental Energy Corporation**
  Before the *New Jersey Board of Public Utilities, No. EX94120585Y,* on the Energy Master Plan Phase I Proceeding to Investigate the Future Structure of the Electric Power Industry, July 1996.

  Before the *Massachusetts Department of Public Utilities, DPU 96-100,* on the Investigation Commencing a Notice of Inquiry/Rulemaking for Electric Industry Restructuring Proceedings, July 1996.

- **Several confidential expert reports, testimonies, and depositions in confidential arbitrations and mediations.**

PUBLICATIONS, REPORTS, ARTICLES

"New England Energy Infrastructure – Adequacy Assessment and Policy Review," Prepared for The New England Energy Alliance. White Paper co-authored with Paul J. Hibbard, November, 2005.

"New energy bill doesn't do enough." Op Ed, *Boston Globe*, July 29, 2005.

"The Benefits of New LNG Infrastructure in Massachusetts and New England:
The Northeast Gateway Project," Prepared for Northeast Gateway Energy Bridge, L.L.C., and Algonquin Gas Transmission, LLC, White Paper co-authored with Paul. J. Hibbard, June 2005.

"Principles for Market Monitoring and Mitigation in PJM: A Review of Economic Principles, Legal and Regulatory Structures, and Practices of Other Regions, with Recommendations," White Paper prepared for PJM Interconnection, January 3, 2005.

"Keeping the Power Flowing: Ensuring a Strong Transmission System to Support Consumer Needs For Cost-Effectiveness, Security and Reliability – A Report of the Transmission Infrastructure Forum of the Consumer Energy Council of America," co-authored the report with CECA staff for this CECA Transmission Infrastructure Forum, January 2005.

Signatory to "Ending the Energy Stalemate: A Bipartisan Strategy to Meet America's Energy Challenges, Summary of Recommendations," Washington, DC: National Commission on Energy Policy, December 2004.

"Comments of Susan F. Tierney and Paul. J. Hibbard on their own behalf," before the *Federal Energy Regulatory Commission, in the Matters of Solicitation Processes for Public Utilities (Docket No. PL04-6-000) and Acquisition and Disposition of Merchant Generation Assets by Public Utilities (Docket No. PL04-9-000),* on the role of independent monitors and independent evaluators in public utility resource solicitations, July 1, 2004.

"Energy and Environmental Policy in the United States: Synergies and Challenges in the Electric Industry" (with Paul J. Hibbard), prepared for Le Centre Français sur les Etats-Unis (The French Center on the United States), July 2003; presentation in Paris, October, 2003.

"Supplemental Report on the Benefits of New Gas Infrastructure in New England: The Everett Extension Project" (with Charles Augustine), prepared for Algonquin Gas Transmission Company, February 5, 2003.

"The Political Economy of Long-Term Generation Adequacy: Why an ICAP Mechanism Is Needed as Part of Standard Market Design" (with Janet Gail Besser and John Farr), *The Electricity Journal,* August/September 2002.

"Siting Power Plants in the New Electric Industry Structure: Lessons California and Best Practices for Other States" (with Paul J. Hibbard), *The Electricity Journal*, June 2002.

"Siting Power Plants: Recent Experience in California and Best Practices in Other States" (with Paul J. Hibbard), prepared for The Hewlett Foundation and The Energy Foundation, February 2002.

"Economic and Environmental Benefits of the Kings Park Energy Project: System Production Modeling Report" (with Joseph Cavicchi), prepared for PPL Global, January 25, 2002.

"The Benefits of New Gas Infrastructure in New England: The Maritimes & Northeast Phase IV Pipeline Project" (with Charles Augustine), prepared for Maritimes & Northeast Pipeline, LLC, January 2002.

"Activating Ontario's Capacity Market: Design and Implementation Issues" (with Janet Gail Besser and John Farr), prepared for Sithe Energies, Inc., October 24, 2001.

White paper on "Ensuring Sufficient Capacity Reserves in Today's Energy Markets" (with Janet Gail Besser and John Farr), prepared for submission as part of comments filed by Sithe Power Marketing LLC, Sithe New England Holdings, and FPL Energy LLC, in FERC Docket No. EX01-1-000, October 17, 2001.

"The Rationale and Need for Capacity Obligations and a Capacity Market in a Restructured Ontario Electricity Industry" (with Janet Gail Besser and John Farr), prepared for Sithe Energies, Inc., September 27, 2001.

"Economic and Environmental Benefits of the Wawayanda Energy Center: System Production Modeling Report" (with Joseph Cavicchi), prepared for Wawayanda Energy Center, LLC, August 24, 2001.

"A Better CO_2 Rule," op-ed, *The New York Times*, May 16, 2001.

"Air Pollution Reductions Resulting from the Kings Park Energy Project" (with Joseph Cavicchi), prepared for PPL Global, January 24, 2001.

"Report on "Economic Benefits of Wireless Telecommunications," prepared on behalf of the New Hampshire Coalition of Wireless Carriers for the New Hampshire HB 733 Study Committee, November 13, 2000.

Expert Report: "Public Benefits of the Proposed Cross Sound Cable Project Prepared for TransÉnergie U.S. Ltd.," July 2000.

"The Benefits of New Gas Infrastructure in Massachusetts and New England: The Maritimes & Northeast Phase III Pipeline and the Algonquin Gas Transmission Company HubLine Projects" (with Wayne Oliver of Navigant Consulting), prepared for Maritimes & Northeast Pipeline, LLC and Algonquin Gas Transmission Company, October 2000.

"Production Modeling for the Astoria Project: Report on Results" (with John G. Farr), report for SCS Energy Corp., June 14, 2000.

"Observations from Across the Border: Implications for Canadian Reliability of Recent Changes in U.S. Electricity Markets and Policy," white paper for Natural Resources Canada, 1999.

"Research Support for the Power Industry" (with M. Granger Morgan), *Issues in Science and Technology*, Fall 1998.

"Maintaining Reliability in a Competitive U.S. Electricity Industry," Final Report of the Task Force on Electric System Reliability, U.S. Department of Energy, September 29, 1998.

"Regional Issues in Restructuring the Electric Industry," *The Electricity Industry Briefing Papers*, The National Council on Competition and the Electric Industry, April 1998.

"Fueling the Future: America's Automotive Alternatives" (with Philip Sharp), The American Assembly, Columbia University, Arden House, NY, September, 1995.

"Needed: Broad Perspective, Fresh Ideas," guest editorial, *The Electricity Journal*, November 1994.

Foreword in J. Raab, *Using Consensus Building to Improve Utility Regulation*, American Council for an Energy-Efficient Economy, Washington, DC, 1994

"Massachusetts' Pre-Approval Approach to Prudence in Massachusetts," *The Electricity Journal*, December 1990.

"Using Existing Tools to Pry Open Transmission—A New England Proposal," *The Electricity Journal*, April 1990.

"Sustainable Energy Strategy: Clean and Secure Energy for a Competitive Economy" (directed), National Energy Policy Plan, July 1995.

"The Domestic Natural Gas and Oil Initiative: First Annual Progress Report" (directed), U.S. Department of Energy, February 1995.

General Guidelines for Voluntary Reporting of Greenhouse Gases under Section 1605(b) of the Energy Policy Act of 1992 (directed), U.S. Department of Energy, October 1994.

"Fueling a Competitive Economy: Strategic Plan for the U.S. Department of Energy" (directed), April 1994.

"The Domestic Natural Gas and Oil Initiative: Energy Leadership in the World Economy" (directed), U.S. Department of Energy, December 1993.

"Siting Needs: Issues and Options," U.S. Department of Energy, June 1993.

"The Nuclear Waste Controversy," in D. Nelkin, *Controversy: The Politics of Technical Decisions*, Sage, 1977; 1984 (second edition).

DATAWARS: Computer Models in the Federal Government (with Kenneth L. Kraemer, Siegfried Dickhoven, and John Leslie King), Columbia University Press, 1987.

"The Evolution of the Nuclear Debate: The Role of Public Participation," *Annual Review of Energy*, 1978.

OTHER PROFESSIONAL ACTIVITIES

Member, National Academy of Sciences Committee on Enhancing the Robustness and Resilience of Electrical Transmission and Distribution in the United States to Terrorist Attack, 2005-present

Director, Electric Power Research Institute, 2005-present, 1998 to 2003

Chair of the Laboratory Direction's Division Review Panel for the Environmental Energy Technologies Division, Lawrence Berkeley National Laboratory, 2005.

Chair, Ocean Management Task Force to the Massachusetts Secretary of Environmental Affairs, 2003-2004.

Member, National Commission on Energy Policy, 2002 to present

Chair, Board of Directors, Electricity Innovations Institute, 2002 to 2004

Member, Board of Directors, Catalytica Energy Systems Inc., 2001 to present

Co-Chair, RTO Futures: Regional Power Working Group, 2001-2002

Member, Advisory Committee, Carnegie Mellon Electricity Industry Center, 2001 to present

Member, Board of Directors, Climate Policy Center, 2001 to present

Member, Florida Energy 2020 Study Commission, Environmental Technical Advisory Committee, 2001

Chair of the Board of Directors, The Energy Foundation, 2000 to present; Vice-Chair, 1999-2000; Director, 1997 to present

Chair, Board of Directors, Clean Air–Cool Planet: A Northeast Alliance, 1999 to present

Member, Policy Advisory Committee, China Sustainable Energy Project–A Joint Project of The Packard Foundation and The Energy Foundation, 1999 to present

Director, North East States Center for a Clean Air Future (formerly, Northeast States Clean Air Foundation), 1998 to present

Technical Advisor, Mid-Atlantic Area Council/PJM, Dispute Resolution Procedure, 1998 to present

Member, "ISO-New England" (Independent System Operator) Advisory Committee, 1998 to 2003

Director, The Randers Group (subsidiary of Thermo TERRATEK), 1997 - 2000

Director, MHI, Inc. (electric utility aggregator for non-profit organizations in Massachusetts), 1997 - 1999

Director, Thermo ECOTEK Corporation, 1996 - 1999

Member, United States Department of Energy, Electricity Reliability Task Force, 1996-1998

Member, Harvard Electricity Policy Group, 1993 to present

HONORS AND AWARDS

Distinguished Alumna Award, Scripps College, Claremont, CA, 1998

Award for Individual Leadership in Public Service, *The Energy Daily*, 1995

Special Recognition Award for Outstanding Contribution to the Industry, Cogeneration and Competitive Power Institute, Association of Energy Engineers, 1994

Leadership Award, National Association of State Energy Officials, 1994

Commencement Speaker and Honorary Doctorate of Laws, Regis College, Weston, MA, 1992.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND	)	
ELECTRIC COMPANY AND KENTUCKY	)	
UTILITIES COMPANY TO TRANSFER	)	CASE NO: 2005-00471
FUNCTIONAL CONTROL OF THEIR	)	
TRANSMISSION SYSTEM	)	

TESTIMONY OF
MICHAEL S. BEER
VICE PRESIDENT OF FEDERAL REGULATION & POLICY
LG&E ENERGY SERVICES INC.

Filed: November 18, 2005

1 **Q. Please state your name, business address and position.**

2 A. My name is Michael S. Beer. My business address is 220 West Main Street,
3 Louisville Kentucky 40202. I am Vice President, Federal Regulation & Policy for
4 LG&E Energy Services Inc. on behalf of Louisville Gas and Electric Company
5 ("LG&E") and Kentucky Utilities Company ("KU") (collectively "LG&E/KU" or
6 "the Companies"). A complete statement of my prior work experience is attached to
7 this testimony as Appendix A.

8 **Q. Have you previously testified before this Commission?**

9 A. Yes. I have previously testified before this Commission in several proceedings,
10 including rate proceedings and Case No. 2003-00266, this Commission's
11 Investigation into the Membership of Louisville Gas and Electric Company and
12 Kentucky Utilities Company in the Midwest Independent Transmission System
13 Operator, Inc. ("MISO").

14 **Q. What is the purpose of your testimony?**

15 A. I will explain how the Companies' application filed with the Commission today fits in
16 the context of (1) the currently open Commission proceeding relating to the
17 Companies' ongoing membership in MISO, Case No. 2003-00266, and (2) the
18 Companies' currently pending application before the Federal Energy Regulatory
19 Commission ("FERC") for approval of the same transaction that is the subject matter
20 of this Application.

21 **Q. How does the Companies' application filed today fit in the context of Case No.**
22 **2003-00266 and the Companies' recent FERC application concerning the**
23 **Companies' exit from MISO?**

1 A. The Companies' present application is the fulfillment of a commitment the
2 Companies made in Case No. 2003-00266, and complements the Companies' recent
3 FERC filing. In the Companies' Brief and Reply Brief, filed in Case No. 2003-00266
4 on September 6 and September 13, 2005, respectively, the Companies stated that they
5 would "return to this Commission for approval under KRS 278.218 for the requisite
6 authority to implement the proposed alternative [to continued MISO membership]."
7 The Independent Transmission Organization ("ITO") and Reliability Coordinator
8 ("RC") proposal ("ITO/RC") the Companies present in this application is the
9 "proposed alternative" of which they earlier wrote, and they now return to the
10 Commission to seek approval of it.

11 In Case No. 2003-00266, the Companies' testimony, cost-benefit analysis, and
12 other evidence laid the foundation for the Companies' FERC application, as well as
13 this application, by showing that the Companies and their customers can obtain
14 financial benefits while maintaining excellent transmission system reliability by
15 exiting MISO in favor of operation with a new, North American Electric Reliability
16 Council ("NERC")-certified reliability coordinator.

17 Spurred on by the evidence introduced in Case No. 2003-00266, the
18 Companies formulated a workable alternative to their continued MISO membership,
19 an alternative the Companies believed would meet KRS 278.218 requirements and be
20 acceptable to FERC: the ITO/RC proposal. Having formulated the proposal, the
21 Companies issued Requests for Proposals ("RFPs") to numerous entities -- including
22 MISO -- that might potentially serve either as the Companies' ITO or RC. Of the
23 candidates to which the Companies issued their RFPs, only the Southwest Power Pool

1 ("SPP") responded to the ITO RFP, and the Tennessee Valley Authority's ("TVA")
2 was the best response to the RC RFP. With the knowledge that those would be the
3 entities to fill the ITO and RC roles, the Companies filed their application with FERC
4 to withdraw from MISO in favor of the ITO/RC proposal. The Companies have
5 included a complete electronic copy of that application as an exhibit to their present
6 Application to this Commission (Application Exhibit 2).
7 In support of their FERC application, the Companies included the testimony
8 of Dr. Mathew J. Morey, an expert familiar to this Commission from Case No. 2003-
9 00266, and Mr. Stuart L. Goza from TVA. Dr. Morey submitted testimony in that
10 proceeding that the ITO/RC proposal would result in net cost savings for the
11 Companies, even after taking into account payment of the MISO exit fee; Dr. Morey
12 submits testimony to the same effect to this Commission today. Likewise, Mr. Goza
13 submitted testimony to FERC on the Companies' behalf, laying out why TVA, as a
14 NERC-certified reliability coordinator that already provides such services to the East
15 Kentucky Power Cooperative, Inc. ("EKPC") and the Big Rivers Electric Corporation
16 ("BREC"), is an excellent fit for Kentucky as the Companies' RC, and why the
17 Companies can continue to expect excellent transmission system reliability by using
18 TVA's RC services; he too submits similar testimony to this Commission today.
19 The ITO/RC proposal contained in the Companies' present application,
20 therefore, is the product of extensive research and contemplation, and is the
21 Companies' best alternative to MISO. The Companies present it to the Commission
22 for approval at this time so that this Commission and FERC may proceed
23 expeditiously and in tandem to approve the Companies' proposal with whatever

1 modifications are agreeable to both authorities, so that the Companies may begin to
2 realize the financial benefits of exiting MISO by April 2006.

3 **Q. What is the status of the proceeding at FERC concerning the Companies'**
4 **application to withdraw from MISO?**

5 A. On October 7, 2005, the Companies filed with FERC their application to withdraw
6 from MISO and utilize TVA as the Companies' RC and SPP as their ITO.[1] On
7 October 14, 2005, FERC issued notice of the Companies' application,[2] setting a
8 comment due date of November 15, 2005 by Errata notice.[3]

9 As of November 15, 2005, a number of persons interested in this proceeding
10 have filed motions to intervene, protest and comment. Most of the interveners'
11 comments have concerned (1) the adequacy of the exit fee and (2) transmission-
12 related issues such as rate pancaking. With respect to (1), as the Companies note
13 below, the party with which the Companies must negotiate the exit fee -- MISO -- has
14 not contested the Companies' calculation thereof. The FERC interveners'
15 transmission access and rate concerns are not relevant to this proceeding, though the
16 Companies will address them before FERC. LG&E Energy, LLC, on behalf of its
17 subsidiaries LG&E and KU, gave FERC notice on November 7, 2005 that it plans to
18 file a motion after the close of the comment period for leave to file one answer to all
19 comments and protests. The Companies presently anticipate making that filing on or
20 by November 30, 2005.

---

[1] *LG&E Energy LLC, Louisville Gas & Electric Company et al*, Docket Nos. EC06-4-000 & EC06-20-000, Application (October 7, 2005).

