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Attachment 1

Patricia D. Kravtin

57 Phillips Avenue
Swampscott, MA 01907
781-593-8171
pdkravtin@comcast.net

Summary

Consulting economist with specialization in telecommunications, cable, and energy markets. Extensive knowledge of complex economic, policy and technical issues facing incumbents, new entrants, regulators, investors, and consumers in rapidly changing telecommunications, cable, and energy markets.

Experience

CONSULTING ECONOMIST

2000–Present Independent Consulting Swampscott, MA

- Providing expert witness services and full range of economic, policy, and technical advisory services in the telecommunications, cable, and energy fields.

SENIOR VICE PRESIDENT/SENIOR ECONOMIST

1982–2000 Economics and Technology, Inc. Boston, MA

- Active participant in regulatory proceedings in over thirty state jurisdictions, before the Federal Communications Commission, Federal Energy Regulatory Commission, and other international regulatory authorities on telecommunications, cable, and energy matters.
- Provided expert witness and technical advisory services in connection with litigation and arbitration proceedings before state and federal regulatory agencies and before U.S. district court, on behalf of diverse set of public and private sector clients (see Record of Prior Testimony).
- Extensive cable television regulation expertise in connection with implementation of the Cable Act of 1992 and the Telecommunications Act of 1996 by the Federal Communications Commission and local franchising authorities.
- Led analysis of wide range of issues related to: rates and rate policies; cost methodologies and allocations; productivity; cost benchmarking; business case studies for entry into cable, telephony, and broadband markets; development of competition; electric industry restructuring; incentive or performance based regulation; universal service; access charges; deployment of advanced services and broadband technologies; and access to pole attachments and other rights-of-way.
- Served as advisor to state regulatory agencies, assisting in negotiations with utilities, non-partial review of record evidence, deliberations and drafting of final decisions.

- Author of numerous industry reports and papers on topics including market structure and competition, alternative forms of regulation, patterns of investment, telecommunications modernization, and broadband deployment (see listing of Reports and Studies).
- Invited speaker before various national organizations, state legislative committees and participant in industry symposiums.
- Grant Reviewer for Broadband Technology Opportunities Program (BTOP) administered by National Telecommunications and Information Administration (NTIA), Fall 2009.

RESEARCH/POLICY ANALYST

1978–1980 Various Federal Agencies Washington, DC

- Prepared economic impact analyses related to allocation of frequency spectrum (Federal Communications Commission).
- Performed financial and statistical analysis of the effect of securities regulations on the acquisition of high-technology firms (Securities and Exchange Commission).
- Prepared analyses and recommendations on national economic policy issues including capital recovery. (U.S. Dept. of Commerce).

Education

1980–1982 Massachusetts Institute of Technology Boston, MA

- Graduate Study in the Ph.D. program in Economics (Abd). General Examination passed in fields of Government Regulation of Industry, Industrial Organization, and Urban and Regional Economics.
- National Science Foundation Fellow.

1976–1980 George Washington University Washington, DC

- B.A. with Distinction in Economics.
- Phi Beta Kappa, Omicron Delta Epsilon in recognition of high scholastic achievement in field of Economics. Recipient of four-year honor scholarship.

Prof. Affiliation

American Economic Association

Reports and Studies (authored and co-authored)

Report on the Financial Viability of the Proposed Greenfield Overbuild in the City of Lincoln, California, prepared for Starstream Communications, August 12, 2003.

“Assessing SBC/Pacific’s Progress in Eliminating Barriers to Entry, The Local Market in California is Not Yet Fully and Irreversibly Open,” prepared for the California Association of Competitive Telecommunications Companies (CALTEL), August 2000.

“Final Report on the Qualifications of Wide Open West-Texas, LLC for a Cable Television Franchise in the City of Dallas,” prepared for the City of Dallas, July 31, 2000.

“Final Report on the Qualifications of Western Integrated Networks of Texas Operating L.P. For a Cable Television Franchise in the City of Dallas,” prepared for the City of Dallas, July 31, 2000.

“Price Cap Plan for USWC: Establishing Appropriate Price and Service Quality Incentives in Utah” prepared for The Division of Public Utilities, March, 2000.

“Building a Broadband America: The Competitive Keys to the Future of the Internet,” prepared for The Competitive Broadband Coalition, May 1999.

“Broken Promises: A Review of Bell Atlantic-Pennsylvania's Performance under Chapter 30,” prepared for AT&T and MCI Telecommunications, June 1998.

“Analysis of Opportunities for Cross Subsidies between GTA and GTA Cellular,” prepared for Guam Cellular and Paging, submitted to the Guam Public Utilities Commission, July 11, 1997.

“Reply to Incumbent LEC Claims to Special Revenue Recovery Mechanisms,” submitted in the Matter of Access Charge Reform in CC Docket 96-262, February 14, 1997.

“Assessing Incumbent LEC Claims to Special Revenue Recovery Mechanisms: Revenue opportunities, market assessments, and further empirical analysis of the ‘Gap’ between embedded and forward-looking costs,” FCC CC Docket 96-262, January 29, 1997.

“Analysis of Incumbent LEC Embedded Investment: An Empirical Perspective on the ‘Gap’ between Historical Costs and Forward-looking TSLRIC,” Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, FCC CC 96-98, May 30, 1996.

“Reply to X-Factor Proposals for the FCC Long-Term LEC Price Cap Plan,” prepared for the Ad Hoc Telecommunications User Committee, submitted in FCC CC Docket 94-1, March 1, 1996.

“Establishing the X-Factor for the FCC Long-Term LEC Price Cap Plan,” prepared for the Ad Hoc Telecommunications User Committee, submitted in FCC CC Docket 94-1, December 1995.

“The Economic Viability of Stentor’s ‘Beacon Initiative,’ exploring the extent of its financial dependency upon revenues from services in the Utility Segment,” prepared for Unitel, evidence before the Canadian Radio-television and Telecommunications Commission, March 1995.

“Fostering a Competitive Local Exchange Market in New Jersey: Blueprint for Development of a Fair Playing Field,” prepared for the New Jersey Cable Television Association, January 1995.

“The Enduring Local Bottleneck: Monopoly Power and the Local Exchange Carriers,” Feb. 1994.

“A Note on Facilitating Local Exchange Competition,” prepared for E.P.G., Nov. 1991.

“Testing for Effective Competition in the Local Exchange,” prepared for the E.P.G., October 1991.

“A Public Good/Private Good Framework for Identifying POTS Objectives for the Public Switched Network” prepared for the National Regulatory Research Institute, October 1991.

“Report on the Status of Telecommunications Regulation, Legislation, and modernization in the states of Arkansas, Kansas, Missouri, Nebraska, Oklahoma and Texas,” prepared for the Mid-America Cable-TV Association, December 13, 1990.

“The U S Telecommunications Infrastructure and Economic Development,” presented at the 18th Annual Telecommunications Policy Research Conference, Airlie, Virginia, October 1990.

“An Analysis of Outside Plant Provisioning and Utilization Practices of US West Communications in the State of Washington,” prepared for the Washington Utilities and Transportation Commission, March 1990.

“Sustainability of Competition in Light of New Technologies,” presented at the Twentieth Annual Williamsburg Conference of the Institute of Public Utilities, Williamsburg, VA, December 1988.

“Telecommunications Modernization: Who Pays?,” prepared for the National Regulatory Research Institute, September 1988.

“Industry Structure and Competition in Telecommunications Markets: An Empirical Analysis,” presented at the Seventh International Conference of the International Telecommunications Society at MIT, July 1988.

“Market Structure and Competition in the Michigan Telecommunications Industry,” prepared for the Michigan Divestiture Research Fund Board, April 1988.

“Impact of Interstate Switched Access Charges on Information Service Providers - Analysis of Initial Comments,” submitted in FCC CC Docket No. 87-215, October 26, 1987.

“An Economic Analysis of the Impact of Interstate Switched Access Charge Treatment on Information Service Providers,” submitted in FCC CC Docket No. 87-215, September 24, 1987.

“Regulation and Technological Change: Assessment of the Nature and Extent of Competition from a Natural Industry Structure Perspective and Implications for Regulatory Policy Options,” prepared for the State of New York in collaboration with the City of New York, February 1987.

“BOC Market Power and MFJ Restrictions: A Critical Analysis of the ‘Competitive Market’ Assumption,” submitted to the Department of Justice, July 1986.

“Long-Run Regulation of AT&T: A Key Element of a Competitive Telecommunications Policy,” *Telematics*, August 1984.