[2] *LG&E Energy LLC, Louisville Gas & Electric Company et al*, Docket Nos. EC06-4-000 & EC06-20-000, Notice of Filing (October 14, 2005).

[3] *LG&E Energy LLC, Louisville Gas & Electric Company et al*, Docket Nos. EC06-4-000 & EC06-20-000, Errata (October 17, 2005).

1 **Q. Has MISO petitioned for intervention in the FERC proceeding?**

2 A. Yes. MISO filed its petition for intervention and comments on the Companies'
3 application on November 15, 2005. In its extensive comments, MISO reiterates the
4 same arguments it raised before this Commission in Case No. 2003-00266, such as its
5 assertion that MISO membership provides net benefits as compared to non-MISO
6 membership, all of which the Companies rebutted in Case No. 2003-00266 before this
7 Commission. MISO further asserts that the Companies should have to pay MISO
8 costs in addition to the exit fee, such as a fee for the costs MISO and the
9 Pennsylvania-Jersey-Maryland RTO ("PJM") incur to administer the Joint Reliability
10 Coordination Agreement between MISO, PJM, and TVA. Of course, MISO's claims
11 are specious: the Companies are under no contractual obligation to pay any such
12 costs, nor has MISO made any filing before FERC or this Commission to compel the
13 Companies to pay such costs.

14 **Q. What is the status of the Companies' negotiations with MISO concerning the exit**
15 **fee that the Companies must pay if they exit MISO?**

16 A. As the letter attached hereto as MSB Exhibit 1 shows, the Companies and MISO have
17 agreed upon the formula by which the exit fee will be calculated once the date for the
18 Companies' exit becomes certain. The Companies estimate that the exit fee will not
19 exceed approximately $41 million, assuming an exit date of April 1, 2006. To the
20 Companies' knowledge, MISO has not disputed this calculation of the exit fee before
21 FERC or elsewhere.

22 **Q. Does this conclude your testimony?**

23 A. Yes, it does.

APPENDIX A

Michael S. Beer

Vice President – Federal Regulation and Policy
LG&E Energy LLC
220 West Main Street
Louisville, Kentucky 40202
(502) 627-3547

Education

Illinois Wesleyan University, B.A. in Business Administration -- 1980
The John Marshall Law School, Juris Doctor (with Distinction) -- 1987

Previous Positions

Louisville Gas and Electric Company, Louisville, KY.:
- 2000-2001 – Senior Counsel Specialist-Regulatory
- 1998 – 2000 – Senior Corporate Attorney

Illinois Power Company, Decatur, Illinois
- 1997 – 1998 – Director of Federal Regulatory Affairs
- 1995 – 1997 – Senior Attorney
- 1992 – 1995 – Attorney

Soyland Power Cooperative Inc., Decatur, Illinois
- 1998 – 1991 – Attorney
- 1982 – 1984 – Contract Buyer

Millikin University, Decatur, Illinois
- January 1996 – December 1998 – Adjunct Associate Professor of Business Law
- August 1988 – December 1995 – Adjunct Assistant Professor of Business Law

Samuels, Miller, Schroeder, Jackson & Sly, Decatur, Illinois
- 1987 – 1988 – Associate

Beerman, Swerdlove, Woloshin, Barezky & Berkson, Chicago, Illinois
- 1985 – 1987 – Law Clerk

Professional/Trade Memberships

American Bar Association
Energy Bar Association
Illinois State Bar Association

Civic Activities

Volunteers of America (Kentucky & Tennessee Chapter), Director

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Michael S. Beer**, being duly sworn, deposes and says that he is the Vice President of Federal Regulation & Policy for LG&E Energy Services Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

MICHAEL S. BEER

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18th day of November, 2005.

(SEAL)
Notary Public

My Commission Expires:
January 12, 2006

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Michael S. Beer**, being duly sworn, deposes and says that he is the Vice President of Federal Regulation & Policy for LG&E Energy Services Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

MICHAEL S. BEER

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18th day of November, 2005.

(SEAL)
Notary Public

My Commission Expires:
January 12, 2006

Michael S. Beer
Vice President
Federal Regulation and Policy

LG&E Energy, LLC
220 West Main Street
Louisville, Kentucky 40202
502-627-3547
502-627-4030 FAX
Cell Phone 502-727-8224
mike.beer@lgeenergy.com

October 6, 2005

Mr. Stephen G. Kozey
Vice President and General Counsel
Midwest Independent Transmission System Operator
701 City Center Drive
Carmel, IN 46032-7574

Re: Status of Withdrawal Discussions

Dear Steve:

Pursuant to our telephone call on October 5, 2005, I wanted to summarize what I believe to be our mutual understanding with respect to the issues described below as they pertain to LG&E's and KU's proposed withdrawal from the Midwest ISO. As we discussed, we have been concentrating primarily on the determination of a methodology for calculating the exit fee, and for identifying the process through which a transition plan will be developed as the Companies' Reliability Coordinator and its Independent Transmission Operator prepare to assume their responsibilities upon the effective date of the withdrawal from the Midwest ISO. While there are other issues to be discussed and resolved prior to that withdrawal, resolution of these issues seem to be most critical prior to the Companies' filing.

Towards that end, we very much appreciate the efforts that you have put forth thus far in preparing your estimate of the exit fee and in providing documentation in support thereof. Based on our conversations this morning, we believe the following to have been discussed and agreed to in principle:

1. Deferred Revenue Balance. The Midwest ISO has reflected as a liability on its balance sheet deferred revenue consisting of a portion of the exit fee that Exelon paid to the Midwest ISO upon its withdrawal. LG&E's and KU's understanding is that this is booked as a liability to reflect the Schedule 10 credit available to Exelon for sales made into the Midwest ISO. With respect to the Companies' exit fee, the Midwest ISO has agreed that in lieu of paying their proportionate share of this entire obligation upon withdrawal, LG&E and KU may pay their proportionate share of the actual Schedule 10 credit earned during each calendar year with payment owed to the Midwest ISO in February of the subsequent year. The obligation to pay a proportionate share of this liability will cease upon expiration of the Schedule 10 credit being available to Exelon.

2. Long-term Operating Leases. The Midwest ISO will review the extent to which there may be termination provisions in the operating leases that are included in this amount. To the extent that such provisions exist, the Midwest ISO has agreed that LG&E and KU shall only be required to pay their proportionate share of any such fees associated with early termination, the same as if the leases were terminated on the withdrawal date.

3. Post-withdrawal Credit. The Midwest ISO agreed that LG&E and KU should be eligible to receive a post-withdrawal credit for the fixed cost component of the Schedule 10, 16, and 17 rates that it would pay for sales made into the Midwest ISO market, to be capped at the amount the amount of the exit fee, all in accordance with the methodology set forth in Schedule 10-A. The actual method of calculating and implementing this credit mechanism is subject to further discussion. The duration of the credit is limited to ten (10) years in length.

4. Due Diligence. In agreeing to pay the exit fee, subject to the adjustments referenced above, the Midwest ISO has agreed that LG&E and KU shall have the right to engage in limited due diligence for the sole purpose of confirming the data provided in support of the Midwest ISO's calculation.

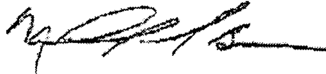
Again, we are very appreciative of the work that has gone into these discussions thus far. If acceptable to the Midwest ISO, LG&E and KU propose to represent the following in their application to FERC:

LG&E, KU and the Midwest ISO have engaged in substantial discussions over issues raised in this application. The Midwest ISO has agreed that the LG&E and KU have the contractual right to withdraw from the Midwest ISO. LG&E, KU, and the Midwest ISO have negotiated the calculation of an exit fee and a transition plan and have reached substantial agreement on the methodology for calculating the exit fee, and are each satisfied with respect to the progress made to date in putting in place an appropriate transition plan. Neither the Midwest ISO, LG&E, nor KU intend to raise either the exit fee calculation or the transition plan as a point of contention in these proceedings. These parties anticipate further discussion on these, and a wide array of other issues arising as a result of this application, and expect to enter into a definitive withdrawal agreement within the next 45 days. That agreement will be appended to this application and made a part of the record of these proceedings.

Please review the foregoing for accuracy and communicate to me any comments or issues that you may have. I am particularly interested in the language that I would propose to include in the application. Comments as soon as possible would be greatly appreciated.

If you have any questions, please call me. Thank you.

Sincerely,



Michael S. Beer

1 **Q: Please state your name, business address, and current position.**

2

3 A: My name is Stuart L. Goza. My business address is 1101 Market Street, PCC 2A,
4 Chattanooga, Tennessee 37402-2801. I am employed by the Tennessee Valley Authority
5 (TVA) in the position of Specialist, Reliability Coordinator.
6

7 **Q: What is your educational and work experience background?**

8 A: I am a registered Professional Engineer in the State of Tennessee. I received a
9 Bachelor of Science degree in Engineering (Electrical Power option) from the University
10 of Tennessee at Chattanooga in 1982. I also received a Master degree in Business
11 Administration from the University of Tennessee at Chattanooga in 2000. I have over
12 twenty-two years of work experience in the electric utility industry. I worked for
13 fourteen years at Tampa Electric Company in Tampa, Florida, in various engineering and
14 management positions in the areas of transmission planning, control area operations,
15 generation planning, and power marketing. I began employment with TVA in 1997. At
16 TVA I have worked in power marketing, control area operations, and reliability
17 coordination. I currently have supervisory responsibility over two 7 x 24 real time
18 operating desks.
19

20 **Q: What is the purpose of your testimony?**

21 A: The purpose of my testimony is to provide background regarding TVA, how TVA
22 acts as a reliability coordinator for other electric systems (including other systems in
23 Kentucky), and how TVA proposes to provide such services to Louisville Gas and
24 Electric Company (LG&E) and Kentucky Utilities Company (KU)(collectively, the
25 Companies).
26
27

28 **Q: Please summarize your testimony.**

29

30 A. As discussed herein, TVA has the requisite experience to provide services to the
31 Companies. Indeed, TVA provides similar services for entities in Kentucky today.
32 Furthermore, based on the location of the Companies' loads, and certain operating
33 conditions described herein, TVA is the logical entity to act as reliability coordinator for
34 the Companies. The Companies' loads are dispersed within TVA's Kentucky reliability
35 area already, and operations and planning will be facilitated if TVA acts as reliability
36 coordinator for them.
37

38 **Q: Please provide a brief description of TVA generally.**

39 A: TVA is a corporate agency and instrumentality of the United States government
40 created in 1933 by an act of Congress and charged with providing navigation, flood

1 control, and agricultural and industrial development, while providing electric power to
2 the Tennessee Valley region.
3
4 TVA is the largest public power company in the United States and operates one of the
5 largest electric power systems in North America. TVA is completely self-financing, and
6 meets the needs of its power and non-power operations through internally generated cash
7 flows. TVA raises capital for its power program primarily through public market
8 financings. Other "quick facts" regarding TVA are as follows.
9
10

11 - Nation's largest public power system
12 - $7.5 billion total revenues
13 - 155 billion kWh total 2004 system generation
14 - 166 billion kWh total 2004 power sales
15 - 33,189 MW power system capacity (net winter dependable)
16 - 158 power distributors, 62 directly-served industries and government agencies
17 - 99.999 percent transmission system reliability
18 - 17,000 miles of transmission lines
19 - 80,000 square-mile service area, covering parts of seven states
20 - Steward of the nation's fifth-largest river system
21 - 800 miles of commercially navigable waterways
22 - 49 dams for integrated river management
23 - $338 million in tax-equivalent payments to states and counties

24
25 The TVA transmission system is one of the largest and most reliable in North America,
26 having maintained 99.999 percent reliability over the past five years in delivering
27 electricity to customers. TVA's system is comprised of almost 17,000 miles of
28 transmission line, about 117,000 transmission line structures, and 1,032 individual
29 interchange and interconnection points, occupying over 258,000 right-of-way acres.

30 During the 2005 summer, TVA surpassed its all-time peak demand of 29,966 MW with
31 demand of 31,703 MW on July 25 and demand of 31,935 MW the following day. These
32 demands were met with no customer interruptions while also handling power from other
33 areas moving across the TVA system. TVA demand exceeded 29,000 MW for eight
34 consecutive days beginning July 20, 2005 with no customer interruptions.
35
36 TVA, as a NERC Reliability Coordinator, is responsible for monitoring and ensuring the
37 reliable operation of the bulk transmission system in a 10-state region that includes
38 Tennessee, and portions of Alabama, Georgia, Illinois, Iowa, Kentucky, Mississippi,
39 Missouri, North Carolina, and Virginia.
40
41
42 **Q: Does TVA currently provide reliability coordination service?**
43
44 **A:** Yes. TVA is one of the original "security coordinators" and began when NERC
45 first established this function. NERC later changed the name of security coordinator to

1 reliability coordinator. TVA Reliability Coordinator (TVA RC) is one of five Reliability
2 Coordinators in the Southeastern Electric Reliability Council (SERC). The TVA
3 Reliability Coordinator office is located in Chattanooga, Tennessee. The reliability
4 coordination function is performed 7 x 24, 365 days a year, at a facility referred to as the
5 Regional Operations Center.
6
7 TVA has entered into Reliability Coordination Agreements with Associated Electric
8 Membership Cooperative (AECI), Big Rivers Electric Corp. (BREC), East Kentucky
9 Power Cooperative (EKPC), and Electric Energy, Inc. (EEI) (collectively "Members")
10 and is the NERC-authorized Reliability Coordinator for each. The Members operate as
11 Balancing Authorities (BA) and/or Transmission Operators (TO) with operations in the
12 East Central Area Reliability (ECAR), Mid-America Interconnected Network, Inc.
13 (MAIN), and SERC regions.
14
15 Each respective NERC region recognizes TVA as the Reliability Coordinator for the
16 applicable Member, and TVA RC complies with each applicable Region's policies and
17 standards. In addition to its own service territory, TVA currently provides reliability
18 services to these four other Members under separate reliability services agreements.
19
20 The TVA RC comprises an area of 192,000 square miles with a population of nearly 10
21 million people.
22
23
24 **Q. Are the existing Members of the TVA RC Area satisfied with TVA's**
25 **performance as their Reliability Coordinator?**
26
27 **A.** Yes, they are. BREC and EKPC have both indicated their intentions to execute
28 new agreements with TVA to provide for additional services in conjunction with
29 reliability coordination services.
30
31
32 **Q. What are the practicalities of changing Reliability Coordinators?**
33
34 **A.** TVA, the Midwest Independent Transmission System Operator, Inc. (MISO), and
35 the Companies would agree upon a transition plan to ensure that there would be no
36 interruption in reliability coordination services to the Companies. In August 2004, the
37 TVA RC worked successfully with the MAIN Reliability Coordinator to transition EEI
38 into the TVA RC Area so that there were not any adverse impacts to reliability. In 2001,
39 BREC and EKPC changed Reliability Coordinators from the ECAR Reliability
40 Coordinator to TVA and AECI changed from the Entergy Reliability Coordinator to
41 TVA.
42
43
44 **Q: Please describe how TVA is organized internally with respect to reliability**
45 **coordination and transmission and generation scheduling and dispatch, *i.e.*,**
46 **regarding the split and separation of functions.**
47

A: TVA operates two geographically separated control centers, one for the Reliability Coordination functions and one for the Balancing Authority and Transmission Operator functions. The Regional Operations Center (ROC) is the main facility for the RC and TVA Transmission Provider and Interchange Authority functions. The System Operations Center (SOC) is the main facility for the TVA Balancing Authority (including generation dispatch) and Transmission Operations functions. To ensure continuity of both functions, the SOC backs-up the ROC and the ROC backs-up the SOC.

Both facilities are in a hot standby mode at all times. Each site utilizes the same type systems and has back-up power supplies, and fully redundant communications independent of each other. The transfer to the back-up center would be transparent to the outside world as a phone script rolls the Reliability Coordinator's numbers from the ROC to the SOC. Once the RC is in place at the SOC, a notice would be posted on the NERC Reliability Coordinator Information System (RCIS) informing everyone that TVA RC had relocated to the back-up facility.

NERC has established an Interregional Security Network (ISN) to facilitate the exchange of information needed by transmission system operators for transmission reliability purposes. The TVA RC will assist the Companies in establishing the necessary telecommunications and other facilities required for the transfer of data in accordance with applicable NERC and Regional Reliability Organization policies and procedures. The TVA RC will coordinate all required data and information to and from the ISN.

The structure and administration of the TVA RC includes a Reliability Coordination Advisory Committee (RCAC), which is composed of representatives from each entity that has executed a reliability coordination agreement designating TVA as its Reliability Coordinator. The Companies would have representation on this committee. The RCAC assists the Reliability Coordinator in the development of new reliability coordination policies and operating procedures and the modification of existing reliability coordination policies and operating procedures. In connection with these activities, RCAC members have access to the necessary data and documents maintained by the Reliability Coordinator.

In addition, TVA has established adjacent reliability coordination agreements with neighboring Reliability Areas, RTOs, and ISOs. These agreements provide for the exchange of transmission-related data and establish various arrangements and protocols for transmission planning and congestion management to enhance the reliability of their interconnected transmission systems and to facilitate efficient market operations. The Companies would have the option to participate as part of the TVA Reliability Area (TVA RA) in these agreements, procedures, and protocols.

Q. Please brief describe the JRCA between TVA, MISO, and PJM regarding improvements in reliability for Kentucky. What is the status of implementation?