“Economic and Policy Considerations Supporting Continued Regulation of AT&T,” submitted in FCC CC Docket No. 83-1147, June 1984.

“Multi-product Transportation Cost Functions,” MIT Working Paper, September 1982.

Record of Prior Testimony

2013

Before the **Commonwealth of Virginia State Corporation Commission**, in *Application of Northern Virginia Electric Cooperative, For Approval of pole attachment rates and terms and conditions under § 56-466.1 of the Code of Virginia*, Pre-filed Direct Testimony on behalf of Comcast California/Maryland/Pennsylvania/Virginia/West Virginia LLC, , August 29, 2013. Live testimony and cross-examination, November 22/25, 2013.

Before the General **Court of Justice Superior Court Division, State of North Carolina, County of Rutherford**, *Rutherford Electric Membership Corporation, Plaintiff, vs. Time Warner Entertainment– Advance/Newhouse Partnership d/b/a Time Warner Cable, Defendant*, 13 CVS 231, submitted July 10, 2013, Deposition July 22, 2013. Live testimony and cross-examination, September 6, 2013.

Before the **Chancery Court for Davidson County, Tennessee at Nashville**, *The Metropolitan Government of Nashville and Davidson County, Tennessee, Plaintiff v. XO Tennessee, Inc., Defendant, Docket No. 02-679-IV; The Metropolitan Government of Nashville and Davidson County, Tennessee, Plaintiff v. TCG Midsouth, Inc., Defendant, Docket No. 02-749-IV*, Affidavit dated January 25, 2013, Reply Affidavit dated February 19, 2013. Live testimony and cross-examination, May 14-15, 2013.

2012

Before the **State of New Hampshire Public Utilities Commission**, in *Time Warner Entertainment Company L.P. d/b/a Time Warner Cable, Petition for Resolution of Dispute with Public Service Company of New Hampshire*, DT 12-084, on behalf of Time Warner Entertainment Company L.P. d/b/a Time Warner Cable, Comcast Cable Communications Management, LLC, Comcast of New Hampshire, Inc., Comcast of Massachusetts/New Hampshire, LLC, and Comcast of Maine/New Hampshire, Inc. Initial Direct Testimony submitted July 20, 2012; Reply Direct Testimony submitted October 31, 2012; Live panel testimony, November 14, 2012.

Before the **Ontario Energy Board**, in *the Matter of the Application by Canadian Distributed Antenna Systems Coalition (“CANDAS”)*, File No. EB-2011-1020, Joint Written Statement (with J. Lemay, M. Starkey, A. Yatchew), submitted July 20, 2012.

Before the **Chancery Court for Davidson County, Tennessee at Nashville**, *The Metropolitan Government of Nashville and Davidson County, Tennessee, Plaintiff v. XO Tennessee, Inc., Defendant, Docket No. 02-679-IV; The Metropolitan Government of Nashville and Davidson County, Tennessee, Plaintiff v. TCG Midsouth, Inc., Defendant, Docket No. 02-749-IV*, Expert Report submitted May 15, 2012; Supplemental Report dated November 6, 2012.

2011

Before the **Ontario Energy Board**, in *the Matter of the Application by Canadian Distributed Antenna Systems Coalition (“CANDAS”)*, File No. EB-2011-1020, Reply Evidence, filed December 16, 2011.

Before the **Public Utilities Commission of Ohio**, *In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company, Individually and, if Their Proposed Merger is Approved, as a Merged Company (collectively, AEP Ohio) for an Increase in Electric Distribution Rates, Case No. 11-351-EL-AIR, Case No. 11-352-EL-AIR; In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company, Individually and, if Their Proposed Merger is Approved, as a Merged Company (collectively, AEP Ohio) for Tariff Approval, Case No. 11-353-EL-ATA Case No. 11-354-EL-ATA; In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company, Individually and, if Their Proposed Merger is Approved, as a Merged Company (collectively, AEP Ohio) for Approval to Change Accounting Methods, Case No. 11-356-EL-AAM, Case No. 11-258-EL-AAM.* filed October 24, 2011.

Before the **Virginia State Corporation Commission**, *In the Matter of Determining Appropriate Regulation of Pole Attachments and Cost Sharing in Virginia*, Case No. PUE-2011-00033, Affidavit submitted June 22, 2011, Live Testimony given July 13, 2011.

Before the **Public Utility Commission of Texas**, State Office of Administrative Hearings, *Petition of CPS Energy for Enforcement Against AT&T Texas and Time Warner Cable Regarding Pole Attachments*, SOAH Docket No. 473-09-5470, PUC Docket No. 36633, Supplemental Testimony submitted March 17, 2011; Further Supplemental Testimony submitted April 22, 2011, Cross-examination, September 13, 2011.

2010

Before the **General Court of Justice Superior Court Division, State of North Carolina, County of Rowan**, *Time Warner Entertainment– Advance/Newhouse Partnership, Plaintiff, V. Town Of Landis, North Carolina, Defendant*, 10 CVS 1172, submitted October 20, 2010, Deposition December 1, 2010, Live testimony and cross-examination July 20, 2011.

Before the **Federal Communications Commission**, *In the Matter of Implementation of Section 224 of the Act; Amendment of the Commission's Rules and Policies Governing Pole Attachments*, WC Docket No. 07-245, GN Docket No. 09-51. Report submitted August 16, 2010, Attachment A to Comments filed by the National Cable and Telecommunications Association.

Before the **Public Utility Commission of Texas**, State Office of Administrative Hearings, *Petition of CPS Energy for Enforcement Against AT&T Texas and Time Warner Cable Regarding Pole Attachments*, SOAH Docket No. 473-09-5470, PUC Docket No. 36633, Direct Testimony submitted July 23, 2010.

Before the **Kentucky Public Service Commission**, *In the Matter of: Application of Kentucky Utilities Company for An Adjustment of its Base Rates*, Case No. 2009-00548, submitted April 22, 2010.

Before the **Kentucky Public Service Commission** *In the Matter of: Application of Louisville Gas and Electric Company for An Adjustment of its Electric and Gas Base Rates*, Case No. 2009-00549, submitted April 22, 2010.

Before the Arkansas Public Service Commission, Coxcom, Inc., D/B/A Cox Communications, Complainant V. Arkansas Valley Electric Cooperative Corporation, Respondent. Docket No. 09-133-C, submitted March 17, 2010

2009

Before the Circuit Court of the Thirteenth Judicial Circuit in and for Hillsborough County, State of Florida, Tampa Electric Company, Plaintiff, vs. Bright House Networks, LLC, Defendant, Case No. 06-00819, Division L. Expert Report submitted December 30, 2009, Deposition February 2, 2010, Cross-examination, March 24, 2010.

Before the **Superior Court of the State Of Washington for the County of Pacific**, *Pacific Utility District No. 2 Of Pacific County, Plaintiff, V. Comcast of Washington Iv, Inc., CenturyTel of Washington, Inc., and Falcon Community Ventures I, L.P. D/B/A Charter Communications, Defendants*, Case No. 07-2-00484-1, Expert Report submitted September 18, 2009, Reply Report submitted October 16, 2009.

Before the **Public Utilities Commission of Ohio**, *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Electric Distribution Rates*, Case No. 08-709-EL-AIR, *In the Matter of the Application of Duke Energy Ohio, Inc., for a Tariff Approval*, Case No. 08-710-EL-ATA, *In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Change Accounting Methods*, Case No. 08-11-EL-AAM, *In the Matter of the Application of Cincinnati Gas & Electric Company for Approval of its Rider BDP, BacLG&Ep Delivery Point*, Case No. 06-718-EL-ATA, filed February 26, 2009.

2008

Before the **Arkansas Public Service Commission**, *In the Matter of a Rulemaking Proceeding to Establish Pole Attachment Rules In Accordance With Act 740 of 2007*, Docket No. 08-073-R, filed May 13, 2008, reply filed June 3, 2008, Cross-examination June 10, 2008.

Before the **Federal Communications Commission**, *In the Matter of Implementation of Section 224 of the Act; Amendment of the Commission's Rules and Policies Governing Pole Attachments*, WC Docket No. 07-245, RM 11293, RM 11303, filed March 7, 2008, reply filed April 22, 2008.

2006

Before the **State of New Jersey Board of Public Utilities**, Office of Administrative Law, *in the Matter of the Verified Petition of TCG Delaware Valley, Inc. and Teleport Communications New York for an Order Requiring PSE&G Co. to Comply with the Board's Conduit Rental Regulations*, OAL Docket PUC 1191-06, BPU Docket No. EO0511005, filed September 29, 2006; rebuttal filed November 17, 2006.