A. As part of TVA RC's efforts to strengthen reliability on the electric grid, TVA executed in April 2005 a Joint Reliability Coordination Agreement (JRCA)

with MISO and PJM Interconnection, LLC (PJM). The JRCA provides for coordination of operating, planning, and congestion management protocols among the participants to ensure the reliable operation of their interconnected transmission systems.

The key components of the JRCA include:

1) The exchange of real-time and forward looking system operating and planning data to enable the parties to accurately model the systems and plan for and respond to power flows between the systems. This section of the JRCA incorporates a Data Exchange Agreement previously executed among the parties in May 2004.

2) Coordinated Congestion Management through the exchange of data on key transmission facilities (flowgates) which are impacted by the parties and proactive agreement on the respective parties' use of the available capacity on these flowgates. This will give the parties a common basis for responding to transmission service requests and for reducing flows in the event of emergencies. The actual response to system emergencies will still be according to NERC Standards. The congestion management plan is designed to:
    a) recognize the impact of parallel flows associated with the bulk transmission system;
    b) coordinate the impact of one party's operations and transmission sales on another party's system;
    c) proactively reduce the number of TLR 5s called on various flowgates by more granular management of congested flowgates; and
    d) establish curtailment priority for market flows.

3) Coordinated System Planning through the exchange of system models, interconnection requests, transmission service requests, and transmission system plans, and periodic joint planning sessions to study the infrastructure needs of the interconnected systems. Nothing in the JRCA obligates the parties to undertake system improvements, and the agreement expressly recognizes that should such upgrades be undertaken jointly, they would be under separate agreements. The process does, however, facilitate the identification of facility needs to enhance reliability of the integrated systems.

The data exchange component of the JRCA was implemented for the TVA system in August 2005. The congestion management portion was implemented in October 2005. The TVA RA (including BREC and EKPC) will be implemented in December 2005. The coordinated planning effort is evolving, and does not yet have a specific implementation date. TVA is actively involved with the MISO-PJM planning efforts.

In addition, the JRCA provides the framework for regional partnerships through which neighboring entities can coordinate operations to enhance reliability for the combined areas.

Prior to the JRCA, TVA was a recognized Reliability Coordinator by NERC and had the necessary tools, abilities, and functionalities to perform that function. The JRCA enhances that strong foundation for reliability. TVA always has been and continues to be committed to a high standard of reliability.

Q: How does TVA comply with standards of conduct?

A: Because TVA is not a public utility under Section 201(e) of the Federal Power Act, it is not subject to the requirements of Order Nos. 888, 889, 2004, and other related FERC orders. TVA has elected, however, to comply voluntarily with these FERC orders and the associated regulations, to the extent they are consistent with TVA's responsibilities under the TVA Act and other applicable laws. Accordingly, TVA has functionally separated its Marketing/Energy Affiliate from its Transmission Function and is conducting its operations in accordance with the attached Standards of Conduct.

The Standards of Conduct are intended to ensure that TVA does not use its unique access to non-public information about its own transmission system to unfairly favor its own Marketing/Energy Affiliate over others. The Standards of Conduct, along with the availability of TVA's Open Access Same-time Information System (OASIS), give potential customers access to information that will facilitate their obtaining transmission service on a non-discriminatory basis.

TVA Transmission Function Employees are located in offices in Chattanooga and in various other locations across the Tennessee Valley. Marketing/Energy Affiliate employees are located in separate offices in Chattanooga. The SOC and the ROC are staffed by Transmission Function Employees, and admittance to these facilities is controlled through card-key access. Marketing/Energy Affiliate employees are not permitted access to the SOC or the ROC in any way that differs from the access available to other TVA Transmission Customers.

The Power Trading Floor, the center for TVA's Marketing functions, is also accessible only with a card key. Of Transmission Function Employees, only load coordination specialists and their management are permitted access to the Power Trading Floor. This access is necessary to coordinate the power supply to meet native load needs and to ensure system reliability.

Q: What is TVA's record regarding provision of reliability coordination services in and outside of the Tennessee Valley?

A: TVA carries out its duties as Reliability Coordinator in a manner consistent with NERC Standards, industry practices, and applicable business processes. The TVA RC has been audited by NERC and SERC. In its role as Reliability Coordinator, TVA has maintained regional reliability and consistently met all SERC and NERC compliance measures.

The NERC Final Audit Report (dated February 11, 2003) contains the following:

"Congratulations to TVA on the excellent results of their Reliability Coordinator audit."

"...the Audit Team assesses that TVA meets the intent of the Policies and attachments that are related to the Reliability Coordinator functions."

"The Reliability Coordinators and Control Area Operators have a good working relationship and the Reliability Coordinators have the authority through the agreements with the Control Areas, to direct operation if the reliability of the power grid is in jeopardy."

"TVA's backup control center plans and facilities are excellent."

Q: In acting as Reliability Coordinator, do you believe TVA will enhance reliability for the Companies' systems?

A: Yes. The Companies' systems are heavily interconnected with the TVA RA inter-ties with BREC, EKPC, and TVA. Incorporating the Companies into the reliability region would be a logical extension of the TVA RC, given the interconnected nature of the Companies' systems with the systems of the Members. Coordinated studies with ECAR, MAIN, and the other SERC sub-regions indicate that adequate transmission transfer capability is available on all interfaces to support reliable operations.

Q: Are there any particular operating circumstances which may be improved by TVA acting as Reliability Coordinator for the Companies?

A: Yes. In real-time, TVA as the RC for the Companies will allow direct coordination of operational issues among the operating systems, as well as improved coordination and integration of planned maintenance activities for the BREC, EKPC, LG&E, and TVA systems.

Q. Heavy north-to-south transfers can burden the Companies' systems. Please describe TVA RC's ability to monitor and address this issue.

A. The existing TVA Reliability Area is subject to constraints due to transfer patterns on the Eastern Interconnection. Certain transfer patterns, such as heavy north-to-south flows, can burden the electrical systems in Kentucky and Tennessee. Because of the interconnections with BREC, EKPC, and TVA systems, the TVA RC has the tools and information necessary to monitor bulk power transfers and related flows on the Companies' systems. As necessary, TVA RC will utilize the NERC Transmission Loading Relief procedures and operating guides to control flows. TVA RC has experience in addressing these issues.

1
2 **Q: How does TVA engage in planning today, and how does providing the service**
3 **for the Companies dovetail with what TVA is doing now?**
4
5 **A:** TVA currently models the Companies' systems and facilities in its reliability
6 models in order to ensure reliability for the TVA RA. Incorporating the Companies into
7 the reliability region would be a logical extension of the TVA RA, given the
8 interconnected nature of the Companies' systems with the systems of the Members.
9 Providing this service to the Companies will enhance reliability coordination for the TVA
10 RC area by facilitating more frequent communications between EKPC, BREC, TVA, and
11 the Companies, as well as improved coordination of outages.
12
13 As Planning Authority (TVA PA), TVA will ensure a long-term (one year and beyond)
14 plan is available for adequate resources and transmission within the TVA RA. TVA will
15 integrate and assess the plans from the Companies' transmission planners and resource
16 planners to ensure those plans meet the reliability standards, and develop recommended
17 solutions to plans that do not meet those standards. As Planning Authority, TVA will
18 coordinate transmission system planning efforts with adjoining reliability areas and in
19 accordance with neighboring Planning Authorities.
20
21 In particular, TVA PA will be responsible for:
22

23 • Developing transmission and resource (demand and capacity) system models
24 to evaluate transmission system performance and resource adequacy;
25 • Developing and applying methodologies and tools for the analysis and
26 simulation of the transmission systems in the assessment and development of
27 transmission expansion plans;
28 • The analysis of resource adequacy plans;
29 • Collecting information required for planning purposes;
30 • Evaluating, from a reliability standpoint, plans for customer requests for
31 transmission service;
32 • Reviewing TTC values (one year and beyond) as appropriate; and
33 • Coordinating the integration of Planning Authority Area plans with
34 neighboring Planning Authorities to provide a broad multi-regional
35 transmission plan.
36
37 In performing these functions, TVA will:

38 • Maintain accurate computer models of the current and future Planning
39 Authority Area and external interconnected power system for internal bulk
40 system planning;
41 • Evaluate the Planning Authority bulk transmission system's ability to deliver
42 its member's generation resources to native load and maintain a prioritized list
43 of transmission capacity problems;

1 • Perform breaker duty studies of the bulk system to ensure that all bulk system
2 breakers are operated within their interrupting capability;
3 • Provide data, as required, for NERC and Regional Compliance Programs and
4 manage the steady state planning criteria and planning standards;
5 • Study alternative plans for identified bulk system problems for technical and
6 economic merit and recommend the best solutions;
7 • Maintain a chronological plan for the ten year planning horizon of the
8 additional bulk system facilities required to deliver generation resources to the
9 native load;
10 • Develop generation operational guides to maintain steady state transmission
11 reliability;
12 • Perform system-wide and regional dynamic and transient stability studies,
13 reactive analyses, exciter and Power System Stabilizer (PSS) setting studies;
14 • Support TOs with dynamic and transient stability studies, operational study
15 checking, and assistance with operating guides;
16 • Perform non-PSS/E special studies including transformer specification,
17 induced voltage, electromagnetic transients (EMT), unbalanced loadflow,
18 flicker, Mathcad/Matlab, voltage collapse, undervoltage load shedding
19 (UVLS), and optimal power flow (OPF) analyses;
20 • Compile and integrate system data with TVA system data, convert (if
21 necessary) to compatible format, and transmit data to partners subject to
22 Regional Coordination Agreements; and
23 • Ensure that TVA maintains confidentiality of all confidential system
24 information provided to it.

25

26

27 **Q: Please describe TVA's use of Advanced Network Analysis (software**
28 **applications) in its reliability operations.**

29 **A:** TVA operates two completely separate Advanced Network Analysis (ANA)
30 systems that perform state estimation and contingency analysis. Both systems are
31 independently operated and have dual-redundant computer systems located in and
32 immediately available at separate TVA control centers. Models used in both systems are
33 built weekly using equivalent external area models derived from VAST operating cases
34 maintained intra-monthly for configuration and facility changes within the region.
35
36 The ANA used by TVA Transmission Operations is a Siemens product, version TG8000,
37 Rev 7.3. It covers the region served over the TVA transmission system and includes
38 parts of the neighboring utility systems adjacent to TVA that are directly impacted by or
39 have significant influence on flows inside the TVA transmission system. Portions of the
40 Companies' system are included in this analysis. The model used in the TO ANA
41 currently has 1400 substations with 2200 buses. It solves in real-time and runs 500
42 contingencies every 15 minutes. Only minor expansions of this model are planned over
43 the next two years.

1
2 The ANA used by the TVA RC is an AREVA product, e-terra*platform* 2.2 with e-
3 terra*habitat* 5.4.0. The model used in this system covers a much broader area and
4 currently includes all of TVA, AECI, BREC, EKPC, EEI, most of the Companies'
5 facilities, and parts of other utility systems adjacent to these areas that impact
6 transmission system operations for these utilities. The model size currently has 3600
7 substations with 5100 buses. It solves in real-time and runs 840 contingencies every 5
8 minutes. Changes are planned to include real-time phasor measurements in this model,
9 expand the observable areas further into the neighboring systems for better wide-area
10 coverage, and activate routine use of the real-time transient and voltage stability analysis
11 available in this system.
12
13
14 **Q: Overall, do you believe that TVA is a "good fit" to act as the Companies'**
15 **Reliability Coordinator?**
16
17 **A:** Yes, I do. As noted above, TVA has the requisite experience and provides similar
18 services for entities in Kentucky today. Furthermore, based on the location of the
19 Companies' loads and certain operating conditions, it makes logical sense for TVA to act
20 as reliability coordinator for the Companies. The Companies' loads are dispersed within
21 TVA's Kentucky reliability area already, and operations and planning will be facilitated
22 with TVA as the Companies' Reliability Coordinator.
23
24
25 **Q: Does this conclude your testimony?**
26
27 **A.** Yes, it does.
28

TENNESSEE VALLEY AUTHORITY STANDARDS OF CONDUCT
for Transmission Providers
August 2005 Edition

1. Regulatory sources.

These Standards of Conduct are adapted from FERC Order No. 2004, Standards of Conduct for Transmission Providers, issued November 25, 2003; FERC Order No. 2004-A, issued April 16, 2004; FERC Order No. 2004-B, issued August 2, 2004; FERC Order No. 2004-C, issued December 21, 2004, and FERC Order No. 2004-D, issued March 23, 2005.

2. General principles.

(a) TVA's employees engaged in the Transmission Function must function independently from the employees of TVA's Marketing/Energy Affiliate.

(b) TVA shall treat all Transmission Customers, affiliated and non-affiliated, on a non-discriminatory basis, and, to the extent consistent with the TVA Act and other applicable law, shall not operate its transmission system to preferentially benefit its Marketing/Energy Affiliate.

3. Definitions.

(a) *Transmission Provider* means:

> (1) Any public utility that owns, operates, or controls facilities used for the transmission of electric energy in interstate commerce; or
>
> (2) Any interstate natural gas pipeline that transports gas for others pursuant to subpart A of 18 C.F.R. Part 157 or subparts B or G of 18 C.F.R. Part 284.
>
> (3) A Transmission Provider does not include a natural gas storage provider authorized to charge market-based rates that is not interconnected with the jurisdictional facilities of any affiliated interstate natural gas pipeline, has no exclusive franchise area, no captive rate payers, and no market power.

(b) *Affiliate* means a person which controls, is controlled by, or is under common control with, another person. An Affiliate includes a division that operates as a functional unit.

(c) *Control* (including the terms "*controlling*," "*controlled by*," and "*under common control with*") as used in 18 C.F.R. § 250.16 and in these Standards of Conduct, includes, but is not limited to, the possession, directly or indirectly and whether acting alone or in conjunction with others, of the authority to direct or cause the direction of the management or policies of a company. A voting interest of 10 percent or more creates a rebuttable presumption of control.

(d) *Energy Affiliate* means TVA's Bulk Power Trading unit. This functional unit meets the definition of an *Energy Affiliate*, which means an Affiliate of TVA that:

> (1) Engages in or is involved in transmission transactions in U.S. energy or transmission markets;
>
> > (i) The term "engages in" transmission transactions means the Affiliate holds (or is requesting) transmission capacity on a Transmission Provider as a customer or buys or sells transmission capacity in the secondary capacity market.
> > (ii) The term "involved in" transmission transactions means acting as agent, asset manager, broker, or in some other fashion managing, controlling, or aggregating capacity on behalf of Transmission Customers.

(iii) Other transmission-related interactions between a Transmission Provider and its interconnected Affiliate, such as exchanging operational data relating to interconnection points, and communications relating to maintenance of interconnected facilities, are not included in the definition of the terms "engaged in" or "involved in."

or

(2) Manages or controls transmission capacity of a Transmission Provider in U.S. energy or transmission markets; or

(3) Buys, sells, trades, or administers natural gas or electric energy in U.S. energy or transmission markets; or

(4) Engages in financial transactions relating to the sale or transmission of natural gas or electric energy in U.S. energy or transmission markets.

(5) An Energy Affiliate does not include an affiliate that purchases natural gas or energy solely for its own consumption. "Solely for its own consumption" does not include the purchase of natural gas or energy for the subsequent generation of electricity.

(e) *Marketing* means a sale for resale of natural gas in interstate commerce or the sale for resale of electric energy in interstate commerce to third parties outside the TVA area, including the purchase for such resale of electric energy from third parties. TVA's sales to TVA distributors and directly-served customers are not Marketing for purposes of these Standards of Conduct.

(f) *Transmission* means electric transmission service (network or point-to-point), reliability service, ancillary transmission services, or the interconnection with transmission facilities.

(g) *Transmission Customer* means any Eligible Customer under TVA's Transmission Service Guidelines or designated agent that can or does execute a transmission service agreement or can or does receive transmission service, including all persons who have pending requests for transmission service or for information regarding transmission.

(h) *Open Access Same-time Information System or OASIS* refers to the Internet location where a transmitting utility posts the information, by electronic means, required of public utilities by 18 C.F.R. Part 37.

(i) *Employee* means an employee, contractor, consultant, or agent.

(j) *Transmission Function* means transmission system operations or reliability functions, including, but not limited to, day-to-day duties and responsibilities for planning, directing, organizing, or executing transmission-related operations.

(1) There may be Transmission Function Employees who do not engage in "day-to-day" Transmission Function activities. When considering the responsibilities of a particular officer, consider whether he or she participated in directing, organizing, or executing transmission or wholesale merchant functions, including whether he or she had direct access to transmission or reliability information on the energy management system or other databases and whether he or she approved contracts or transactions.

(k) *Marketing Affiliate* means an Affiliate as that term is defined in § 3(b) or a unit that engages in Marketing activities as that term is defined at § 3(e), specifically TVA's Bulk Power Trading unit.

4. Independent functioning.

(a) Separation of functions.

(1) Except in emergency circumstances affecting system reliability, TVA's Transmission Function Employees must function independently of TVA's Marketing/Energy Affiliate employees.

(2) Notwithstanding any other provisions in this section, in emergency circumstances affecting system reliability, TVA may take whatever steps are necessary to keep the system in operation. TVA must report on the OASIS each emergency that resulted in any deviation from the Standards of Conduct, within 24 hours of such deviation.