Before the **Federal Communications Commission**, *In the Matter of Florida Cable Telecommunications Association, Inc., Comcast Cablevision of Panama City, Inc.; Mediacom Southeast, L.L.C.; and Cox Communications Gulf, L.L.C.; Complainants v. Gulf Power Company, Respondent*. EB Docket No. 04-381. Testimony on behalf of Complainants filed March 31, 2006, Deposition March 15, 2006, Cross-Examination April 26-27, 2006.

2005

Before the **United States District Court for the Eastern District of New York**, *Coastal Communication Service, Inc. and Telebeam Telecommunications Corporation, Plaintiffs - against -The City of New York and New York City Department of Information Technology and Telecommunications*, 02 Civ. 2300 (RJD) (SMG), Expert Report filed February 4, 2005; Rebuttal Expert Report, filed August 29, 2005, Deposition December 1, 2005.

2004

Before the **Ontario Energy Board**, *In the Matter of the Ontario Energy Board Act 1998*, S.O.1998, c.15, (Schedule B); and *In the Matter of an Application pursuant to section 74 of the Ontario Energy Board Act, 1998* by the Canadian Cable Television Association for an Order or Orders to amend the licenses of electricity distributors, RP-2003-024, Reply Evidence, filed September 27, 2004 (jointly with Paul Glist), Cross-examination October 26-27, 2004.

2003

Before the **United States District Court for the Southern District of California**, *Level 3 Communications, LLC v. City of Santee*, Civil Action No. 02-CV-1193, Rebuttal Expert Report, Filed July 18, 2003

2002

Before the **New York State Public Service Commission**, *In the Matter of the Cable Television & Telecommunications Association of New York, Inc., Petitioner, v. Verizon New York, Inc., Respondent*, Case 02-M-1636, Affidavit filed December 19, 2002.

Before the **West Virginia Public Service Commission**, *Community Antenna Service, Inc. v. Charter Communications*, Case No. 01-0646-CTV-C, Live Direct Testimony and Cross-examination, June 12, 2002.

Before the **Public Service Commission of the District of Columbia**, *Comcast Cablevision of the District, L.L.C., Complainant, v. Verizon Communications Inc. - Washington, D.C., Respondent*, Formal Case No. 1006, Direct Testimony filed June 11, 2002; Rebuttal Testimony filed June 24, 2002.

Before the **Federal Communications Commission**, *in Cavalier Telephone, LLC, Complainant, v. Virginia Electric & Power Co., D/b/a Dominion Virginia Power, Respondent*, Case No. EB-02-MD-005, Declaration filed May 21, 2002.

Before the **Puerto Rico Telecommunications Regulatory Board**, in *Re: Petition of Centennial Puerto Rico License Corp. for arbitration pursuant to Sections 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Puerto Rico Telephone Company*, on behalf of Centennial Puerto Rico License Corp., Direct Testimony filed April 16, 2002; Deposition May 7, 2002, May 14, 2002; Reply Testimony filed May 20, 2002, Cross-examination May 22, 2002.

Before the **Federal Energy Regulatory Commission**, in *Re: In the Matter of Transcontinental Gas Pipe Line Corporation*, Docket No. RP01-245, on behalf of the University of Maryland-College Park, Johns Hopkins University and Johns Hopkins University Health System, and the North Carolina Utilities Commission, Cross-answering Testimony filed January 23, 2002; Rebuttal Testimony filed May 31, 2002, Cross-examination July 31, 2002.

2001

Before the **United States District Court for the Northern District of New York**, *TC Systems, Inc. and Teleport Communications-New York vs. Town of Colonie, New York*, Civil Action No. 00-CV-1972, Expert Report filed November 16, 2001; Deposition December 7, 2001, Rebuttal Expert Report filed December 20, 2001, Deposition January 9, 2002.

Before the **Federal Energy Regulatory Commission**, in *Re: In the Matter of Transcontinental Gas Pipe Line Corporation*, Docket No. RP01-245, on behalf of the University of Maryland-College Park, Johns Hopkins University and Johns Hopkins University Health System, and the North Carolina Utilities Commission, filed November 15, 2001.

Before the **Public Service Commission of the District of Columbia**, Comcast Cable Communications, Inc. d/b/a/Comcast Cable of Washington, D.C., Complainant, v. Verizon Communications Inc. – Washington, D.C., Respondent, filed September 21, 2001.

Before the **Public Utility Commission of Texas**, State Office of Administrative Hearings, SOAH Docket No. 473-00-1014, PUC Docket No. 22349, *Application of Texas-New Mexico Power Company for Approval of Unbundled Cost of Service Rate Pursuant to PURA § 39.201 and Public Utility Commission Substantive Rule §25.344*, on behalf of Cities Served by Texas-New Mexico Power, filed January 25, 2001.

2000

Before the **Puerto Rico Telecommunications Regulatory Board**, in *AT&T of Puerto Rico, Inc. et al v. Puerto Rico Telephone Company, Inc., Re: Dialing Parity*, Docket Nos. 97-Q-0008, 98-Q-0002, on behalf of Lambda Communications Inc., Cross-examination October 19-20, 2000.

Before the **Department of Telecommunications and Energy of the Commonwealth of Massachusetts**, Docket No. DTE 98-57 – Phase III, *Re: Bell Atlantic- Massachusetts Tariff No. 17 Digital Subscriber Line Compliance Filing and Line Sharing Filing*, (Panel Testimony with Joseph Riolo, Robert Williams, and Michael Clancy) on behalf of Rhythms Links Inc. and Covad Communications Company, filed July 10, 2000.

Before the **New York State Public Service Commission** in *Re: Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements* on behalf of the Cable Television & Telecommunications Association of New York, Inc., Direct Testimony filed June 26, 2000, Supplemental Testimony filed November 29, 2000.

Before the **Maryland Public Service Commission**, on behalf of Rhythms Links Inc. and Covad Communications Company, filed jointly with Terry L. Murray and Richard Cabe, May 5, 2000.

Before the **Public Utility Commission of Texas**, in *Re: Proceeding to Examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996*, CC Docket No. 21982, on behalf of AT&T Communications of Texas, L.P., TCG Dallas, and Teleport Communications Houston, Inc., filed March 31, 2000.

Before the **Federal Communications Commission**, in *Re: In the Matter of Price Caps Performance Review for Local Exchange Carriers, Access Charge Reform*, CC Dockets 94-1, 96-262, on behalf of Ad Hoc Telecommunications Users Committee, filed January 24, 2000.

Before the **Federal Energy Regulatory Commission**, in *Re: In the Matter of Northern Border Pipeline Company*, on behalf of the Canadian Association of Petroleum Producers and the Alberta Department of Resource Development, filed January 20, 2000.

1999

Before the **Connecticut Department of Public Utilities**, in *Re: Evaluation and Application to Modify Franchise Agreement by SBC Communications Inc., Southern New England telecommunications Corporation and SNET Personal Vision, Inc.*, Docket No. 99-04-02, on behalf of the Office of Consumer Counsel, filed June 22, 1999; cross-examination July 8, 1999

Before the **Illinois Commerce Commission**, in *Re: Illinois Commerce Commission on its own Motion v. Illinois Bell Telephone Company; et al: Investigation into Non-Cost Based Access Charge Rate Elements in the Intrastate Access Charges of the Incumbent Local Exchange Carriers in Illinois, Illinois Commerce Commission on its own Motion Investigation into Implicit Universal Service Subsidies in Intrastate Access Charges and to Investigate how these Subsidies should be Treated in the Future, Illinois Commerce Commission on its own motion Investigation into the Reasonableness of the LS2 Rate of Illinois Bell Telephone Company*, Docket No. 97-00601, 97-0602, 97-0516, Consolidated, on behalf of City of Chicago, filed January 4, 1999; rebuttal February 17, 1999.

Before the **Puerto Rico Telecommunications Regulatory Board**, in *Re: In the Matter of Arbitration of Interconnection Rates, Terms and Conditions between Centennial Wireless PCS Operations Corp., Lambda Communications Inc., and the Puerto Rico Telephone Company*, behalf of Centennial Wireless PCS Operations Corp. and Lambda Communications Inc., cross-examination February 16, 1999.

1998

Before the **California Public Utilities Commission**, in *Re: In the Matter of the Application of Pacific Bell (U 1001 C), a Corporation, for Authority for Pricing Flexibility and to Increase Prices of Certain Operator Services, to Reduce the Number of Monthly Assistance Call Allowances, and Adjust Prices for Four Centrex Optional Features*, Application No. 98-05-038, on behalf of County of Los Angeles, filed November 17, 1998, cross-examination, December 9, 1998.

Before the **Puerto Rico Telecommunications Regulatory Board**, in *Re: In the Matter of PRTC's Tariff K-2 (Intra-island access charges)*, Docket no. 97-Q-0001, 97-Q-0003, on behalf of Lambda Communications, Inc., filed October 9, 1998, cross-examination October 9, 1998.

Before the **Connecticut Department of Public Utility Control**, in *Re: Application of the Southern New England Telephone Company*, Docket no. 98-04-03, on behalf of the Connecticut Office of Consumer Counsel, filed August 17, 1998, cross-examination February 18, 1999.

Before the **California Public Utilities Commission**, in *Re: Pacific Gas & Electric General Rate Case*, A.97-12-020, on behalf of Office of Rate Payers Advocates CA PUC, filed June 8, 1998.

1997

Before the **South Carolina Public Service Commission**, in *Re: Proceeding to Review BellSouth Telecommunications, Inc. ' s Cost for Unbundled Network Elements*, Docket no. 97-374-C, on behalf of the South Carolina Cable Television Association, filed November 17, 1997.

Before the **State Corporation Commission of Kansas**, in *Re: In the Matter of and Investigation to Determine whether the Exemption from Interconnection Granted by 47 U.S.C. 251(f) should be Terminated in the Dighton, Ellis, Wakeeney, and Hill City Exchanges*, Docket No. 98-GIMT-162-MIS, on behalf of classic Telephone, Inc., filed October 23, 1997.

Before the **Georgia Public Services Commission**, in *Re: Review of Cost Studies, Methodologies, and Cost-Based Rates for Interconnection and Unbundling of BellSouth Telecommunications Services*, Docket No. 7061-U, on behalf of the Cable Television Association of Georgia, filed August 29, 1997, cross-examination September 19, 1997.

Before the **Federal Communications Commission**, in *Re: In the Matter of Price Caps Performance Review for Local Exchange Carriers, Access Charge Reform*, CC Dockets 94-1, 96-262, on behalf of Ad Hoc Telecommunications Users Committee, filed July 11, 1997.

Before the **Federal Communications Commission**, in *Re: In the Matter of Amendment of Rules and Policies Governing Pole Attachments*, CS Docket 97-98, on behalf of NCTA, filed June 27, 1997.

Before the **Public Utilities Commission of the State of California**, in *Re: Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks*, R.93-04-003, I.93-04-002AT&T, filed March 19, 1997, reply April 7, 1997.

Before the **Puerto Rico Telecommunications Regulatory Board**, in *Re: In the Matter of Centennial Petition for Arbitration with PRTC*, on behalf of Centennial Cellular Corporation, filed February 14, 1997, supplemental March 10, 1997.

Before the **Federal Communications Commission**, in *Re: In the Matter of Access Charge Reform*, CC Docket 96-262, on behalf of AT&T, filed January 29, 1997, reply February 14, 1997.

1996

Before the **New Jersey Board of Public Utilities**, in *Re: In the Matter of the Investigation Regarding Local Exchange Competition for Telecommunications Services*, TX95120631, on behalf of New Jersey Cable Television Association, filed on August 30, 1996, reply September 9, 1997, October 20, 1997, cross-examination September 12, 1996, December 20, 1996.

Before the **State Corporation Commission of the State of Kansas**, in *Re: In the Matter of a General Investigation Into Competition Within the Telecommunications Industry in the State of Kansas*, 190, 492-U 94-GIMT-478-GIT, on behalf of Kansas Cable Telecommunications Association, Inc., filed July 15, 1996, cross-examination August 14, 1996.

Before the **Federal Communications Commission**, in *Re: Price Caps Performance Review for Local Exchange Carriers*, CC Docket 94-1, on behalf of Ad Hoc Telecommunications Users Committee, filed July 12, 1996.

Before the **State Corporation Commission of the State of Kansas**, in *Re: In the Matter of a General Investigation Into Competition Within the Telecommunications Industry in the State of Kansas*, 190, 492-U 94-GIMT-478-GIT, on behalf of Kansas Cable Telecommunications Association, Inc., filed June 14, 1996, cross-examination August 14, 1996.

Before the **Federal Communications Commission**, in *Re: In the Matter of Implementation of the Local Competition Provisions of Telecommunications Act of 1996*, CC Docket 96-98, filed May 1996.

Before the **Federal Communications Commission**, in *Re: Puerto Rico Telephone Company (Tariff FCC No. 1)*, Transmittal No. 1, on behalf of Centennial Cellular Corp., filed April 29, 1996.

Before the **United States District Court for the Eastern District of Tennessee at Greeneville**, in *Re: Richard R. Land, Individually and d/b/a The Outer Shell, and on behalf of all others similarly situated, Plaintiffs, vs. United Telephone-Southeast, Inc., Defendant*, CIV 2-93-55, filed December 7, 1996.

1995

Before the **Federal Communications Commission**, in *Re: Bentleyville Telephone Company Petition and Waiver of Sections 63.54 and 63.55 of the Commission's Rules and Application for Authority to Construct and Operate, Cable Television Facilities in its Telephone Service Area*, W-P-C-6817, on behalf of the Helicon Group, L.P. d/b/a Helicon Cablevision, filed November 2, 1995.

Before the **US District Court for the Eastern District of Tennessee**, in *Re: Richard R. Land, Individually and d/b/a The Outer Shell, and on behalf of all others similarly situated, Plaintiffs, vs. United Telephone-Southeast, Inc., Defendant*, 2-93-55, Class Action, filed June 12, 1995.

Before the **Connecticut Department of Public Utility Control**, in *Re: Application of SNET Company for approval to trial video dial tone transport and switching*, 95-03-10, on behalf of New England Cable TV Association, filed May 8, 1995, cross-examination May 12, 1995.

Before **Canadian Radio-Television and Telecommunications Commission**, in *Re: CRTC Order in Council 1994-1689*, Public Notice CRTC 1994-130 (Information Highway), filed March 10, 1995.

Before the **Federal Communications Commission**, in *Re: GTE Hawaii's Section 214 Application to provide Video Dialtone in Honolulu, Hawaii*, W-P-C- 6958, on behalf of Hawaii Cable TV Association, filed January 17, 1995 (Reply to Amended Applications).

Before the **Federal Communications Commission**, in *Re: GTE Hawaii's Section 214 Application to provide Video Dialtone in Ventura County*, W-P-C 6957, on behalf of the California Cable TV Association, filed January 17, 1995 (Reply to Amended Applications).

Before the **Federal Communications Commission**, in *Re: GTE Florida's Section 214 Application to Provide Video Dialtone in the Pinellas County and Pasco County, Florida areas*, W-P-C 6956, on behalf of Florida Cable TV Association, filed January 17, 1995 (Reply to Amended Applications).

Before the **Federal Communications Commission**, in *Re: GTE Virginia's Section 214 Application to provide Video Dialtone in the Manassas, Virginia area*, W-P-C 6956, on behalf of Virginia Cable TV Association, filed January 17, 1995 (Reply to Amended Applications).

1994

Before the **Federal Communications Commission**, in *Re: NET's Section 214 Application to provide Video Dialtone in Rhode Island and Massachusetts*, W-P-C 6982, W-P-C 6983, on behalf of New England Cable TV Association, filed December 22, 1994 (Reply to Supp. Responses).

Before the **State Corporation Commission of the State of Kansas**, in *Re: General Investigation into Competition*, 190, 492-U 94-GIMT-478-GIT, on behalf of Kansas CATV Association, filed November 14, 1994, cross-examination December 1, 1994.

Before the **Federal Communication Commission**, in *Re: Carolina Telephone's Section 214 Application to provide Video Dialtone in areas of North Carolina*, W-P-C 6999, on behalf of North Carolina Cable TV Association, filed October 20, 1994, reply November 8, 1994.

Before the **Federal Communication Commission**, in *Re: NET's Section 214 Application to provide Video Dialtone in Rhode Island and Massachusetts*, W-P-C 6982, W-P-C 6983, on behalf of New England Cable TV Association, filed September 8, 1994, reply October 3, 1994.

Before the **California Public Utilities Commission**, in *Re: Petition of GTE-California to Eliminate the Preapproval Requirement for Fiber Beyond the Feeder*, I.87-11-033, on behalf of California Bankers Clearing House, County of LA, filed August 24, 1994.

Before the **Federal Communications Commission**, in *Re: BellSouth Telecommunications Inc., Section 214 Application to provide Video Dialtone in Chamblee, GA and DeKalb County, GA*, W-P-C 6977, on behalf of Georgia Cable TV Association, filed August 5, 1994.