(3) TVA is prohibited from permitting the employees of its Marketing/Energy Affiliate:

(i) To conduct Transmission Functions; and

(ii) To have access to the System Operations Center or Regional Operations Center that differs in any way from the access available to other Transmission Customers.

(4) The TVA Transmission Function is permitted to share support employees and field and maintenance employees with TVA's Marketing/Energy Affiliate.

(i) Among permitted shared support employees are personnel performing various non-operating functions such as legal, accounting, and information services.

(ii) Shared field and maintenance employees may include field supervisors who do not take part in advance planning for facility shut downs or are not involved in shutting down facilities based on economic reasons alone.

(iii) The field and maintenance personnel exception allows sharing of employees who would not be in a position to give undue preferences to the Marketing/Energy Affiliate either by sharing information or through physical control of facilities.

(iv) If an employee is directing, organizing, or executing either Transmission Functions or Marketing functions, the employee is not a "support" employee, but rather is either a Transmission Function Employee or a Marketing function employee.

(5) The TVA Transmission Function is permitted to share with its Marketing/Energy Affiliate senior officers and directors who are not "Transmission Function Employees" as that term is defined in §§ 3(i) and (j). TVA may share non-public transmission information covered by §§ 5(a) and (b) with its shared senior officers and directors provided that they do not participate in directing, organizing, or executing transmission system operations or marketing functions; or act as a conduit to share such information with the Marketing/Energy Affiliate.

(6) The TVA Transmission Function is permitted to share risk management employees that are not engaged in Transmission Functions or sales or commodity functions with its Marketing/Energy Affiliate.

(b) Identifying Affiliates on the public Internet.

(1) TVA shall post the name and address of its Marketing/Energy Affiliate on its OASIS.

(2) TVA shall post on its OASIS a complete list of the facilities shared by the TVA Transmission Function and TVA's Marketing/Energy Affiliate, including the types of facilities shared and their addresses.

(i) The types of facilities that are required to be posted are office buildings and computer systems, for example.

(ii) TVA need not post notice of shared physical field infrastructure such as substations or other transmission equipment that does not house any employees.

(3) TVA shall post comprehensive organizational charts showing:

(i) The organizational structure of TVA with the relative position in the corporate structure of the TVA Transmission Function and the Marketing/Energy Affiliate;

(ii) For the Transmission Function and Marketing/Energy Affiliate: the business units, job titles and descriptions, and chain of command for all positions, including officers and directors, with the exception of clerical, maintenance, and field positions. The job titles and descriptions must include the employee's title, the employee's duties, whether the employee is involved in the Transmission Function or Marketing, and the name of the supervisory employees who manage non-clerical employees involved in the Transmission Function or Marketing.

(A) Where the Transmission Function shares support, field, or maintenance employees with its Marketing/Energy Affiliate, the posting shall clearly identify the business units for the shared employees and provide a description of the shared services functions or responsibilities, but is not required to provide names or job descriptions for the shared employees.

(B) TVA is not required to post detailed organizational charts for the shared non-Transmission Function support units, but these units must be identified as shared in the organizational chart that identifies the corporate structure of the Transmission Function and its relative position to TVA as a whole and its Marketing/Energy Affiliate.

(iii) For any TVA employees who are engaged in both the Transmission Function and the Marketing functions or who are engaged in the Transmission Function for TVA and are employed in the Marketing/Energy Affiliate, TVA must post: the name of the business unit within the Marketing/Energy Affiliate, the organizational structure in which the employee is located, the employee's name, job title, and job description in the Marketing/Energy Affiliate, and the employee's position within the chain of command of the Marketing/Energy Affiliate.

(A) Section 4(b)(3)(iii) is intended to identify any shared employees of TVA who have received exemptions from the independent functioning requirements of these Standards of Conduct.

(iv) TVA shall update the information on its OASIS required by §§ 4(b)(1), (2), and (3) of these Standards of Conduct within 20 business days of any change and post the date on which the information was updated.

(c) Transfers. Employees of the TVA Transmission Function and Marketing/Energy Affiliate are not precluded from transferring among such functions as long as such transfer is not used as a means to circumvent the Standards of Conduct. Notices of any employee transfers between the Transmission Function, on the one hand, and the Marketing/Energy Affiliate, on the other, must

be posted on the OASIS. The information to be posted must include: the name of the transferring employee, the respective titles held while performing each function (i.e., on behalf of the TVA Transmission Function or Marketing/Energy Affiliate), and the effective date of the transfer. The information posted under this section must remain on the OASIS for 90 days.

(1) Employees transferring to the Marketing/Energy Affiliate may not use in their new jobs transmission information that is not publicly available.

(d) Books and records. Because its Marketing/Energy Affiliate is not a separate corporate entity, but rather a division that operates as a functional unit, TVA's Marketing/Energy Affiliate is not required to maintain separate books and records to comply with the Standards of Conduct. TVA shall maintain its books of account and records separately from those of any Energy Affiliates that are separate corporate entities.

(e) Written procedures.

(1) By April 1, 2005, TVA will post on the OASIS a plan and schedule for implementing the Standards of Conduct.

(2) These Standards of Conduct will be effective on April 1, 2005.

(3) TVA will post on the OASIS current written procedures implementing the Standards of Conduct in such detail as will enable customers and FERC to determine that TVA is in compliance with the requirements of these Standards of Conduct.

(4) TVA will distribute the written procedures to all TVA Transmission Function Employees and employees of the Marketing/Energy Affiliate.

(5) TVA shall train officers and directors as well as shared support employees with access to non-public transmission information or non-public information concerning gas or electric Marketing functions. TVA shall require each employee to sign a document or certify electronically signifying that he or she has participated in the training.

(6) TVA designates a Chief Compliance Officer for Transmission Standards of Conduct who is responsible for Standards of Conduct compliance. This designation is posted on TVA's OASIS.

5. Non-discrimination requirements.

(a) Information access.

(1) TVA shall ensure that any employee of its Marketing/Energy Affiliate may have access to only that information available to TVA's Transmission Customers (i.e., information posted on the OASIS), and shall not have access to any non-public information about TVA's transmission system that is not available to all users of the OASIS.

(2) TVA shall ensure that any employee of its Marketing/Energy Affiliate is prohibited from obtaining non-public information about TVA's transmission system (including, but not limited to, non-public information about available transmission capability, price, curtailments, storage, ancillary services, balancing, maintenance activity, capacity expansion plans, or similar non-public information) through access to non-public information not posted on the OASIS or that is not otherwise also available to the general public without restriction.

(b) Prohibited disclosure.

(1) A TVA Transmission Function Employee may not disclose to TVA's Marketing/Energy Affiliate any non-public information concerning the TVA transmission system or the transmission system of another (including, but not limited to, non-public information received from non-affiliates or non-public information about available transmission capability, price, curtailments, storage, ancillary services, balancing, maintenance activity, capacity expansion plans, or similar non-public information) through communications conducted off the OASIS or through access to non-public information, whether or not posted on the OASIS, that is not contemporaneously available to the public.

(2) TVA may not share any non-public information, acquired from non-affiliated Transmission Customers or potential non-affiliated Transmission Customers, or developed in the course of responding to requests for transmission or ancillary service on the OASIS, with employees of its Marketing/Energy Affiliate, except to the limited extent information is required to be posted on the OASIS in response to a request for transmission service or ancillary services.

(3) If a TVA employee discloses non-public information in a manner contrary to the requirements of §§ 5(b)(1) and (2) of these Standards of Conduct, TVA must immediately post such information on the OASIS.

(i) The Transmission Function may share certain information with its Marketing/Energy Affiliate covered under § 5(b)(8) without triggering the posting requirements under § 5(b)(3).

(4) A non-affiliated Transmission Customer may voluntarily consent, in writing, to allow TVA's Transmission Function to share that customer's information with TVA's Marketing/Energy Affiliate. TVA must post notice of that consent on the OASIS along with a statement that TVA did not provide any preferences, either operational or rate-related, in exchange for that voluntary consent.

(5) TVA is not required to contemporaneously disclose to all Transmission Customers or potential Transmission Customers information covered by § 5(b)(1) of these Standards of Conduct if it relates solely to TVA's Marketing/Energy Affiliate's specific request for transmission service.

(6) TVA may share any non-public generation information necessary to perform generation dispatch with its Marketing/Energy Affiliate that does not include specific information about individual third party transmission transactions or potential transmission arrangements.

(7) Neither TVA nor an employee of TVA is permitted to use anyone as a conduit for sharing non-public information covered by the prohibitions of § 5(b)(1) and (2) of these Standards of Conduct with its Marketing/Energy Affiliate. TVA may share non-public information covered by §§ 5(b)(1) and (2) with shared support employees, provided that such employees do not act as a conduit to share that information with the Marketing/Energy Affiliate.

(8) The TVA Transmission Function is permitted to share non-public operating information necessary to maintain the operations and reliability of the transmission system with its Marketing/Energy Affiliate.

(i) This exception allows sharing of that information necessary to operate and maintain the transmission system on a day-to-day basis to the extent consistent

with the TVA Act and other applicable law; it does not include transmission or marketing information that would give TVA's Marketing/Energy Affiliate undue preference over TVA's non-affiliated customers.

(ii) The functional separation requirement of § 4 does not limit the sharing of operational information permissible under § 5(b)(8). Sharing of information necessary to maintain the operations of the transmission system under § 5(b)(8) does not compromise the independent functioning required in § 4.

(9) TVA employees shall maintain the confidentiality of non-public interconnection information in accordance with TVA's interconnection process and the relevant contracts relating to the particular interconnection(s).

(c) Implementation of TVA's Transmission Service Guidelines.

(1) TVA shall strictly enforce all provisions of its Transmission Service Guidelines (Guidelines) relating to the sale or purchase of open access transmission service, if these Guidelines provisions do not permit the use of discretion.

(2) TVA shall apply all Guidelines provisions relating to the sale or purchase of open access transmission service in a fair and impartial manner that treats all Transmission Customers in a non-discriminatory manner (to the extent consistent with the TVA Act and other applicable law), if these Guidelines provisions permit the use of discretion.

(3) TVA shall process all similar requests for transmission in the same manner and within the same period of time.

(4) TVA shall maintain a written log detailing the circumstances and manner in which it exercised its discretion under any terms of the Guidelines. The information contained in this log is to be posted on the OASIS within 24 hours of when TVA exercises its discretion under any terms of the Guidelines.

(i) A posting need not reveal confidential customer information or sensitive business information. Rather, TVA shall post information regarding the date of its action and the type of discretion it exercised (*e.g.*, a creditworthiness determination) without revealing the name of the customer.

(5) To the extent consistent with the TVA Act and other applicable law, TVA shall not, through its Guidelines or otherwise, give preference to its Marketing/Energy Affiliate, over any other Transmission Customer in matters relating to the sale or purchase of transmission service (including, but not limited to, issues of price, curtailments, scheduling, priority, ancillary transmission services, or balancing).

(d) Discounts.

Any offer of a discount for any transmission service made by TVA must be posted on the OASIS contemporaneous with the time that the offer is contractually binding on both parties. TVA shall post all discounts, not just discounts to its Marketing/Energy Affiliate. The posting must include: the name of the Transmission Customer involved in the discount and whether it is a Marketing/Energy Affiliate or whether a Marketing/Energy Affiliate is involved in the transaction; the rate offered; the maximum rate; the time period for which the discount would apply; the quantity of power upon which the discount is based; the delivery points under the transaction; and any conditions or requirements applicable to the discount. The posting must remain on the OASIS for 60 days.

IMPLEMENTING THE STANDARDS OF CONDUCT

I. INTRODUCTION

TVA is not a public utility under Section 201(e) of the Federal Power Act (FPA) and, thus, is not directly subject to the requirements of Orders No. 888, 889, 2004, and other related FERC orders. TVA has elected, however, to comply voluntarily with these FERC orders and the associated regulations, to the extent they are consistent with TVA's responsibilities under the TVA Act and other applicable law. Accordingly, TVA has functionally separated its Marketing/Energy Affiliate from its Transmission Function and is conducting its operations according to the Standards of Conduct.

The Standards of Conduct are intended to make sure that TVA, as an owner of electric transmission facilities, does not use its unique access to non-public information about its own transmission system to unfairly favor its own Marketing/Energy Affiliate over others. The Standards of Conduct, along with the availability of TVA's Open Access Same-time Information System (OASIS), give potential customers access to information that will facilitate their obtaining transmission service on a non-discriminatory basis.

The Standards of Conduct are subject to modification or replacement by TVA from time to time to address changing regulatory requirements or the changing needs of the TVA transmission system. TVA's Standards of Conduct are available through TVA's OASIS site.

II. BACKGROUND

TVA is a federal corporation with responsibilities including flood control, navigation, power production and transmission, agriculture, and economic development. The area served with TVA power covers roughly 80,000 square miles (200,000 square kilometers) in the southeastern United States, including nearly all of Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina, and Virginia. TVA manages the Tennessee River, the nation's fifth-largest river system. TVA's transmission system includes approximately 17,000 miles (27,000 kilometers) of transmission lines. TVA operates 11 coal-fired plants, three nuclear plants, 29 hydroelectric plants, a pumped-storage plant, solar and wind energy sites, and numerous combustion turbines at various locations. Together they provide over 33,000 megawatts of generating capacity. TVA provides power to numerous municipal and cooperative power distributors and directly serves a number of federal and industrial customers in the Valley, supplying the electricity needs of approximately 8,500,000 people. In addition, TVA provides third-party transmission service and sells power and energy that are surplus to the needs of the area to certain neighboring utilities in accordance with the provisions of the TVA Act.

TVA's Board of Directors has decision-making authority and responsibility over the transmission and sale of power. The TVA Board is accountable to Congress and the President. This accountability dictates that the TVA Board have a direct decision-making role in some issues and be free to provide information to the Executive Branch and Congress consistent with its legal responsibilities. The TVA Board is not engaged in any Transmission Functions or Marketing.

TVA has voluntarily implemented open access transmission service (under TVA's Transmission Service Guidelines), an OASIS, and the Standards of Conduct. The following describes how the Standards of Conduct are being applied and implemented.

III. DESCRIPTION OF SEPARATION

A. Description of Functional Separation

TVA's organizational charts and employee job descriptions posted on the OASIS identify employees engaged in Transmission Functions and those working in Marketing/Energy Affiliates, as well as showing the chain of command. Employees engaged in these functions are located in two TVA organizations: Transmission/Power Supply and Bulk Power Trading.

Employees who are engaged in Transmission Functions are functionally separated from employees working in Marketing/Energy Affiliate.

TVA also has support employees who do not plan, direct, organize, or execute either Transmission Functions or Marketing functions. A support employee may support both the Transmission Function and Marketing functions. Support employees include attorneys and regulatory staff as well as information technology, finance, accounting, billing, and operational analysis employees. Support employees are identified as such on the organizational charts posted on the OASIS. If a support employee obtains non-public information about TVA's transmission system or non-public information acquired or developed in connection with requests for transmission service restricted by TVA's Standards of Conduct, he or she may not disclose such information to Marketing/Energy Affiliate employees. Support employees are prohibited from acting as conduits for improper communications between Transmission Function Employees and Marketing employees.

TVA requires officers and Directors as well as its employees performing a Transmission Function, a Marketing function, or a support role for those functions to participate in training and certify that they have been trained regarding the Standards of Conduct requirements if they have access to non-public transmission information or non-public information concerning gas or electric Marketing functions.

Regulatory staff employees monitor employee additions and transfers through an internal human resources database in order to update organizational charts and job descriptions and post transfer notices on the OASIS. Transmission Operations employees update transmission rates, discounts, and discretionary information as needed on the OASIS. Such information is available through OASIS for three years.

B. Description of Physical Separation

TVA Transmission Function Employees are located in offices in Chattanooga, Tennessee, and in various other locations across the Tennessee Valley. Marketing/Energy Affiliate employees are located in offices in Chattanooga.

The TVA System Operations Center and the Regional Operations Center are staffed by Transmission Function Employees in Chattanooga. Admittance to these facilities is controlled through card-key access. Marketing/Energy Affiliate employees are not permitted to have access to the System Operations Center or the Regional Operations Center that differs in any way from the access available to other Transmission Customers.

The Power Trading Floor, the center for TVA's Marketing, is also accessible only with a card key. Of Transmission Function Employees, only load coordination specialists and their management are permitted access to the Power Trading Floor. This access is necessary to coordinate the power supply to meet native load needs and to ensure system reliability. The Bulk Power Trading Vice President's office must clear anyone without card-key access before entry to the Power Trading Floor is permitted.

C. Description of Security for Transmission Function Information Access

This section describes TVA's computer and telecommunications systems used by employees engaged in Transmission Functions and those used by employees in the Marketing/Energy Affiliate. This section also addresses the security measures TVA has implemented to make sure that the Marketing/Energy Affiliate employees do not have access, in contravention of the Standards of Conduct, to non-public information about TVA's transmission system or non-public information acquired or developed in connection with requests for transmission service.

1. General

As part of their daily activities, information technology, billing, operational analysis, and telecommunications support employees access computer networks containing non-public information about TVA's transmission system and non-public information acquired or developed in connection with requests for transmission service. These employees shall not act on or share this information with Marketing/Energy Affiliate employees. The purpose for their access is solely to make sure that TVA computer systems, telecommunications, billing, and databases are operating effectively and to carry out billing, operational analysis, and related tasks. These employees, as well as other support employees, are bound by the Standards of Conduct prohibition against disclosing to Marketing/Energy Affiliate employees non-public information about TVA's transmission system or non-public information acquired or developed in connection with requests for transmission service.

2. Special Control Area Systems and Information

TVA uses many computer systems to carry out its operational responsibilities. These systems include the Supervisory Control and Data Acquisition (SCADA) System, the Energy Management System (EMS), the Block Pricing Compendium (BPC), the Operations Simulation (OPSYM), the Transmission Energy Scheduler (TES), as well as others. TVA provides security for the information in these systems, so that information about TVA's transmission system is made available to Marketing/Energy Affiliate employees only at the time and in the same form that it is made available to the public at large. This security is provided by computer system firewalls, by individual user account password access to the TVA wide-area network, and by card-key access to the System Operations Center and the Regional Operations Center.

3. OASIS System and Information

Transmission reservations are handled using the OASIS, which is found on the OATI OASIS service. Only the transmission operations employees (who are responsible for handling transmission reservations and scheduling for the TVA transmission system), the transmission system reliability employees (who are responsible for the Reliability Coordinator function), and billing employees have access to non-public information on the OASIS system that is not available to all Transmission Customers under normal access to OASIS. Consistent with industry practice, the billing group reviews transmission service reservations for the month using data from the OASIS to resolve billing issues. Marketing/Energy Affiliate employees have access to the OASIS system on the same basis as any other Transmission Customer.

4. Corporate Computer Networks

TVA's corporate computer systems contain data relating to customers, revenue, transmission system usage, transmission engineering data, transmission capacity planning studies, transmission contracts, energy contracts, and forecasting data. Organizational routing codes, user IDs, and password controls are used to limit access to the data. The TVA corporate network administrators and the corporate firewall administrators conduct periodic security audits to preclude unauthorized access to non-public information. Marketing/Energy Affiliate employees cannot access non-public information about TVA's transmission system or non-public information

acquired or developed in connection with requests for transmission service, including non-public transmission usage information (except information pertaining to their own transactions), other non-public Transmission Customer information, transmission engineering data, and transmission capacity planning studies.

TVA employees share common intra-office computer systems including LAN, e-mail, and an intranet. TVA employees engaged in Transmission Functions and those employed in the Marketing/Energy Affiliate are aware of the Standards of Conduct provisions and are prohibited from using these common systems as a way to circumvent these rules.

5. Special Telephone Systems and Recording

Telephone systems are segregated by different line access for Transmission Function Employees and Marketing/Energy Affiliate employees. TVA is recording telephone calls involving the system operators (transmission, scheduling, and generation), reliability engineers, reliability specialists, power traders, and power marketers. The Marketing function has a separate telephone system (and separate tapes for recording) from the System Operations Center and the other Transmission Function Employees. Employees working in the Marketing/Energy Affiliate cannot access the taped recordings of Transmission Function Employees.

003743825

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND	)	
ELECTRIC COMPANY AND KENTUCKY	)	
UTILITIES COMPANY TO TRANSFER	)	CASE NO: 2005-00471
FUNCTIONAL CONTROL OF THEIR	)	
TRANSMISSION SYSTEM	)	

TESTIMONY OF
BRUCE A. REW
EXECUTIVE DIRECTOR, CONTRACT SERVICES
SOUTHWEST POWER POOL

Filed: November 18, 2005

1 **Q. Please state your name, business address and position.**

2 A. My name is Bruce A. Rew, Executive Director, Contract Services, Southwest
3 Power Pool, 415 North McKinley, Suite 140, Little Rock, AR 72205-3020.

4 **Q. What are your duties and responsibilities in your current position?**

5 A. I am responsible for overall management of contract services provided by
6 Southwest Power Pool, Inc (SPP). These services include the performance of
7 Independent Coordinator of Transmission (ICT) services for the Entergy system.
8 The ICT functions include Reliability Coordination, transmission service
9 evaluation and approvals, Weekly Procurement Process, and transmission
10 planning activities including a stakeholder process. I will also provide the initial
11 management oversight of the development of the Independent Transmission
12 Operator (ITO) functions for Louisville Gas and Electric Company (LG&E) and
13 Kentucky Utilities Company (KU).

14 **Q. Please describe your educational and professional background.**

15 A. I am a graduate of Louisiana Tech University holding a Bachelor's degree in
16 Electrical Engineering and a Master's degree in Operations Management from the
17 University of Arkansas. I have been employed at SPP since 1990 in several
18 engineering and management positions and promoted to Executive Director,
19 Contract services in 2005. Prior to joining SPP, I served in the United States Air
20 Force on a nuclear missile launch crew. Also, I am a registered professional
21 engineer in the state of Arkansas.

22 **Q. Have you previously testified before any regulatory agencies?**

1 A. Yes. I have testified before the Federal Energy Regulatory Commission on SPP
2 Regional Transmission Organization matters. I have also testified before the
3 Louisiana Public Service Commission on the proposed Entergy ICT activities.
4 Q. **What is the purpose of your testimony?**
5 A. I will first describe the SPP RTO and then provide information on the capabilities
6 and qualifications of SPP to perform the functions of an ITO for LG&E and KU.
7 The specific ITO roles and responsibilities that I will discuss are (1)
8 independence; (2) the ITO's role in taking transmission service requests and in
9 setting ATC and TTC; (3) oversight of generator interconnections; and (4)
10 oversight of the stakeholder process. This testimony will provide information and
11 answer questions about SPP, its interests, capabilities, and resources.
12 Q. **Please describe the Southwest Power Pool, Inc.**
13 A. SPP is an Arkansas non-profit corporation with its principal place of business in
14 Little Rock, Arkansas. SPP was formed in 1941 by a voluntary, inter-company
15 agreement between 11 utilities, in response to critical national defense needs
16 during World War II. In 1968, SPP became a regional reliability council, joining
17 with several other such organizations, to form the predecessor to the North
18 American Electric Reliability Council ("NERC"), and in 1997, became the
19 security coordinator for the region.
20
21 SPP currently has 45 Members, serving more than 4 million customers in a
22 250,000 square-mile area covering all or part of the states of Arkansas, Kansas,
23 Louisiana, Missouri, New Mexico, Oklahoma, and Texas. SPP's Members

1 include 13 investor-owned utilities, seven municipal systems, eight generation
2 and transmission cooperatives, two state authorities, three independent power
3 producers and 12 power marketers.
4
5 Since 1998, SPP has administered a regional open-access transmission service
6 Tariff for its Member transmission owners. Under that Commission-approved
7 Tariff, SPP currently provides firm and non-firm point-to-point transmission
8 service and network transmission service.
9
10 SPP been recognized as a Regional Transmission Organization (RTO) by the
11 Federal Energy Regulatory Commission (FERC). SPP as an RTO has
12 implemented a regional planning process, regional transmission cost allocation for
13 transmission upgrades, and is currently developing an energy imbalance market
14 scheduled for implementation in May of 2006.
15 Q **Have Louisville Gas and Electric Company and Kentucky Utilities Company**
16 **selected SPP to serve as the Independent Transmission Organization ("ITO")**
17 **for their transmission systems?**
18 A. Yes. Louisville Gas and Electric Company and Kentucky Utilities Company
19 selected SPP to serve as the ITO through a competitive bid process in which SPP
20 submitted a proposal for the provision of ITO services.
21 Q. **Does SPP have an agreement with LG&E and KU to serve as their ITO?**

1 **A.** LG&E and KU have filed a draft ITO agreement with the ITO proposal at the
2 FERC. Negotiations between SPP, LG&E and KU regarding the specific details
3 of the ITO agreement are currently underway.

4 **Q. Can you provide a copy of the ITO agreement with your testimony?**

5 **A.** Yes, I have attached a copy of the initial proposed ITO contract filed with the
6 Federal Energy Regulatory Commission in LG&E and KU's initial ITO
7 application.

8 **Q. What services will SPP provide as the ITO?**

9 **A.** The specific services I will discuss in more detail that SPP will provide as the ITO
10 include, transmission service processing consisting of OASIS administration,
11 ATC calculations, and acceptance and denial of transmission reservations. In
12 addition, the ITO will provide oversight to the generation interconnection requests
13 made on the LG&E and KU systems. The ITO will also perform administration
14 and oversight of a stakeholder process. SPP will provide all of these ITO services
15 in an independent manner to LG&E and KU and its customers.

16 **INDEPENDENCE**

17 **Q. Will SPP be able to satisfy the independence requirements of the proposed**
18 **ITO?**

19 **A.** Yes. The hallmark of being an Independent Transmission Organization is, of
20 course, independence. In this case, the ITO must be independent of LG&E and
21 KU in particular, as well as all other market participants. The Federal Energy
22 Regulatory Commission ("FERC"), in Docket No. RT04-1, found SPP to be an
23 independent entity free of any affiliation with any market participant, thus

1 satisfying the FERC's independence requirements for RTOs. SPP has established
2 an independent board of directors and independent governance structure, which
3 the FERC has approved. *Southwest Power Pool, Inc.*, 108 FERC ¶ 61,003 at P
4 27 (2004) and *Southwest Power Pool, Inc.*, 110 FERC ¶ 61,046, at P 22 (2004).
5 If SPP is approved as the ITO, it would administer transmission for LG&E and
6 KU and its customers in an independent, non-discriminatory manner. Also, SPP
7 has the experience of independently administering transmission service over the
8 American Electric Power East system for approximately four years.

9 **TRANSMISSION SERVICE**

10 **Q. Does SPP have experience in administering and maintaining an OASIS**
11 **system?**

12 **A.** Yes. SPP has maintained and administered an OASIS system continuously since
13 FERC's initial order requiring OASIS systems in 1997. The SPP regional tariff
14 was approved in 1998, and SPP added regional tariff administration to its
15 responsibilities and has performed this function since June 1, 1998, acting as
16 agent for each of its Transmission Owners.

17 **Q. Does SPP have the capability to perform the Available Transmission**
18 **Capacity calculations for the ITO?**

19 **A.** The SPP regional tariff provides for flowgate based determination of Available
20 Flowgate Capacity (AFC). SPP has also performed Available Transmission
21 Capacity (ATC) calculations for AEP East during our administration of their
22 tariff. This process is similar to the one that the ITO would administer. The ITO

1 would develop inputs into the ATC calculation and based on this input data, the
2 ITO would determine the ATC for the LG&E and KU region and ensure that ATC
3 was properly posted on the OASIS site. SPP has approximately seven years
4 experience administering a similar process on the systems of the 11 SPP
5 transmission owners. SPP is also implementing an AFC process for the Entergy
6 ICT. SPP is one of the most experienced organizations in the country
7 administering and determining transmission capability under a pro-forma
8 transmission tariff.

9 **Q. What experience does SPP have in acceptance and denial of transmission**
10 **service reservations?**

11 A. Since 1998, SPP has been acting as agent for its transmission owners in the
12 processing of transmission service. SPP initially performed only short-term
13 transmission service administration, but by February of 2000, SPP expanded the
14 scope of services offered to include all transmission service provided under
15 FERC's pro-forma tariff. SPP is scheduled to begin transmission service
16 processing for the Entergy ICT in 2006. Also, as mentioned before, SPP
17 processed transmission service requests for the AEP East transmission system
18 from 2000 through 2004. In this role, SPP independently accepted or denied
19 transmission service requests received on AEP's OASIS. Also, SPP administers
20 transmission service reservations for grandfathered service provided under some
21 of its member's OATTs. SPP's experience in operating not only its own tariff but
22 that of other transmission owner's simultaneously clearly demonstrates SPP's
23 ability to perform the ITO function in a efficient and non-discriminatory manner.

1 **GENERATION INTERCONNECTION**

2 **Q. Does SPP have experience in processing generation interconnection requests**
3 **under a FERC Tariff?**

4 A. Yes. SPP has acted as agent for its eleven transmission owners in processing
5 requests for generation interconnection. Recently, FERC issued Order 2003 and
6 subsequent Orders prescribing generation interconnection procedures and a pro
7 forma interconnection agreement. Both SPP and SPP acting as the ITO are subject
8 to these Orders and are in compliance with these Orders. SPP and the ITO have
9 essentially the same procedures for processing interconnection requests and
10 essentially the same pro-forma interconnection agreement.

11 **STAKE HOLDER PROCESS**

12 **Q. What oversight of the stakeholder process will SPP as the ITO have?**

13 A. SPP as the ITO will be responsible for administering a stakeholder process for
14 LG&E and KU. SPP as an RTO administers a stakeholder driven organization.
15 As such SPP regularly facilitates a stakeholder process requiring presentation of
16 current activities and gathering and collecting stakeholder feedback and
17 recommendations. SPP has the essential experience to administer the stakeholder
18 process as proposed for the ITO.

19 **Q. Please summarize your testimony.**

20 A. If SPP is approved by this Commission as the ITO, it will provide independent
21 services to LG&E and KU and its customers. SPP also already possesses both the
22 knowledge and expertise requisite for the performance of the functions that would
23 be required of it as an ITO. SPP has the independence, functionality and

1 competence to handle the challenges in implementing the ITO proposal. SPP is
2 the clear choice for providing the ITO services to LG&E and KU for the
3 following reasons:

4 - SPP has been shown to be independent as an RTO and as a
5 provider of services under a third party tariff;
6 - SPP has significant experience in all aspects of tariff
7 administration including generation interconnection request
8 processing, transmission service requests, AFC processes, and
9 OASIS administration;
10 - SPP currently maintains a stakeholder process in the administration
11 of its RTO functions and has shown the ability to perform this
12 function in a variety of settings.

13 **Q. Does this conclude your testimony?**

14 A. Yes.

15

VERIFICATION

STATE OF ARKANSAS)

) SS:

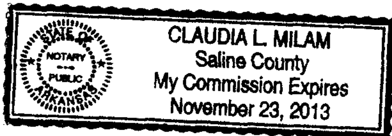
COUNTY OF PULASKI)

The undersigned, **Bruce A. Rew**, being duly sworn, deposes and says that he is the Executive Director of Contract Services for Southwest Power Pool, that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Bruce A. Rew

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18th day of November, 2005.

(SEAL)
Notary Public



My Commission Expires:

11-23-2013

INDEPENDENT TRANSMISSION ORGANIZATION AGREEMENT

BETWEEN

LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY

AND

SOUTHWEST POWER POOL, INC.

TABLE OF CONTENTS

Sections:

Section 1 - Scope of Functions; Standards of Performance.....2

1.1 Functions.....2

1.2 Coordination with Reliability Coordinator.....2

1.3 Expansion.....2

1.4 ITO Performance.....2

1.5 LG&E/KU Performance.....2

Section 2 - Independence.....2

2.1 Key Personnel.....2

2.2 Standards of Conduct Treatment.....3

Section 3 - Compensation, Billing and Payment.....3

Section 4 - Effective Date; Term; Termination; Termination Fees; Transition Assistance Services.....3

4.1 Effective Date; Term.....3

4.2 Mutually-Agreed Termination.....3

4.3 Termination at End of Term.....3

4.4 Termination for Cause.....4

4.4.1 Termination by Either Party.....4

(a) Material Failure or Default.....4
(b) Pattern of Failure.....4
(c) Gross Negligence, Willful Misconduct or Fraud.....4
(d) Material Misrepresentation.....4
(e) Bankruptcy.....4.
(f) Dissolution.....4

4.4.2 Termination by LG&E/KU.....4

4.5 FERC Approval....5

4.6 Return of Materials....5

4.7 Survival....5

4.8 Transition Assistance Services....5

4.8.1 Transition Assistance Period....5

4.8.2 Transition Assistance Services....5

4.8.3 Key Personnel....5

Section 5 - Data Management....5

5.1 Supply of Data....5

5.2 Property of Each Party....6

5.3 Data Integrity....6

5.4 Confidentiality....6

Section 6 - Intellectual Property....6

6.1 Pre-Existing Intellectual Property....6

6.1.1 Exclusion....6

6.2 Jointly-Owned Intellectual Property....6

6.3 ITO Retained Rights....7

6.4 LG&E/KU Retained Rights....7

6.5 ITO Non-Infringement; Indemnification....7

6.6 LG&E/KU Non-Infringement; Indemnification....8

Section 7 - Indemnification....9

7.1 Indemnification by the Parties....9

7.2 No Consequential Damages....9

7.3 Cooperation Regarding Claims....9

Section 8 - Contract Managers; Dispute Resolution....10

8.1 LG&E/KU Contact Manager....10

8.2 ITO Contract Manager....10

8.3 Resolution of Disputes....10

8.3.1 Notice of Dispute....10

8.3.2 Dispute Resolution by Contract Managers....10

8.3.3 Dispute Resolution by Executive Management Representatives....10

8.3.4 Exercise of Remedies at Law or in Equity....10

8.4 Rights Under FPA Unaffected....11

8.5 Statute of Limitations; Continued Performance....11

Section 9 - Insurance....11

9.1 Requirements....11

9.2 Insurance Matters....11

9.3 Compliance....11

Section 10 - Confidentiality....12

10.1 Definition of Confidential Information....12

10.2 Protection of Confidential Information....12

Section 11 - Force Majeure....12

Section 12 - Reporting; Audit....13

12.1 Reporting....13

12.2 Books and Records....13

12.3 Regulatory Compliance....14

Section 13 - Independent Contractor 15

Section 14 - Taxes 15

Section 15 - Notices 15

15.1 Notices 15

15.2 Changes 16

Section 16 - Key Personnel 16

16.1 Key Personnel; Work Conditions 16

16.2 Conduct of Key Personnel and Reporting 16

16.3 Personnel Screening 16

16.4 Security 17

Section 17 - Miscellaneous Provisions 17

17.1 Governing Law 17

17.2 Consent to Jurisdiction 17

17.3 Amendment 17

17.4 Assignment 17

17.5 No Third Party Beneficiaries 17

17.6 Waivers 18

17.7 Severability; Renegotiation 18

17.8 Representations and Warranties 18

17.8.1 Organization 18

17.8.2 Authority 18

17.8.3 Binding Effect 18

17.8.4 Regulatory Approval 18

17.8.5 No Limitation....................19

17.8.6 No Violation or Breach....................19

17.9 Further Assurances....................19

17.10 Entire Agreement....................19

17.11 Good Faith Efforts....................19

17.12 Time of the Essence....................19

17.13 Interpretation....................19

17.14 Joint Effort....................20

17.15 Counterparts....................20

Attachment A - Description of the Functions

Attachment B - List of Key Personnel

INDEPENDENT TRANSMISSION ORGANIZATION AGREEMENT

This Independent Transmission Organization Agreement (this "Agreement") is entered into this ___th day of September, 2005, between Louisville Gas and Electric Company and Kentucky Utilities Company, corporations organized pursuant to the laws of the State of Kentucky (collectively, "LG&E/KU"), and Southwest Power Pool, Inc., an entity organized pursuant to the laws of the State of Arkansas (the "ITO"). LG&E/KU and the ITO may sometimes be individually referred to herein as a "Party" and collectively as the "Parties."