Before the **Federal Communications Commission**, in *Re: Bell Atlantic Telephone Companies Section 214 Application to provide Video Dialtone within their Telephone Services Areas*, W-P-C 6966, on behalf of Mid Atlantic Cable Coalition, filed July 28, 1994, reply August 22, 1994.

Before the **Federal Communication Commission**, in *Re: GTE Hawaii ' s 214 Application to provide Video Dialtone in Honolulu, Hawaii*, W-P-C 6958, on behalf of Hawaii Cable TV Association, filed July 1, 1994, and July 29, 1994.

Before the **Federal Communication Commission**, in *Re: GTE California ' s Section 214 Application to provide Video Dialtone in Ventura County*, W-P-C 6957, on behalf of California Cable TV Association, filed July 1, 1994, and July 29, 1994.

Before the **Federal Communication Commission**, in *Re: GTE Florida ' s 214 Application to provide Video Dialtone in the Pinellas and Pasco County, Florida areas*, W-P-C 6956, on behalf of Florida Cable TV Association, filed July 1, 1994, and July 29, 1994.

Before the **Federal Communication Commission**, in *Re: GTE Virginia ' s 214 Application to provide Video Dialtone in the Manassas, Virginia area*, W-P-C 6955, on behalf of the Virginia Cable TV Association, filed July 1, 1994, and July 29, 1994.

Before the **Federal Communications Commission**, in *Re: US WEST ' s Section 214 Application to provide Video Dialtone in Boise, Idaho and Salt Lake City, Utah*, W-P-C 6944-45, before the Idaho and Utah Cable TV Association, filed May 31, 1994.

Before the **Federal Communication Commission**, in *Re: US WEST ' s Section 214 Application to provide Video Dialtone in Portland, OR; Minneapolis, St. Paul, MN; and Denver, CO*, W-P-C 6919-22, on behalf of Minnesota & Oregon Cable TV Association, filed March 28, 1994.

Before the **Federal Communications Commission**, in *Re: Ameritech ' s Section 214 Application to provide Video Dialtone within areas in Illinois, Indiana, Michigan, Ohio, and Wisconsin*, W-P-C-6926-30, on behalf of Great Lakes Cable Coalition, filed March 10, 1994, reply April 4, 1994.

Before the **Federal Communications Commission**, in *Re: Pacific Bell ' s Section 214 Application to provide Video Dialtone in Los Angeles, Orange County, San Diego, and Southern San Francisco Bay areas*, W-P-C-6913-16, on behalf of Comcast/Cablevision Inc., filed February 11, 1994, reply March 11, 1994.

Before the **Federal Communications Commission**, in *Re: SNET ' s Section 214 Application to provide Video Dialtone in Connecticut*, W-P-C 6858, on behalf of New England Cable TV Association, filed January 20, 1994, reply February 23, 1994.

1993

Before the **Arkansas Public Service Commission**, in *Re: Earnings Review of Southwestern Bell Telephone Company*, 92-260-U, on behalf of Arkansas Press Association, filed September 2, 1993.

Before the **United States District Court for the Eastern District of Tennessee at Greenville**, in *Re: Cleo Stinnett, et al. Vs. BellSouth Telecommunications, Inc. d/b/a/ South Central Bell Telephone Company, Defendant*, Civil Action No 2-92-207, Class Action, cross-examination May 10, 1993, and February 10, 1994.

Before the **Federal Communications Commission**, in *Re: NJ Bell ' s Section 214 Application to provide Video Dialtone service within Dover Township, and Ocean County, New Jersey*, W-P-C-6840, on behalf of New Jersey Cable TV Association, filed January 21, 1993.

1992

Before the **New Jersey Board of Regulatory Commissioners**, in *Re: NJ Bell Alternative Regulation*, T092030358, on behalf of NJ Cable TV Association, filed September 21, 1992.

Before the **New Hampshire Public Utilities Commission**, in *Re: Generic competition docket*, DR 90-002, on behalf of Office of the Consumer Advocate, filed May 1, 1992, reply July 10, 1992, Surrebuttal August 21, 1992.

Before the **New Jersey General assembly Transportation, Telecommunications, and Technology Committee**, *Concerning A-5063*, on behalf of NJ Cable TV Association, filed January 6, 1992.

1991

Before the **New Jersey Senate Transportation and Public Utilities Committee**, in *Re: Concerning Senate Bill S-3617*, on behalf of New Jersey Cable Television Association, filed December 10, 1991.

Before the **119th Ohio General Assembly Senate Select Committee on Telecommunications Infrastructure and Technology**, in *Re: Issues Surrounding Telecommunications Network Modernization*, on behalf of the Ohio Cable TV Association, filed March 7, 1991.

Before the **Tennessee Public Service Commission**, in *Re: Master Plan Development and TN Regulatory Reform Plan*, on behalf of TN Cable TV Association, filed February 20, 1991.

1990

Before the **Tennessee Public Service Commission**, in *Re: Earnings Investigation of South Central Bell*, 90-05953, on behalf of the TN Cable Television Association, filed September 28, 1990.

Before the **New York Public Service Commission**, in *Re: NYT Rates, 90-C-0191, on behalf of User Parties NY Clearing House Association*, filed July 13, 1990, Surrebuttal July 30, 1990.

Before the **Louisiana Public Service Commission**, in *Re: South Central Bell Bidirectional Usage Rate Service*, U-18656, on behalf of Answerphone of New Orleans, Inc., Executive Services, Inc., King Telephone Answering Service, et al, filed January 11, 1990.

1989

Before the **Georgia Public Service Commission**, in *Re: Southern Bell Tariff Revision and Bidirectional Usage Rate Service*, 3896-U, on behalf of Atlanta Journal Const./Voice Information Services Company, Inc., GA Association of Telemessaging Services, Prodigy Services, Company, Telnet Communications, Corp., filed November 28, 1989.

Before the **New York State Public Service Commission**, in *Re: NYT Co. - Rate Moratorium Extension - Fifth Stage Filing*, 28961 Fifth Stage, on behalf of User Parties NY Clearing House Association Committee of Corporate Telecommunication Users, filed October 16, 1989.

Before the **Delaware Public Service Commission**, in *Re: Diamond State Telephone Co. Rate Case*, 86-20, on behalf of DE PSC, filed June 16, 1989.

Before the **Arizona Corporation Committee**, in *Re: General Rate Case*, 86-20, on behalf of Arizona Corporation Committee, filed March 6, 1989.

1988

Before **New York State Public Service Commission**, in *Re: NYT Rate Moratorium Extension*, 28961, on behalf of Capital Cities/ ABC, Inc., AMEX Co., CBS, Inc., NBC, Inc., filed December 23, 1988.

1987

Before **Rhode Island Public Utilities Commission**, in *Re: New England Telephone*, 1475, on behalf of RI Bankers Association, filed August 11, 1987, cross-examination August 21, 1987.

Before the **New York State Public Service Commission**, in *Re: General Rate Case Subject to Competition*, 29469, on behalf of AMEX Co., Capital Cities/ ABNC, Inc., NBC, Inc., filed April 17, 1987, cross-examination May 20, 1987.

Before the **Minnesota Public Utilities Commission**, in *Re: Northwestern Bell*, P-421/ M-86-508, on behalf of MN Bus. Utilities Users Counsel filed February 10, 1987, cross-examination March 5, 1987.

1986-1982

Before the **Kansas Public Utilities Commission**, in *Re: Southwestern Bell*, 127, 140-U, on behalf of Boeing Military, et al., filed August 15, 1986.

Before the **Washington Utilities and Transportation Commission**, in *Re: Cost of Service Issues bearing on the Regulation of Telecommunications Company*, on behalf of US Department of Energy, filed November 18, 1985 (Reply Comments).

Before the **Maine Public Utilities Commission**, in *Re: New England Telephone*, 83-213, on behalf of Staff, ME PUC, filed February 7, 1984, cross-examination March 16, 1984.

Before the **Minnesota Public Service Commission**, in *Re: South Central Bell*, U-4415, on behalf of MS PSC, filed January 24, 1984, cross-examination February 1984.

Before the **Kentucky Public Service Commission**, in *Re: South Central Bell*, 8847, on behalf of KY PSC, filed November 28, 1983, cross-examination December 1983.

Before the **Florida Public Service Commission**, in *Re: Southern Bell Rate Case*, 820294-TP, on behalf of Florida Department of General Services, FL Ad Hoc Telecommunications Users, filed March 21, 1983, cross-examination May 5, 1983.

Before the **Maine Public Utilities Commission**, in *Re: New England Telephone*, 82-142, on behalf of Staff, ME PUC, filed November 15, 1982, cross-examination December 9, 1982.

Before the **Kentucky Public Service Commission**, in *Re: South Central Bell*, 8467, on behalf of the Commonwealth of Kentucky, cross-examination August 26, 1982.

Attachment 2

**Kravtin Recommended
Rate Calculations
CATV Attachment Charges**

**LG&E - Test Years Ending
March 31, 2012 and
October 31, 2014**

Louisville Gas & Electric Company Data As Of:

Weighted Average Bare Pole Cost	31-Mar-12		31-Oct-14		Notes/Sources
	Two-User	Three-User	Two-User	Three-User	
Installed Costs					
35' Poles	\$11,527,332		\$12,786,133		
40' Poles	\$27,701,656	\$27,701,656	\$31,220,040	\$31,220,040	
45" Poles		\$27,726,577		\$35,703,828	
Sum Installed Costs	\$39,228,988	\$55,428,233	\$44,006,173	\$66,923,867	
- Investment in Minor Appurtenances	\$5,884,348	\$8,314,235	\$6,600,926	\$10,038,580	KPSC Admin 251,Case 2004-00319
= Investment in Bare Pole Plant	33,344,640	\$47,113,998	37,405,247	\$56,885,287	
Quantity of Poles					
35' Poles	23,130		23,334		
40' Poles	59,477	59,477	59,312	59,312	
45" Poles		22,455		23,443	
/ Sum Quantity	82,607	81,932	82,646	82,755	
=Weighted Average Cost per Bare Pole	\$403.65	\$575.04	\$452.60	\$687.39	
Carrying Charges					
Rate of Return					
Net Investment Acct 364 Pole Plant	\$67,227,853	\$67,227,853	\$86,316,298	\$86,316,298	
Gross Investment Acct 364 Pole Plant /	\$135,724,485	\$135,724,485	\$159,591,768	\$159,591,768	
Ratio Net to Gross Plant	0.495	0.495	0.541	0.541	See KPSC Case 2000-414
Rate of Return Applied to Gross Pole Plant	3.86%	3.86%	3.95%	3.95%	
Depreciation					
Rate of Return Applied to Gross Pole Plant	3.86%	3.86%	3.95%	3.95%	
Number of Years Plant in Service	35	35	35	35	
Sinking Fund Factor	1.40%	1.40%	1.37%	1.37%	
Income Tax					
Return on Equity Component of ROR	11.00%	11.00%	10.50%	10.50%	
x Percentage Equity	55.64%	55.64%	54.04%	54.04%	
= Return on Equity Component	6.12%	6.12%	5.67%	5.67%	
Net Investment Acct 364 Pole Plant	\$67,227,853	\$67,227,853	\$86,316,298	\$86,316,298	
Gross Investment Acct 364 Pole Plant /	\$135,724,485	\$135,724,485	\$159,591,768	\$159,591,768	
Ratio Net to Gross Plant	0.495	0.495	0.541	0.541	See KPSC Case 2000-414
Return on Equity Applied to Gross Pole Plant	3.03%	3.03%	3.07%	3.07%	
Composite Fed. And State Income Tax Rate	37.37%	37.37%	37.52%	37.52%	
Income Tax Factor	1.81%	1.81%	1.84%	1.84%	
Property Tax and Insurance					
Percentage Applicable to Poles	0.22%	0.22%	0.22%	0.22%	
Operation and Maintenance					
Labor Charged to Maintenance Accts 593001+593004	\$509,449	\$509,449	\$506,600	\$506,600	
Total Labor	\$63,964,275	\$63,964,275	\$70,473,158	\$70,473,158	
Ratio Designated 593 Labor to Total Labor	0.80%	0.80%	0.72%	0.72%	
Total A&G Expenses	\$83,493,455	\$83,493,455	\$82,720,225	\$82,720,225	

A&G Expenses Assigned to Poles	\$664,991	\$664,991	\$594,638	\$594,638
Maintenance of Poles, Towers & Fixtures Acct 593001	\$564,286	\$564,286	\$474,899	\$474,899
Tree Trimming Elec. Distribution Routes Acct 593004	\$7,007,225	\$7,007,225	\$7,870,074	\$7,870,074
Sum Expenses Assigned to Poles	\$8,236,502	\$8,236,502	\$8,939,611	\$8,939,611
Gross Investment Accts 364 +365+369	\$405,682,089	\$405,682,089	\$460,948,133	\$460,948,133 See Staff 3-3c (2009 case)
O&M Expense Factor	2.03%	2.03%	1.94%	1.94%

Total Carrying Charges 9.32% 9.32% 9.33% 9.33%

Usage Space Factor

KPSC Usage Space Factor 0.1224 0.0759 0.1224 0.0759

Maximum Pole Attachment Rates

Investment Per Bare Pole	\$403.65	\$575.04	\$452.60	\$687.39
*Carrying Charges	9.32%	9.32%	9.33%	9.33%
*Charge Factor	12.24%	7.59%	12.24%	7.59%

Maximum Pole Attachment Rate **\$4.60** **\$4.07** **\$5.17** **\$4.87**

Maximum Weighted Pole Attachment Rate **\$4.34** **\$5.02**

Estimated Number of Attachments	86,757	86,757	87,522	87,522
Percentage of Total Attachments	50.00%	50.00%	50.00%	50.00%

DATA ENTRY AND SOURCE

Gross Investment in 364	\$135,724,485	\$135,724,485	\$159,591,768	\$159,591,768 KCTA 1-2
Gross Investment in 365	\$241,550,956	\$241,550,956	\$271,406,761	\$271,406,761 KCTA 2-31
Gross Investment in 369	\$28,406,648	\$28,406,648	\$29,949,603	\$29,949,603 KCTA 2-31
Sum 364,365,369	\$405,682,089	\$405,682,089	\$460,948,133	\$460,948,133 sum
Total Depreciation Reserve for 364	\$68,496,632.25	\$68,496,632.25	\$73,275,470	\$73,275,470 KCTA 1-10
Gross Plant Investment	\$4,933,705,788.03	\$4,933,705,788.03	\$6,268,420,954	\$6,268,420,954 KCTA 1-22
Accum Depreciation All Plant	\$2,144,260,455.77	\$2,144,260,455.77	\$2,406,013,061	\$2,406,013,061 KCTA 1-23
Overall Rate of Return	7.80%	7.80%	7.31%	7.31% KCTA 1-1/Blake Sche.J-1 p2
Return on Equity Component of ROR	11.00%	11.00%	10.50%	10.50% KCTA 1-1/Blake Sche.J-1 p2
Percentage Equity Component	55.64%	55.64%	54.04%	54.04% KCTA 1-1/Blake Sche.J-1 p2
Composite Fed. And State Income Tax Rate	37.37%	37.37%	37.52%	37.52% Wkpr WPH-1-A

Percentage Reduction Appurtenances 15% 15% 15% 15% KCTA 2-5,6,7,8,9,10

Maintenance of Poles,Towers & Fixtures Acct 593001	\$564,286	\$564,286	\$474,899	\$474,899 KCTA 1-1, 1-19
Tree Trimming ElectricDistribution Routes Acct 593004	\$7,007,225	\$7,007,225	\$7,870,074	\$7,870,074 KCTA 1-1, 1-19
Total A & G Expenses	\$83,493,455	\$83,493,455	\$82,720,225	\$82,720,225 KCTA 1-1,1-21 (A&G Tab)
Labor Charged to 593001	\$232,934	\$232,934	\$196,035.48	\$196,035.48 KCTA 1-1, prorated 2014
Labor Charged to 593004	\$276,515	\$276,515	\$310,564.24	\$310,564.24 KCTA 1-1, prorated 2014
Sum Labor 593001,593004	\$509,449	\$509,449	\$506,600	\$506,600
Total Labor -Electric Cost of Service	\$63,964,275	\$63,964,275	\$70,473,158	\$70,473,158 KCTA 1-1, prorated 2014 per 2-4
Ratio 593 Labor / Total Labor	0.00796	0.00796	0.00719	0.00719 calculation