WHEREAS, LG&E/KU owns, among other things, an integrated electric transmission system ("Transmission System"), over which the Midwest Independent Transmission System Operator Inc. ("Midwest ISO") currently provides open access transmission service to customers in the LG&E/KU Control Area (as defined in the LGE&E/KU Open Access Transmission Tariff ("the OATT"));

WHEREAS, as part of LG&E/KU's proposal to withdraw its participation in the Midwest ISO, LG&E/KU desires to provide non-discriminatory open access transmission service pursuant to the OATT;

WHEREAS, LG&E/KU desires to have the ITO perform certain key transmission-related functions under the OATT as set forth herein;

WHEREAS, LG&E/KU will remain the owner of its Transmission System and will bear the ultimate responsibility for the provision of transmission services to Eligible Customers (as defined in the OATT), including the sole authority to amend the OATT;

WHEREAS, the ITO: (i) is a FERC-approved regional transmission organization; (ii) is independent from LG&E/KU; (iii) possesses the necessary competence and experience to perform the functions provided for hereunder; and (iv) is willing to perform such functions under the terms and conditions agreed upon by the Parties as set forth in this Agreement; and

WHEREAS, as part of LG&E/KU's goal to maintain the requisite level of independence in the operation of its Transmission System to prevent any exercise of transmission market power, on September __, 2005, LG&E/KU entered into a Reliability Coordinator Agreement (the "Reliability Coordinator Agreement") with the Tennessee Valley Authority, a NERC-certified reliability coordinator (the "Reliability Coordinator"), pursuant to which the Reliability Coordinator will provide to LG&E/KU certain required reliability functions, including security coordination, transmission planning and regional coordination, identifying and mandating upgrades required to maintain reliability, non-binding recommendations relating to economic transmission system upgrades, and administration of any seams agreements to be entered by LG&E/KU;

NOW THEREFORE, in consideration of the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

Section 1 - Scope of Functions; Standards of Performance.

1.1 Functions. The ITO shall perform the functions described in Attachment A (the "Functions") during the Term in accordance with the terms and conditions of this Agreement.

1.2 Coordination with Reliability Coordinator. In conjunction with its performance of the Functions, the ITO shall coordinate and cooperate with the Reliability Coordinator and provide, subject to the terms and conditions of this Agreement, including the ITO's obligations with respect to Confidential Information in Section 10, any information that the Reliability Coordinator may reasonably request in order to carry out its functions under the Reliability Coordinator Agreement.

1.3 Expansion. Nothing in this Agreement is intended to prevent the ITO from entering into other agreements with one or more third party transmission providers or operators to perform functions for such transmission providers or operators that are the same or similar to the Functions performed hereunder; provided, however, that the ITO does not breach any of its obligations under this Agreement (including its obligations with respect to Confidential Information in Section 10) by entering into or performing any of its obligations under such other agreements; provided, further, that any such other agreements shall provide for LG&E/KU to be reimbursed in an equitable manner for any capital expenditures made pursuant to this Agreement as well as for LG&E/KU's ongoing operations and maintenance expenditures to the extent such capital expenditures and operations and maintenance expenditures are used by the ITO in performing functions under such other agreements.

1.4 ITO Performance. The ITO shall perform its obligations (including the Functions) under this Agreement in accordance with (a) Good Utility Practice (as defined in the OATT), (b) LG&E/KU's specific requirements and operating guidelines (to the extent these are not inconsistent with other requirements specified in this Section 1.4),] (c) the OATT, and (d) all applicable laws and the requirements of federal and state regulatory authorities.

1.5 LG&E/KU Performance. LG&E/KU shall perform its obligations under this Agreement in accordance with Good Utility Practice.

Section 2 - Independence.

2.1 Key Personnel. All Functions shall be performed by employees of the ITO identified in Attachment B (the "Key Personnel"). No Key Personnel shall also be employed by LG&E/KU or any of its Affiliates (as defined in 18 C.F.R. § 35.34(b)(3) of FERC's regulations). The ITO and the Key Personnel shall be, and shall remain throughout the Term, Independent (as defined below) of LG&E/KU, its Affiliates and any Tariff Participant (as defined below). For purposes of this Agreement: (a) "Independent" shall mean that the ITO and the Key Personnel are not subject to the control of LG&E/KU, its Affiliates or any Tariff Participant, and have full decision-making authority to perform all Functions in accordance with the provisions of this Agreement. Any Key Personnel owning securities in LG&E/KU, its Affiliates or any Tariff Participant shall divest such securities within six (6) months of first being assigned to perform

such Functions, provided that nothing in this Section 2.1 shall be interpreted or construed to preclude any such Key Personnel from indirectly owning securities issued by LG&E/KU, its Affiliates or any Tariff Participant through a mutual fund or similar arrangement (other than a fund or arrangement specifically targeted toward the electric industry or the electric utility industry or any segment thereof) under which the Key Personnel does not control the purchase or sale of such securities. Participation by any Key Personnel in a pension plan of LG&E/KU, its Affiliates or any Tariff Participant shall not be deemed to be a direct financial interest if the plan is a defined-benefit plan that does not involve the Key Personnel's ownership of the securities; (b) "Tariff Participant" shall mean LG&E/KU Transmission System customers, interconnection customers, wholesale customers, affected transmission providers, any Market Participant (as defined in 18 C.F.R. § 35.34(a)(2) of FERC's regulations) and similarly qualified third parties within the LG&E/KU Control Area.

2.2 Standards of Conduct Treatment. All Key Personnel shall be treated, for purposes of the FERC's Standards of Conduct, as transmission employees. All restrictions relating to information sharing and other relationships between merchant employees and transmission employees shall apply to the Key Personnel.

Section 3 - Compensation, Billing and Payment.

[COMPENSATION, BILLING AND PAYMENT PROVISIONS WILL BE NEGOTIATED WITH THE ITO]

Section 4 - Effective Date; Term; Termination; Termination Fees; Transition Assistance Services.

4.1 Effective Date; Term. This Agreement shall become effective on the date (the "Effective Date") which is thirty (30) days after FERC's acceptance of this Agreement and shall continue for an initial term of four (4) years from the Effective Date (the "Initial Term"). After the conclusion of the Initial Term, this Agreement shall automatically continue for successive additional one-year terms (each, a "Subsequent Term") unless and until terminated pursuant to the termination provisions hereof. The Initial Term and any Subsequent Terms, together with the Transition Assistance Period, if any, shall collectively be referred to as the "Term."

4.2 Mutually-Agreed Termination. Subject to Section 4.5, this Agreement may be terminated by mutual agreement of the Parties at any time during the Term (other than any Transition Assistance Period).

4.3 Termination at End of Term. Subject to Section 4.5, either Party may terminate this Agreement at the end of the Initial Term or any Subsequent Term upon six (6) months prior written notice to the other Party.

4.4 Termination for Cause.

4.4.1 Termination by Either Party. Subject to Section 4.5, either Party may terminate this Agreement effective immediately upon prior written notice thereof to the other Party if:

(a) Material Failure or Default. The other Party fails, in any material respect, to comply with, observe or perform, or defaults, in any material respect, in the performance of the terms and conditions of this Agreement, and such failure or default remains uncured for thirty (30) days after notice thereof, provided that such failure or default is susceptible to cure and the other Party is exercising reasonable diligence to cure such failure or default;

(b) Pattern of Failure. It determines, in its sole discretion, that there has been a pattern of failure by the other Party to comply with the standards of performance required under this Agreement;

(c) Gross Negligence, Willful Misconduct or Fraud. The other Party commits gross negligence, willful misconduct or fraud in the performance of its obligations under this Agreement;

(d) Material Misrepresentation. Any representation made by the other Party hereunder shall be false or incorrect in any material respect when made and such misrepresentation is not cured within thirty (30) days of such discovery or is incapable of cure;

(e) Bankruptcy. The other Party: (i) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it; (ii) makes an assignment or any general arrangement for the benefit of creditors; (iii) otherwise becomes bankrupt or insolvent (however evidenced); (iv) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets; or (v) is generally unable to pay its debts as they fall due; or

(f) Dissolution. The other Party dissolves or is dissolved or its legal existence is otherwise terminated.

4.4.2 Termination by LG&E/KU. Subject to Section 4.5, LG&E/KU may terminate this Agreement effective immediately upon prior written notice thereof to the ITO if FERC determines that the ITO is not Independent.

4.5 FERC Approval. No termination of this Agreement shall be effective until approved by FERC.

4.6 Return of Materials. Upon any termination of this Agreement or the conclusion of any Transition Assistance Period pursuant to Section 4.8.1, whichever is later, the ITO shall

timely and orderly turn over to LG&E/KU all materials that were prepared or developed prior thereto pursuant to this Agreement, and return or destroy, at the option of LG&E/KU, all Data and other information supplied by LG&E/KU to the ITO or created by the ITO on behalf of LG&E/KU.

4.7 Survival. All provisions of this Agreement which are by their nature or terms intended to survive the termination of this Agreement, including the obligations set forth in Section 7 and Section 10, shall survive termination of this Agreement.

4.8 Transition Assistance Services.

4.8.1 Transition Assistance Period. Commencing on the date this Agreement is terminated and continuing for up to six (6) months thereafter (the "Transition Assistance Period"), the ITO shall (a) provide the Functions (and any replacements thereof or substitutions therefor), to the extent LG&E/KU requests such Functions to be performed during the Transition Assistance Period, and (b) cooperate with LG&E/KU in the transfer of the Functions (collectively, the "Transition Assistance Services").

4.8.2 Transition Assistance Services. The ITO shall, upon LG&E/KU's request, provide the Transition Assistance Services during the Transition Assistance Period at the ITO's actual cost for such services. The quality and level of performance of the Functions by the ITO during the Transition Assistance Period shall not be degraded. After the expiration of the Transition Assistance Period, the ITO shall answer questions from LG&E/KU regarding the Functions on an "as needed" basis at the ITO's then-standard billing rates.

4.8.3 Key Personnel. During the Transition Assistance Period, the ITO shall not terminate, reassign or otherwise remove any Key Personnel without providing LG&E/KU thirty (30) days' prior notice of such termination, reassignment or removal unless such employee (a) voluntarily resigns from the ITO, (b) is dismissed by the ITO for cause, or (c) dies or is unable to work due to his or her disability.

Section 5 - Data Management.

5.1 Supply of Data. During the Term, LG&E/KU shall supply to the ITO, and/or grant the ITO access to all Data that the ITO reasonably requires to perform the Functions. The Parties shall agree upon the initial format and manner in which such Data shall be provided. For purposes of this Agreement, "Data" means all information, text, drawings, diagrams, images or sounds which are embodied in any electronic or tangible medium and which (a) are supplied or in respect of which access is granted to the ITO by LG&E/KU under this Agreement, which shall be LG&E/KU's Data, (b) are prepared, stored or transmitted by the ITO solely on behalf of LG&E/KU, which shall be LG&E/KU's Data; or (c) are compiled by the ITO by aggregating Data owned by LG&E/KU and Data owned by third parties, which shall be ITO's Data.

5.2 Property of Each Party. Each Party acknowledges that the other Party's Data and the other Party's software, base data models and operating procedures for software or base data

models ("Processes") are the property of such other Party and agrees that it will do nothing inconsistent with such ownership, including preserving all intellectual property and/or proprietary rights in such other Party's Data and Processes as provided in Section 6.

5.3 Data Integrity. Each Party shall reasonably assist the other Party in establishing measures to preserve the integrity and prevent any corruption or loss of Data, and the Parties shall reasonably assist each other in the recovery of any corrupted or lost Data. Each Party shall retain and preserve any of the other Party's Data that are supplied to it during the Term, and shall exercise commercially reasonable efforts to preserve the integrity of the other Party's Data that are supplied to it during the Term, in order to prevent any corruption or loss of the other Party's Data.

5.4 Confidentiality. Each Party's Data shall be treated as Confidential Information in accordance with the provisions of Section 10.

Section 6 - Intellectual Property.

6.1 Pre-Existing Intellectual Property. Each Party shall own (and continue to own) all trade secrets, Processes and designs and other intellectual property that it owned prior to entering this Agreement, including any enhancements thereto ("Pre-Existing Intellectual Property"). Each Party acknowledges the ownership of the other Party's Pre-Existing Intellectual Property and agrees that it will do nothing inconsistent with such ownership. Each Party agrees that nothing in this Agreement shall give it any right, title or interest in the other Party's Pre-Existing Intellectual Property, other than the rights set forth in this Agreement. The ITO's Pre-Existing Intellectual Property shall include the ITO Retained Rights set forth in Section 6.3. LG&E/KU's Pre-Existing Intellectual Property shall include LG&E/KU Retained Rights set forth in Section 6.4.

6.1.1 Exclusion. Nothing in this Agreement shall prevent either Party from using general techniques, ideas, concepts and know-how gained by its employees during the performance of its obligations under this Agreement in the furtherance of its normal business, to the extent that it does not result in disclosure of the other Party's Data or any data generated from the other Party's Data or other Confidential Information or an infringement by LG&E/KU or the ITO of any intellectual property right. For the avoidance of doubt, the use by a Party of such general techniques, ideas, concepts and know-how gained by its employees during the performance of its obligations under this Agreement shall not be deemed to be an infringement of the other Party's intellectual property rights so long as such matters are retained in the unaided memories of such employees and any Confidential Information is treated in accordance with the provisions of Section 10.

6.2 Jointly-Owned Intellectual Property. Except for the Data described in Section 5.1, all deliverables, whether software or otherwise, to the extent originated and prepared by the ITO exclusively in connection with the performance of its obligations under this Agreement shall be, upon payment of all amounts that may be due from LG&E/KU to the ITO, jointly owned by LG&E/KU and ITO ("Jointly-Owned Intellectual Property"). Each Party shall have the right to

use the Jointly-Owned Intellectual Property without any right or duty or accounting to the other Party, except as provided in this Section 6.2. Upon the ITO using, transferring or licensing Jointly-Owned Intellectual Property for or to a third party, the ITO shall reimburse LG&E/KU in an equitable manner as determined by the Parties in good faith for the actual amounts paid by LG&E/KU to the ITO that relate to such Jointly-Owned Intellectual Property. Except as stated in the foregoing sentence, the ITO shall have no other obligation to account to LG&E/KU for any such use, transfer, license, disclosure, copying, modifying or enhancing of the Jointly-Owned Intellectual Property. Notwithstanding anything herein to the contrary, LG&E/KU may use the Jointly-Owned Intellectual Property for its internal business purposes, including licensing or transferring its interests therein to a third party for purposes of operating or performing functions in connection with LG&E/KU's transmission business.

6.3 ITO Retained Rights. The ITO shall retain all right, title and interest in its proprietary know-how, concepts, techniques, processes, materials and information that were or are developed entirely independently of this Agreement ("ITO Retained Rights"), whether or not such ITO Retained Rights are embodied in a deliverable, whether software or otherwise originated and prepared by the ITO in connection with the performance of its obligations under this Agreement. With respect to the ITO Retained Rights embodied in any deliverable, whether software or otherwise originated and prepared by the ITO in connection with the performance of its obligations under this Agreement, LG&E/KU is hereby granted a nonexclusive, perpetual, worldwide, royalty-free, fully paid-up license under such ITO Retained Rights to use such deliverable for LG&E/KU's internal business purposes only, including licensing or transferring its interests therein to an Affiliate of LG&E/KU or a third party for purposes of operating or performing functions in connection with LG&E/KU's transmission business.

6.4 LG&E/KU Retained Rights. LG&E/KU shall retain all right, title and interest in its proprietary know-how, concepts, techniques, processes, materials and information that were or are developed entirely independently of this Agreement ("LG&E/KU Retained Rights"), whether or not such LG&E/KU Retained Rights are embodied in a deliverable, whether software or otherwise originated and prepared by LG&E/KU in connection with the performance of its obligations under this Agreement. With respect to LG&E/KU Retained Rights embodied in any software or otherwise originated and prepared by LG&E/KU in connection with the performance of its obligations under this Agreement, the ITO is hereby granted a nonexclusive, worldwide, royalty-free, fully paid-up license under such LG&E/KU Retained Rights to use such deliverable for the ITO's performance of its obligations under this Agreement only; provided that LG&E/KU shall not be liable in any way for the use of or reliance on such ITO Retained Rights by the ITO's Affiliate or third party for any purpose whatsoever.

6.5 ITO Non-Infringement; Indemnification. The ITO warrants to LG&E/KU that all ITO's Data and Processes, ITO Pre-Existing Intellectual Property, ITO Retained Rights, and deliverables prepared, produced or first developed by the ITO in connection with the performance of its obligations under this Agreement shall not infringe on any third party patent, copyright, trade secret or other third party proprietary rights. The ITO shall defend, hold harmless and indemnify LG&E/KU and its Affiliates and their respective employees, officers, directors, principals, owners, partners, shareholders, agents, representatives, consultants and subcontractors (collectively, "LG&E/KU Representatives") from and against all claims, lawsuits,

penalties, awards, judgments, court arbitration costs, attorneys' fees, and other reasonable out-of-pocket costs incurred in connection with such claims or lawsuits based upon the actual or alleged infringement of any of the foregoing rights; provided that LG&E/KU gives prompt written notice of any such claim or action to the ITO, permits the ITO to control the defense of any such claim or action with counsel of its choice, and cooperates with the ITO in the defense thereof; and further provided that such claim or action is not based on any alteration, modification or combination of the deliverable with any item, information or process not provided by the ITO, where there would be no infringement in the absence of such alteration, modification or combination. If any infringement action results in a final injunction against LG&E/KU or the LG&E/KU Representatives with respect to ITO's Data and Processes, ITO Pre-Existing Intellectual Property, ITO Retained Rights or deliverables prepared, produced or first developed by the ITO in connection with the performance of its obligations under this Agreement or in the event the use of such matters or any part thereof, is, in such lawsuit, held to constitute infringement, the ITO agrees that it shall, at its option and sole expense, either (a) procure for LG&E/KU or the LG&E/KU Representatives the right to continue using the infringing matter, or (b) replace the infringing matter with non-infringing items of equivalent functionality or modify the same so that it becomes non-infringing and retains its full functionality. If the ITO is unable to accomplish (a) or (b) above, the ITO shall reimburse LG&E/KU for all costs and fees paid by LG&E/KU to the ITO for the infringing matter. The above constitutes the ITO's complete liability for claims of infringement relating to any of the ITO's Data and Processes, ITO Pre-Existing Intellectual Property, ITO Retained Rights and deliverables prepared, produced or first developed by the ITO in connection with the performance of its obligations under this Agreement.

6.6 LG&E/KU Non-Infringement; Indemnification. LG&E/KU warrants to the ITO that, to its knowledge, all LG&E/KU's Data (except for Data created by the ITO on behalf of LG&E/KU) and Processes, LG&E/KU Pre-Existing Intellectual Property, and LG&E/KU Retained Rights shall not infringe on any third party patent, copyright, trade secret or other third party proprietary rights. LG&E/KU shall defend, hold harmless and indemnify the ITO and its Affiliates and their respective employees, officers, directors, principals, owners, partners, shareholders, agents, representatives, consultants and subcontractors against all claims, lawsuits, penalties, awards, judgments, court costs, and arbitration costs, attorneys' fees, and other reasonable out-of-pocket costs incurred in connection with such claims or lawsuits based upon the actual or alleged infringement of any of the foregoing rights; provided that the ITO gives prompt written notice of any such claim or action to LG&E/KU, permits LG&E/KU to control the defense of any such claim or action with counsel of its choice, and cooperates with LG&E/KU in the defense thereof; and further provided that such claim or action is not based on any alteration, modification or combination of the deliverable with any item, information or process not provided by LG&E/KU to the ITO, where there would be no infringement in the absence of such alteration, modification or combination. The above constitutes LG&E/KU's complete liability for claims of infringement relating to any of the LG&E/KU's Data and Processes, LG&E/KU Pre-Existing Intellectual Property and LG&E/KU Retained Rights.

Section 7 - Indemnification.

7.1 Indemnification by the Parties. Each Party ("Indemnifying Party") shall indemnify, release, defend, reimburse and hold harmless the other Party and its Affiliates, and their respective directors, officers, employees, principals, representatives and agents (collectively, the "Indemnified Parties") from and against any and all claims, demands, liabilities, losses, causes of action, awards, fines, penalties, litigation, administrative proceedings and investigations, costs and expenses, and attorney fees (each, an "Indemnifiable Loss") asserted against or incurred by any of the Indemnified Parties arising out of, resulting from or based upon (a) a breach by the Indemnifying Party of its obligations under this Agreement, (b) the acts or omissions of the Indemnifying Party and its Affiliates and their respective directors, officers, employees, principals, representatives, agents or contractors during the Term, or (c) claims of bodily injury or death of any person or damage to real and/or tangible personal property caused by the negligence or willful misconduct of the Indemnifying Party and its Affiliates and their respective directors, officers, employees, principals, representatives, agents or contractors during the Term.

7.2 No Consequential Damages. Neither Party shall be liable to the other Party for, nor will the measure of damages include, any indirect, incidental, exemplary, punitive, special or consequential damages.

7.3 Cooperation Regarding Claims. If an Indemnified Party receives notice or has knowledge of any Indemnifiable Loss that may result in a claim for indemnification by such Indemnified Party against an Indemnifying Party pursuant to this Section 7, such Indemnified Party shall as promptly as possible give the Indemnifying Party notice of such Indemnifiable Loss, including a reasonably detailed description of the facts and circumstances relating to such Indemnifiable Loss, a complete copy of all notices, pleadings and other papers related thereto, and in reasonable detail the basis for its claim for indemnification with respect thereto. Failure to promptly give such notice or to provide such information and documents shall not relieve the Indemnifying Party from the obligation hereunder to respond to or defend the Indemnified Party against such Indemnifiable Loss unless such failure shall materially diminish the ability of the Indemnifying Party to respond to or to defend the Indemnified Party against such Indemnifiable Loss. The Indemnifying Party, upon its acknowledgment in writing of its obligation to indemnify the Indemnified Party in accordance with this Section 7, shall be entitled to assume the defense or to represent the interest of the Indemnified Party with respect to such Indemnifiable Loss, which shall include the right to select and direct legal counsel and other consultants, appear in proceedings on behalf of such Indemnified Party and to propose, accept or reject offers of settlement, all at its sole cost. If and to the extent that any such settlement is reasonably likely to involve injunctive, equitable or prospective relief or materially and adversely affect the Indemnified Party's business or operations other than as a result of money damages or other money payments, then such settlement will be subject to the reasonable approval of the Indemnified Party. Nothing herein shall prevent an Indemnified Party from retaining its own legal counsel and other consultants and participating in its own defense at its own cost and expense.

Section 8 - Contract Managers; Dispute Resolution.

8.1 LG&E/KU Contract Manager. LG&E/KU shall appoint an individual (the "LG&E/KU Contract Manager") who shall serve as the primary LG&E/KU representative under this Agreement. The LG&E/KU Contract Manager shall (a) have overall responsibility for managing and coordinating the performance of LG&E/KU's obligations under this Agreement, and (b) be authorized to act for and on behalf of LG&E/KU with respect to all matters relating to this Agreement. Notwithstanding the foregoing, the LG&E/KU Contract Manager may, upon notice to the ITO, delegate such of his or her responsibilities to other LG&E/KU employees, as the LG&E/KU Contract Manager deems appropriate.

8.2 ITO Contract Manager. The ITO shall appoint, among the Key Personnel identified in Attachment B, an individual (the "ITO Contract Manager") who shall serve as the primary ITO representative under this Agreement. The ITO Contract Manager shall (a) have overall responsibility for managing and coordinating the performance of ITO obligations under this Agreement, and (b) be authorized to act for and on behalf of the ITO with respect to all matters relating to this Agreement. Notwithstanding the foregoing, the ITO Contract Manager may, upon notice to LG&E/KU, delegate such of his or her responsibilities to other Key Personnel, as the ITO Contract Manager deems appropriate.

8.3 Resolution of Disputes. Any dispute, claim or controversy between the Parties arising out of or relating to this Agreement (each, a "Dispute") shall be resolved in accordance with the procedures set forth in this Section 8.3; provided, however, that this Section 8.3 shall not apply to Disputes arising from or relating to confidentiality or intellectual property rights (in which case either Party shall be free to seek available legal or equitable remedies).

8.3.1 Notice of Dispute. Each Party shall provide written notice to the other party of any Dispute, including a description of the nature of the Dispute.

8.3.2 Dispute Resolution by Contract Managers. Any Dispute shall first be referred to the LG&E/KU Contract Manager and the ITO Contract Manager, who shall negotiate in good faith to resolve the Dispute.

8.3.3 Dispute Resolution by Executive Management Representatives. If the Dispute is not resolved within fifteen (15) days of being referred to the LG&E/KU Contract Manager and the ITO Contract Manager pursuant to Section 8.3.2, then each Party shall have five (5) days to appoint an executive management representative who shall negotiate in good faith to resolve the Dispute.

8.3.4 Exercise of Remedies at Law or in Equity. If the Parties' executive management representatives are unable to resolve the Dispute within thirty (30) days of their appointment, then each Party shall be free to pursue any remedies available to it and to take any action in law or equity that it believes necessary or convenient in order to enforce its rights or cause to be fulfilled any of the obligations or agreements of the other Party.

8.4 Rights Under FPA Unaffected. Nothing in this Agreement is intended to limit or abridge any rights that LG&E/KU may have to file or make application before FERC under Section 205 of the Federal Power Act to revise any rates, terms or conditions of the OATT.

8.5 Statute of Limitations; Continued Performance. The Parties agree to waive the applicable statute of limitations during the period of time that the Parties are seeking to resolve a Dispute pursuant to Sections 8.3.2 and 8.3.3, and the statute of limitations shall be tolled for such period. The Parties shall continue to perform their obligations under this Agreement during the resolution of a Dispute.

Section 9 - Insurance.

9.1 Requirements. The ITO shall provide and maintain during the Term insurance coverage in the form and with minimum limits of liability as specified below, unless otherwise agreed to by the Parties.

9.1.1 Worker's compensation insurance with statutory limits, and employer's liability insurance with limits of not less than $1,000,000.

9.1.2 Commercial general liability or equivalent insurance with a combined single limit of not less than $10,000,000 per occurrence. Such insurance shall include products/completed operations liability, owners protective, blanket contractual liability, personal injury liability and broad form property damage.

9.1.3 Comprehensive automobile liability insurance with a combined single limit of not less than $2,000,000 per occurrence. Such insurance shall include coverage for owned, hired and non-owned automobiles, and contractual liability.

9.1.4 Errors & Omissions Insurance in the amount of $5,000,000.

9.2 Insurance Matters. All insurance coverages required pursuant to Section 9.1 shall (a) be provided by insurance companies that have a Best Rating of A or higher, (b) provide that LG&E/KU is an additional insured (other than the workers' compensation insurance), (c) provide that LG&E/KU will receive at least thirty (30) days written notice from the insurer prior to the cancellation or termination of or any material change in any such insurance coverages, and (d) include waivers of any right of subrogation of the insurers thereunder against LG&E/KU. Certificates of insurance evidencing that the insurance required by Section 9.1 is in force shall be delivered by the ITO to LG&E/KU prior to the Effective Date.

9.3 Compliance. The ITO shall not commence performance of any Functions until all of the insurance required pursuant to Section 9.1 is in force, and the necessary documents have been received by LG&E/KU pursuant to Section 9.2. Compliance with the insurance provisions in Section 9 is expressly made a condition precedent to the obligation of LG&E/KU to make payment for any Functions performed by the ITO under this Agreement. The minimum insurance requirements set forth above shall not vary, limit or waive the ITO's legal or contractual responsibilities or liabilities under this Agreement.

Section 10 - Confidentiality.

10.1 Definition of Confidential Information. For purposes of this Agreement, "Confidential Information" shall mean, in respect of each Party, all information and documentation of such Party, whether disclosed to or accessed by the other Party in connection with this Agreement; provided, however, that the term "Confidential information" shall not include information that: (a) is independently developed by the recipient, as demonstrated by the recipient's written records, without violating the disclosing Party's proprietary rights; (b) is or becomes publicly known (other than through unauthorized disclosure); (c) is disclosed by the owner of such information to a third party free of any obligation of confidentiality; (d) is already known by the recipient at the time of disclosure, as demonstrated by the recipient's written records, and the recipient has no obligation of confidentiality other than pursuant to this Agreement or any confidentiality agreements between the Parties entered into before the Effective Date; or (e) is rightfully received by a Party free of any obligation of confidentiality.

10.2 Protection of Confidential Information. All Confidential Information shall be held in confidence by the recipient to the same extent and in at least the same manner as the recipient protects its own confidential information, and such Confidential Information shall be used only for purposes of performing obligations under this Agreement. Neither Party shall disclose, publish, release, transfer or otherwise make available Confidential Information of, or obtained from, the other Party in any form to, or for the use or benefit of, any person or entity without the disclosing Party's prior written consent. Each Party shall be permitted to disclose relevant aspects of the other Party's Confidential Information to its officers, directors, agents, professional advisors, contractors, subcontractors and employees and to the officers, directors, agents, professional advisors, contractors, subcontractors and employees of its Affiliates, to the extent that such disclosure is reasonably necessary for the performance of its duties and obligations or the determination, preservation or exercise of its rights and remedies under this Agreement; provided, however, that the recipient shall take all reasonable measures to ensure that Confidential Information of the disclosing Party is not disclosed or duplicated in contravention of the provisions of this Agreement by such officers, directors, agents, professional advisors, contractors, subcontractors and employees. The obligations in this Section 10 shall not restrict any disclosure pursuant to any local, state or federal governmental agency or authority if such release is necessary to comply with valid laws, governmental regulations or final orders of regulatory bodies or courts; provided that the recipient shall give prompt notice to the disclosing Party in reasonable time to exercise whatever legal rights the disclosing Party may have to prevent or limit such disclosure. Further, the recipient shall cooperate with the disclosing Party in preventing or limiting such disclosure.

Section 11 - Force Majeure.

11.1 Neither Party shall be liable to the other Party for any failure or delay of performance hereunder due to causes beyond such Party's reasonable control, which by the exercise of reasonable due diligence such Party is unable, in whole or in part, to prevent or overcome (a "Force Majeure"), including acts of God, act of the public enemy, fire, explosion, vandalism, cable cut, storm or other catastrophes, weather impediments, national emergency,

insurrections, riots, wars or any law, order, regulation, direction, action or request of any government or authority or instrumentality thereof. Neither Party shall be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure, except for the obligation to pay any amount when due, provided that the affected Party:

11.1.1 gives notice to the other Party of the event or circumstance giving rise to the event of Force Majeure;

11.1.2 affords the other Party reasonable access to information about the event or circumstances giving rise to the event of Force Majeure;

11.1.3 takes commercially reasonable steps to restore its ability to perform its obligations hereunder as soon as reasonably practicable, provided that the affected Party shall not be obligated to take any steps that are not otherwise in accordance with Good Utility Practice; and

11.1.4 exercises commercially reasonable efforts to perform its obligations hereunder.

Section 12 - Reporting; Audit.

12.1 Reporting. The ITO shall make regular reports to FERC and LG&E/KU's retail regulators as may be required by applicable law and regulations or as may be requested by such authorities.

12.2 Books and Records. The ITO shall maintain full and accurate books and records pertinent to this Agreement, and the ITO shall maintain such books and records for three (3) years following the expiration or early termination of this Agreement or longer if necessary to resolve a pending Dispute. LG&E/KU will have the right, at reasonable times and under reasonable conditions, to inspect and audit, or have an independent third party inspect and audit, the ITO's operations and books to (a) ensure compliance with this Agreement, (b) verify any cost claims or other amounts due hereunder, and (c) validate the ITO's internal controls with respect to the performance of the Functions. The ITO shall maintain an audit trail, including all original transaction records, of all financial and non-financial transactions resulting from or arising in connection with this Agreement as may be necessary to enable LG&E/KU or the independent third party, as applicable, to perform the foregoing activities. LG&E/KU shall be responsible for any costs and expenses incurred in connection with any such inspection or audit, unless such inspection or audit discovers that LG&E/KU was charged inappropriate or incorrect costs and expenses, in which case, the ITO shall be responsible for a percentage of the costs and expenses incurred in connection with such inspection or audit equal to the percentage variance by which LG&E/KU was charged inappropriate or incorrect costs and expenses. The ITO shall provide reasonable assistance necessary to enable LG&E/KU or an independent third party, as applicable, and shall not be entitled to charge LG&E/KU for any such assistance. Amounts incorrectly or inappropriately invoiced by the ITO to LG&E/KU, whether discovered prior to or

subsequent to payment by LG&E/KU, shall be adjusted or reimbursed to LG&E/KU by the ITO within twenty (20) days of notification by LG&E/KU to the ITO of the error in the invoice.