A&G Expenses Assigned to Poles	\$664,991	\$664,991	\$594,638	\$594,638 calculation
Total Labor - General Ledger All Accounts	\$106,931,638	\$106,931,638	\$117,812,798	\$117,812,798 KCTA 2-4
A&G Expenses Assigned to Poles Based on Gen Ledg	\$397,784	\$397,784	\$355,700	\$355,700 calculation
Property Tax and Insurance	0.22%	0.22%	0.22%	0.22% KCTA 1-1
Estimated Number of Attachments	86,757	86,757	87,522	87,522 KCTA 1-1,1-14, as of 6/30/14
Installed Costs				
35' Poles	\$11,527,332	\$11,527,332	\$12,786,133	\$12,786,133 KCTA 1-4
40' Poles	\$27,701,656	\$27,701,656	\$31,220,040	\$31,220,040 KCTA 1-6
45" Poles	27,726,577	27,726,577	\$35,703,828	\$35,703,828 KCTA 1-8
Quantity of Poles				
35' Poles	23,130	23,130	23,334	23,334 KCTA 1-5
40' Poles	59,477	59,477	59,312	59,312 KCTA 1-7
45" Poles	22,455	22,455	23,443	23,443 KCTA 1-9
Total 35/40/45' Poles	105,062	105,062	106,089	106,089 calculation
Total No Poles Acct 364	141,804	141,804	143,303	143,303 KCTA 1-3

**Kravtin Recommended
Rate Calculations
CATV Attachment Charges**

**LG&E - Test Years Ending
March 31, 2012 and
October 31, 2014**

A&G Detail

31-Mar-12

TOTAL A&G - Reconciliation of LG&E Data

Per KCTA 1-1 \$83,493,455.00

31-Oct-14

n/a

Per KCTA 1-21 Electric

920	\$16,456,591
921	\$5,348,737
922	-\$2,107,022
923	\$5,267,224
924	\$4,471,918
925	\$2,448,360
926	\$37,074,584
927	\$30,731
928	\$1,173,366
929	-\$153,701
930.1	\$520,854
930.2	\$2,363,430
931	\$1,598,925
935	\$8,999,458
	<u>\$83,493,455</u>

Electric

\$23,947,295
\$5,668,569
-\$3,635,095
\$15,502,714
\$4,722,578
\$2,741,573
\$26,999,945
\$36,604
\$768,242
-\$270,394
\$780,552
\$2,956,518
\$1,528,692
\$972,433
<u>\$82,720,225</u>

Kravtin Rate Calculations Using LG&E O&M

Louisville Gas & Electric Company Data As Of:

Weighted Average Bare Pole Cost	31-Mar-12		31-Oct-14		Notes/Sources
	Two-User	Three-User	Two-User	Three-User	
Installed Costs					
35' Poles	\$11,527,332		\$12,786,133		
40' Poles	\$27,701,656	\$27,701,656	\$31,220,040	\$31,220,040	
45" Poles		\$27,726,577		\$35,703,828	
Sum Installed Costs	\$39,228,988	\$55,428,233	\$44,006,173	\$66,923,867	
- Investment in Minor Appurtenances	\$5,884,348	\$8,314,235	\$6,600,926	\$10,038,580	KPSC Admin 251,Case 2004-00319
= Investment in Bare Pole Plant	33,344,640	\$47,113,998	37,405,247	\$56,885,287	
Quantity of Poles					
35' Poles	23,130		23,334		
40' Poles	59,477	59,477	59,312	59,312	
45" Poles		22,455		23,443	
/ Sum Quantity	82,607	81,932	82,646	82,755	
=Weighted Average Cost per Bare Pole	\$403.65	\$575.04	\$452.60	\$687.39	
Carrying Charges					
Rate of Return					
Net Investment Acct 364 Pole Plant	\$67,227,853	\$67,227,853	\$86,316,298	\$86,316,298	
Gross Investment Acct 364 Pole Plant /	\$135,724,485	\$135,724,485	\$159,591,768	\$159,591,768	
Ratio Net to Gross Plant	0.495	0.495	0.541	0.541	See KPSC Case 2000-414
Rate of Return Applied to Gross Pole Plant	3.86%	3.86%	3.95%	3.95%	
Depreciation					
Rate of Return Applied to Gross Pole Plant	3.86%	3.86%	3.95%	3.95%	
Number of Years Plant in Service	35	35	35	35	
Sinking Fund Factor	1.40%	1.40%	1.37%	1.37%	
Income Tax					
Return on Equity Component of ROR	11.00%	11.00%	10.50%	10.50%	
x Percentage Equity	55.64%	55.64%	54.04%	54.04%	
= Return on Equity Component	6.12%	6.12%	5.67%	5.67%	
Net Investment Acct 364 Pole Plant	\$67,227,853	\$67,227,853	\$86,316,298	\$86,316,298	
Gross Investment Acct 364 Pole Plant /	\$135,724,485	\$135,724,485	\$159,591,768	\$159,591,768	
Ratio Net to Gross Plant	0.495	0.495	0.541	0.541	See KPSC Case 2000-414
Return on Equity Applied to Gross Pole Plant	3.03%	3.03%	3.07%	3.07%	
Composite Fed. And State Income Tax Rate	37.37%	37.37%	37.52%	37.52%	
Income Tax Factor	1.81%	1.81%	1.84%	1.84%	
Property Tax and Insurance					
Percentage Applicable to Poles	0.22%	0.22%	0.22%	0.22%	
Operation and Maintenance					
Labor Charged to Maintenance Accts 593001+593004	\$509,449	\$509,449	\$506,600	\$506,600	
Total Labor	\$63,964,275	\$63,964,275	\$70,473,158	\$70,473,158	
Ratio Designated 593 Labor to Total Labor	0.80%	0.80%	0.72%	0.72%	
Total A&G Expenses	\$83,493,455	\$83,493,455	\$82,720,225	\$82,720,225	

A&G Expenses Assigned to Poles	\$664,991	\$664,991	\$594,638	\$594,638
Maintenance of Poles, Towers & Fixtures Acct 593001	\$564,286	\$564,286	\$474,899	\$474,899
Tree Trimming Elec. Distribution Routes Acct 593004	\$7,007,225	\$7,007,225	\$7,870,074	\$7,870,074
Sum Expenses Assigned to Poles	\$8,236,502	\$8,236,502	\$8,939,611	\$8,939,611
Gross Investment Account 364	\$135,724,485	\$135,724,485	\$159,591,768	\$159,591,768
O&M Expense Factor	6.07%	6.07%	5.60%	5.60%
Total Carrying Charges	13.36%	13.36%	12.99%	12.99%

Usage Space Factor

KPSC Usage Space Factor	0.1224	0.0759	0.1224	0.0759
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Maximum Pole Attachment Rates

Investment Per Bare Pole	\$403.65	\$575.04	\$452.60	\$687.39
*Carrying Charges	13.36%	13.36%	12.99%	12.99%
*Charge Factor	12.24%	7.59%	12.24%	7.59%
Maximum Pole Attachment Rate	\$6.60	\$5.83	\$7.20	\$6.78
Maximum Weighted Pole Attachment Rate	\$6.22		\$6.99	
Estimated Number of Attachments	86,757	86,757	87,522	87,522
Percentage of Total Attachments	50.00%	50.00%	50.00%	50.00%

DATA ENTRY AND SOURCE

Gross Investment in 364	\$135,724,485	\$135,724,485	\$159,591,768	\$159,591,768 KCTA 1-2
Gross Investment in 365	\$241,550,956	\$241,550,956	\$271,406,761	\$271,406,761 KCTA 2-31
Gross Investment in 369	\$28,406,648	\$28,406,648	\$29,949,603	\$29,949,603 KCTA 2-31
Sum 364,365,369	\$405,682,089	\$405,682,089	\$460,948,133	\$460,948,133 sum
Total Depreciation Reserve for 364	\$68,496,632.25	\$68,496,632.25	\$73,275,470	\$73,275,470 KCTA 1-10
Gross Plant Investment	\$4,933,705,788.03	\$4,933,705,788.03	\$6,268,420,954	\$6,268,420,954 KCTA 1-22
Accum Depreciation All Plant	\$2,144,260,455.77	\$2,144,260,455.77	\$2,406,013,061	\$2,406,013,061 KCTA 1-23
Overall Rate of Return	7.80%	7.80%	7.31%	7.31% KCTA 1-1/Blake Sche.J-1 p2
Return on Equity Component of ROR	11.00%	11.00%	10.50%	10.50% KCTA 1-1/Blake Sche.J-1 p2
Percentage Equity Component	55.64%	55.64%	54.04%	54.04% KCTA 1-1/Blake Sche.J-1 p2
Composite Fed. And State Income Tax Rate	37.37%	37.37%	37.52%	37.52% Wkpr WPH-1-A
Percentage Reduction Appurtenances	15%	15%	15%	15% KCTA 2-5,6,7,8,9,10
Maintenance of Poles,Towers & Fixtures Acct 593001	\$564,286	\$564,286	\$474,899	\$474,899 KCTA 1-1, 1-19
Tree Trimming ElectricDistribution Routes Acct 593004	\$7,007,225	\$7,007,225	\$7,870,074	\$7,870,074 KCTA 1-1, 1-19
Total A & G Expenses	\$83,493,455	\$83,493,455	\$82,720,225	\$82,720,225 KCTA 1-1,1-21 (A&G Tab)
Labor Charged to 593001	\$232,934	\$232,934	\$196,035.48	\$196,035.48 KCTA 1-1, prorated 2014
Labor Charged to 593004	\$276,515	\$276,515	\$310,564.24	\$310,564.24 KCTA 1-1, prorated 2014
Sum Labor 593001,593004	\$509,449	\$509,449	\$506,600	\$506,600
Total Labor -Electric Cost of Service	\$63,964,275	\$63,964,275	\$70,473,158	\$70,473,158 KCTA 1-1, prorated 2014 per 2-4
Ratio 593 Labor / Total Labor	0.00796	0.00796	0.00719	0.00719 calculation