12.3 Regulatory Compliance. The ITO shall comply with all requests by LG&E/KU to the extent considered reasonably necessary by LG&E/KU to comply with the Sarbanes-Oxley Act or other regulatory requirements. Notwithstanding the generality of the foregoing, the ITO shall provide to LG&E/KU, at LG&E/KU's request, all reports reasonably deemed necessary or desirable by LG&E/KU to support the review, audit and preparation of audit reports relating to the Functions and LG&E/KU's financial statements and reports, including (a) providing LG&E/KU with an executed copy of a report and opinion, from independent auditors of national reputation engaged and compensated by the ITO, of an examination in accordance with SAS No. 70, Type II, of the ITO's controls and systems relating to the performance of the Functions, as of and for the six (6)-month period ending at the end of the first (1st) and third (3rd) calendar quarter of each year of the Term, which shall be delivered not later than forty-five (45) days after the end of each such quarter, and (b) providing to LG&E/KU (and exercising commercially reasonable efforts to do so within twenty (20) days of LG&E/KU's request, but in no event more than thirty (30) days from said request) a certificate of an officer of the ITO certifying that there has been no change in such controls and systems or the effective operation of such controls and systems since the date of the most recent opinion of such independent auditors. The report, in its form and preparation, shall follow all SAS No. 70 guidelines and must be comprehensive and cover all significant controls executed by the ITO in connection with its systems and processes underlying the Functions. Additionally, the report must contain an opinion of the independent auditor that concludes that the ITO's description of controls pertaining to the processes and systems underlying the performance of the Functions presents fairly, in all material respects, the relevant aspects of the ITO's controls that had been placed into operation as of the end of each reporting period and whether, in the opinion of the independent auditor, the controls were suitably designed to provide reasonable assurance that the control objectives set forth by the ITO would be achieved if the described controls were complied with satisfactorily. In addition, the report shall state whether, in the opinion of the independent auditor, the controls tested by the independent auditor were operating with sufficient effectiveness to provide reasonable, but not absolute, assurance that the control objectives specified by the ITO were achieved during the reporting period. Such report and opinion shall have no significant or material exceptions or qualifiers. If the ITO is unable to timely deliver to LG&E/KU an unqualified opinion or certification, the ITO shall: (i) provide LG&E/KU, on the date such opinion or certificate is delivered or due to be delivered, with a written statement describing the circumstances giving rise to any delay in delivering such opinion or certificate or any qualification to such opinion or certificate; (ii) immediately take such actions as shall be necessary to resolve such circumstances and deliver an unqualified opinion or certificate as promptly as practicable thereafter; and (iii) permit LG&E/KU and its external auditors to perform such procedures and testing of the ITO's controls and processes as are reasonably necessary for their assessment of the operating effectiveness of the ITO controls and of LG&E/KU's internal controls. In addition, the ITO expressly agrees that prior to or at the time of any significant or material change to any internal process or financial control of the ITO that would or might impact the Functions performed for or on behalf of LG&E/KU or that would, or might, have a significant or material effect on such process's mitigation of risk or upon the integrity of LG&E/KU's financial reporting or disclosures, it shall notify LG&E/KU and provide full details of the change so as to enable

LG&E/KU to review the change and evaluate its impact on its internal controls and financial reporting. LG&E/KU shall have the right to provide all such reports, opinions and certifications delivered hereunder to its attorneys, accountants and other advisors, who shall be entitled to rely thereon.

Section 13 - Independent Contractor.

The ITO shall be and remain during the Term an independent contractor with respect to LG&E/KU, and nothing contained in this Agreement shall be (a) construed as inconsistent with that status, or (b) deemed or construed to create the relationship of principal and agent or employer and employee, between the ITO and LG&E/KU or to make either the ITO or LG&E/KU partners, joint ventures, principals, fiduciaries, agents or employees of the other Party for any purpose. Neither Party shall represent itself to be an agent, partner or representative of the other Party. Neither Party shall commit or bind, nor be authorized to commit or bind, the other Party in any manner, without such other Party's prior written consent. Personnel employed, provided or used by any Party in connection herewith will not be employees of the other Party in any respect. Each Party shall have full responsibility for the actions or omissions of its employees and shall be responsible for their supervision, direction and control.

Section 14 - Taxes.

Each Party shall be responsible for the payment of its own taxes, including taxes based on its net income, employment taxes of its employees, taxes on any property it owns or leases, and sales, use, gross receipts, excise, value-added or other transaction taxes.

Section 15 - Notices.

15.1 Notices. All notices, requests, consents and other communications hereunder shall be in writing, signed by the Party giving such notice or communication, and shall be hand-delivered or sent by certified mail, postage prepaid, return receipt requested, by nationally recognized courier, to the other Party at the address set forth below, and shall be deemed given upon the earlier of the date delivered or the date delivery is refused.

If to LG&E/KU:

Louisville Gas and Electric Company
____
____
Facsimile: (___) ___-____

And

Kentucky Utilities Company
____
____
Facsimile: (___) ___-____

If to the ITO:

Southwest Power Pool, Inc.

____

____

Facsimile: (___) ___-____

15.2 Changes. Either Party may, from time to time, change the names, addresses, facsimile numbers or other notice information set out in Section 15.1 by notice to the other Party in accordance with the requirements of Section 15.1.

Section 16 - Key Personnel; Work Conditions.

16.1 Key Personnel. All Key Personnel shall be properly certified and licensed, if required by law, and be qualified and competent to perform the Functions. The ITO shall provide LG&E/KU prior written notice of the replacement of any Key Personnel.

16.2 Conduct of Key Personnel and Reporting. The ITO agrees to require that the Key Personnel comply with the ITO's employee code of conduct, a current copy of which has been provided to LG&E/KU. The ITO may amend its employee code of conduct at any time, provided that the ITO shall promptly provide the LG&E/KU Contract Manager with a copy of the amended employee code of conduct. If any Key Personnel commits fraud or engages in material violation of the ITO's employee code of conduct, the ITO shall promptly notify LG&E/KU as provided above and promptly remove any such Key Personnel from the performance of the Functions.

16.3 Personnel Screening. The ITO shall be responsible for conducting, in accordance with applicable law (including the Fair Credit Reporting Act, The Fair and Accurate Credit Transactions Act, and Title VII of the Civil Rights Act of 1964), adequate pre-deployment screening of the Key Personnel prior to commencing performance of the Functions. By deploying Key Personnel under this Agreement, the ITO represents that it has completed the Screening Measures (as defined below) with respect to such Key Personnel. To the extent permitted by applicable law, the term "Screening Measures" shall include, at a minimum, a background check including: (a) a Terrorist Watch Database Search; (b) a Social Security Number trace; (c) motor vehicle license and driving record check; and (d) a criminal history check, including, a criminal record check for each county/city and state/country in the employee's residence history for the maximum number of years permitted by law, up to seven (7) years. Unless prohibited by law, if, prior to or after assigning a Key Personnel to perform the Functions, the ITO learns of any information that the ITO considers would adversely affect such Key Personnel's suitability for the performance of the Functions (including based on information discovered from the Screening Measures), the ITO shall not assign the Key Personnel to the Functions or, if already assigned, promptly remove such Key Personnel from performing the Functions and immediately notify LG&E/KU of such action.

16.4 Security. LG&E/KU shall have the option of barring from LG&E/KU's property any Key Personnel whom LG&E/KU determines is not suitable in accordance with the applicable laws pursuant to Sections 16.1 through 16.3.

Section 17 - Miscellaneous Provisions.

17.1 Governing Law. This Agreement and the rights and obligations of the Parties hereunder shall be governed by and construed in accordance with the laws of Kentucky, without giving effect to its conflicts of law rules.

17.2 Consent to Jurisdiction. All Disputes by any Party in connection with or relating to this Agreement or any matters described or contemplated in this Agreement shall be instituted in the courts of the State of Kentucky or of the United States sitting in the State of Kentucky. Each Party irrevocably submits, for itself and its properties, to the exclusive jurisdiction of the courts of the State of Kentucky and of the United States sitting in the State of Kentucky in connection with any such Dispute. Each Party irrevocably and unconditionally waives any objection or defense that it may have based on improper venue or *forum non conveniens* to the conduct of any proceeding in any such courts. This provision does not adversely affect FERC's jurisdiction of this Agreement.

17.3 Amendment. This Agreement shall not be varied or amended unless such variation or amendment is agreed to by the Parties in writing and accepted by FERC. The Parties explicitly agree that neither Party shall unilaterally petition to FERC pursuant to the provisions of Sections 205 or 206 of the Federal Power Act to amend this Agreement or to request that FERC initiate its own proceeding to amend this Agreement.

17.4 Assignment. Any assignment of this Agreement or any interest herein or delegation of all or any portion of a Party's obligations, by operation of law or otherwise, by either Party without the other Party's prior written consent shall be void and of no effect; provided, however, that the ITO's consent will not be required for LG&E/KU to assign this Agreement to (a) an affiliate or (b) a successor entity that acquires all or substantially all of LG&E/KU's Transmission System whether by merger, consolidation, reorganization, sale, spin-off or foreclosure; provided, further, that such successor entity agrees to assume all of LG&E/KU's obligations hereunder from and after the date of such assignment. As a condition to the effectiveness of such assignment (i) LG&E/KU shall promptly notify the ITO of such assignment, (ii) the successor entity shall provide a confirmation to the ITO of its assumption of LG&E/KU's obligations hereunder, and (iii) LG&E/KU shall promptly reimburse the ITO, upon receipt of an invoice from the ITO, for any one-time incremental costs reasonably incurred by the ITO as a result of such assignment. For the avoidance of doubt, nothing herein shall preclude LG&E/KU from transferring any or all of its transmission facilities to another entity or disposing of or acquiring any other transmission assets.

17.5 No Third Party Beneficiaries. Except as otherwise expressly provided in this Agreement, this Agreement is made solely for the benefit of the Parties and their successors and permitted assigns and no other person shall have any rights, interest or claims hereunder or

otherwise be entitled to any benefits under or on account of this Agreement as third party beneficiary or otherwise.

17.6 Waivers. No waiver of any provision of this Agreement shall be effective unless it is signed by the Party against which it is sought to be enforced. The delay or failure by either Party to exercise or enforce any of its rights under this Agreement shall not constitute or be deemed a waiver of that Party's right thereafter to enforce those rights, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right.

17.7 Severability; Renegotiation. The invalidity or unenforceability of any portion or provision of this Agreement shall in no way affect the validity or enforceability of any other portion or provision herein. If any provision of this Agreement is found to be invalid, illegal or otherwise unenforceable, the same shall not affect the other provisions hereof or the whole of this Agreement and shall not render invalid, illegal or unenforceable this Agreement or any of the remaining provisions of this Agreement. If any provision of this Agreement or the application thereof to any person, entity or circumstance, is held by a court or regulatory authority of competent jurisdiction to be invalid, void or unenforceable, or if a modification or condition to this Agreement is imposed by such court or regulatory authority, the Parties shall in good faith negotiate such amendment or amendments to this Agreement as will restore the relative benefits and obligation of the Parties immediately prior to such holding, modification or condition.

17.8 Representations and Warranties. Each Party represents and warrants to the other Party as of the date hereof as follows:

17.8.1 Organization. It is duly organized, validly existing and in good standing under the laws of the State in which it was organized, and has all the requisite power and authority to own and operate its material assets and properties and to carry on its business as now being conducted and as proposed to be conducted under this Agreement.

17.8.2 Authority. It has the requisite power and authority to execute and deliver this Agreement and, subject to the procurement of applicable regulatory approvals, to perform its obligations under this Agreement. The execution and delivery of this Agreement by it and the performance of its obligations under this Agreement have been duly authorized by all necessary corporate action required on its part.

17.8.3 Binding Effect. Assuming the due authorization, execution and delivery of this Agreement by the other Party, this Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with its terms, except as the same may be limited by bankruptcy, insolvency or other similar applicable laws affecting creditors' rights generally, and by general principles of equity regardless of whether such principles are considered in a proceeding at law or in equity.

17.8.4 Regulatory Approval. It has obtained or will obtain by the Effective Date, any and all approvals of, and acceptances for filing by, and has given or will give any

notices to, any applicable federal or state authority, including FERC, that are required for it to execute, deliver, and perform its obligations under this Agreement.

17.8.5 No Litigation. There are no actions at law, suits in equity, proceedings, or claims pending or, to its knowledge, threatened against it before or by any federal, state, foreign or local court, tribunal, or governmental agency or authority that might materially delay, prevent, or hinder the performance by such entity of its obligations hereunder.

17.8.6 No Violation or Breach. The execution, delivery and performance by it of its obligations under this Agreement do not and shall not: (a) violate its organizational documents; (b) violate any applicable law, statute, order, rule, regulation or judgment promulgated or entered by any applicable federal or state authority, which violation could reasonably be expected to materially adversely affect the performance of its obligations under this Agreement; or (c) result in a breach of or constitute a default of any material agreement to which it is a party.

17.9 Further Assurances. Each Party agrees that it shall execute and deliver such further instruments, provide all information, and take or forbear such further acts and things as may be reasonably required or useful to carry out the purpose of this Agreement and are not inconsistent with the provisions of this Agreement.

17.10 Entire Agreement. This Agreement and the Attachments hereto set forth the entire agreement between the Parties with respect to the subject matter hereof, and supersede all prior agreements, whether oral or written, related to the subject matter of this Agreement. The terms of this Agreement and the Attachments hereto are controlling, and no parole or extrinsic evidence, including to prior drafts and drafts exchanged with any third parties, shall be used to vary, contradict or interpret the express terms, and conditions of this Agreement.

17.11 Good Faith Efforts. Each Party agrees that it shall in good faith take all reasonable actions necessary to permit it and the other Party to fulfill their obligations under this Agreement. Where the consent, agreement or approval of any Party must be obtained hereunder, such consent, agreement or approval shall not be unreasonably withheld, delayed or conditioned. Where a Party is required or permitted to act, or omit to act, based on its opinion or judgment, such opinion or judgment shall not be unreasonably exercised. To the extent that the jurisdiction of any federal or state authority applies to any part of this Agreement or the transactions or actions covered by this Agreement, each Party shall cooperate with the other Party to secure any necessary or desirable approval or acceptance of such authorities of such part of this Agreement or such transactions or actions.

17.12 Time of the Essence. With respect to all duties, obligations and rights of the Parties, time shall be of the essence in this Agreement.

17.13 Interpretation. Unless the context of this Agreement otherwise clearly requires:

17.13.1 all defined terms in the singular shall have the same meaning when used in the plural and vice versa;

17.13.2 the terms "hereof," "herein," "hereto" and similar words refer to this entire Agreement and not to any particular Section, Attachment or any other subdivision of this Agreement;

17.13.3 references to "Section" or "Attachment" refer to this Agreement, unless specified otherwise;

17.13.4 references to any law, statute, rule, regulation, notification or statutory provision shall be construed as a reference to the same as it applies to this Agreement and may have been, or may from time to time be, amended, modified or re-enacted;

17.13.5 references to "includes," "including" and similar phrases shall mean "including, without limitation;"

17.13.6 the captions, section numbers and headings in this Agreement are included for convenience of reference only and shall not in any way affect the meaning or interpretation of this Agreement;

17.13.7 "or" may not be mutually exclusive, and can be construed to mean "and" where the context requires there to be a multiple rather than an alternative obligation; and

17.13.8 references to a particular entity include such entity's successors and assigns to the extent not prohibited by this Agreement.

17.14 Joint Effort. Preparation of this Agreement has been a joint effort of the Parties and the resulting document shall not be construed more severely against one of the Parties than against the other and no provision in this Agreement is to be interpreted for or against any Party because that Party or its counsel drafted such provision. Each Party acknowledges that in executing this Agreement its has relied solely on its own judgment, belief and knowledge, and such advice as it may have received from its own counsel, and it has not been influenced by any representation or statement made by the other Party or its counsel not contained in this Agreement.

17.15 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument, binding upon LG&E/KU and the ITO, notwithstanding that LG&E/KU and the ITO may not have executed the same counterpart.

The Parties have caused this Independent Transmission Organization Agreement to be executed by their duly authorized representatives as of the dates shown below.

LOUISVILLE GAS AND ELECTRIC COMPANY

____
Name:
Title:
Date:

KENTUCKY UTILITIES COMPANY

____
Name:
Title:
Date:

SOUTHWEST POWER POOL, INC.

____
Name:
Title:
Date:

ATTACHMENT A
TO THE INDEPENDENT TRANSMISSION ORGANIZATION AGREEMENT

DESCRIPTION OF THE FUNCTIONS

The Functions are as follows:

[**TBD**]

ATTACHMENT B
TO THE INDEPENDENT TRANSMISSION ORGANIZATION AGREEMENT

LIST OF KEY PERSONNEL

[To be provided by the ITO]