A&G Expenses Assigned to Poles	\$664,991	\$664,991	\$594,638	\$594,638 calculation
Total Labor - General Ledger All Accounts	\$106,931,638	\$106,931,638	\$117,812,798	\$117,812,798 KCTA 2-4
A&G Expenses Assigned to Poles Based on Gen Ledg	\$397,784	\$397,784	\$355,700	\$355,700 calculation
Property Tax and Insurance	0.22%	0.22%	0.22%	0.22% KCTA 1-1
Estimated Number of Attachments	86,757	86,757	87,522	87,522 KCTA 1-1,1-14, as of 6/30/14
Installed Costs				
35' Poles	\$11,527,332	\$11,527,332	\$12,786,133	\$12,786,133 KCTA 1-4
40' Poles	\$27,701,656	\$27,701,656	\$31,220,040	\$31,220,040 KCTA 1-6
45" Poles	27,726,577	27,726,577	\$35,703,828	\$35,703,828 KCTA 1-8
Quantity of Poles				
35' Poles	23,130	23,130	23,334	23,334 KCTA 1-5
40' Poles	59,477	59,477	59,312	59,312 KCTA 1-7
45" Poles	22,455	22,455	23,443	23,443 KCTA 1-9
Total 35/40/45' Poles	105,062	105,062	106,089	106,089 calculation
Total No Poles Acct 364	141,804	141,804	143,303	143,303 KCTA 1-3

Attachment 3

Table 1

Comparison of Non-Levelized and Levelized Capital Recovery Carrying Charge Approaches

(a) Average Service Life	35
(b) Ratio Net to Gross Investment	0.5
(c) Straight Line Depreciation [1/(a)] as Fixed % of Gross Investment	2.86%
(d) Straight Line Depreciation [1/(a)] as Average % of Net Investment	5.72%
(e) Authorized Rate of Return (ROR) /Discount Factor (DF) as Fixed % of Net Investment	8.32%
(f) Authorized Rate of Return (ROR) /Discount Factor (DF) as Average % of Gross Investment	4.16%
(g) Sinking-Fund Depreciation $[(f)/(1+f)^{(a-1)}]$ as Fixed % of Gross Investment	1.31%

Year (1)	Non-Levelized (Straight Line Depreciation) Capital Carrying Charges							Levelized (Sinking Fund Depreciation) Capital Carrying Charges per Kravtin					
	Net Investment	Return Charge	ROR as % Net Inv	ROR as % Gross Inv	Straight Line Depreciation	Capital Carry Charges	Present Val @8.32%	Gross Investment	Return Charge	ROR as % Gross Inv	Sinking Fund Depreciation	Capital Carry Charges	Present Val @Gross RoR
	(2)	(3)=(2) x(4)	(4)	(5)	(6)=(c)xGross	(7)=(3)+(6)	(8)	(9)	(10)	(11)	(12)=(g)*Gross	(13)=(10)+(12)	(14)
1	\$ 1,000.00	\$ 83.20	8.32%	8.32%	\$ 28.57	\$ 111.77	\$103.19	\$ 1,000.00	\$ 41.60	4.16%	\$ 13.15	\$ 54.75	\$ 52.56
2	971.43	80.82	8.32%	8.08%	28.57	109.39	93.23	1,000.00	41.60	4.16%	13.15	54.75	50.46
3	942.86	78.45	8.32%	7.84%	28.57	107.02	84.20	1,000.00	41.60	4.16%	13.15	54.75	48.45
4	914.29	76.07	8.32%	7.61%	28.57	104.64	76.01	1,000.00	41.60	4.16%	13.15	54.75	46.51
5	885.71	73.69	8.32%	7.37%	28.57	102.26	68.58	1,000.00	41.60	4.16%	13.15	54.75	44.65
6	857.14	71.31	8.32%	7.13%	28.57	99.89	61.84	1,000.00	41.60	4.16%	13.15	54.75	42.87
7	828.57	68.94	8.32%	6.89%	28.57	97.51	55.73	1,000.00	41.60	4.16%	13.15	54.75	41.16
8	800.00	66.56	8.32%	6.66%	28.57	95.13	50.19	1,000.00	41.60	4.16%	13.15	54.75	39.51
9	771.43	64.18	8.32%	6.42%	28.57	92.75	45.18	1,000.00	41.60	4.16%	13.15	54.75	37.94
10	742.86	61.81	8.32%	6.18%	28.57	90.38	40.64	1,000.00	41.60	4.16%	13.15	54.75	36.42
11	714.29	59.43	8.32%	5.94%	28.57	88.00	36.53	1,000.00	41.60	4.16%	13.15	54.75	34.97
12	685.71	57.05	8.32%	5.71%	28.57	85.62	32.82	1,000.00	41.60	4.16%	13.15	54.75	33.57
13	657.14	54.67	8.32%	5.47%	28.57	83.25	29.45	1,000.00	41.60	4.16%	13.15	54.75	32.23
14	628.57	52.30	8.32%	5.23%	28.57	80.87	26.42	1,000.00	41.60	4.16%	13.15	54.75	30.94
15	600.00	49.92	8.32%	4.99%	28.57	78.49	23.67	1,000.00	41.60	4.16%	13.15	54.75	29.71
16	571.43	47.54	8.32%	4.75%	28.57	76.11	21.19	1,000.00	41.60	4.16%	13.15	54.75	28.52
17	542.86	45.17	8.32%	4.52%	28.57	73.74	18.95	1,000.00	41.60	4.16%	13.15	54.75	27.38
18	514.29	42.79	8.32%	4.28%	28.57	71.36	16.93	1,000.00	41.60	4.16%	13.15	54.75	26.29
19	485.71	40.41	8.32%	4.04%	28.57	68.98	15.11	1,000.00	41.60	4.16%	13.15	54.75	25.24
20	457.14	38.03	8.32%	3.80%	28.57	66.61	13.47	1,000.00	41.60	4.16%	13.15	54.75	24.23
21	428.57	35.66	8.32%	3.57%	28.57	64.23	11.99	1,000.00	41.60	4.16%	13.15	54.75	23.26
22	400.00	33.28	8.32%	3.33%	28.57	61.85	10.66	1,000.00	41.60	4.16%	13.15	54.75	22.33
23	371.43	30.90	8.32%	3.09%	28.57	59.47	9.46	1,000.00	41.60	4.16%	13.15	54.75	21.44
24	342.86	28.53	8.32%	2.85%	28.57	57.10	8.39	1,000.00	41.60	4.16%	13.15	54.75	20.58
25	314.29	26.15	8.32%	2.61%	28.57	54.72	7.42	1,000.00	41.60	4.16%	13.15	54.75	19.76
26	285.71	23.77	8.32%	2.38%	28.57	52.34	6.55	1,000.00	41.60	4.16%	13.15	54.75	18.97
27	257.14	21.39	8.32%	2.14%	28.57	49.97	5.77	1,000.00	41.60	4.16%	13.15	54.75	18.22
28	228.57	19.02	8.32%	1.90%	28.57	47.59	5.08	1,000.00	41.60	4.16%	13.15	54.75	17.49
29	200.00	16.64	8.32%	1.66%	28.57	45.21	4.45	1,000.00	41.60	4.16%	13.15	54.75	16.79
30	171.43	14.26	8.32%	1.43%	28.57	42.83	3.90	1,000.00	41.60	4.16%	13.15	54.75	16.12
31	142.86	11.89	8.32%	1.19%	28.57	40.46	3.40	1,000.00	41.60	4.16%	13.15	54.75	15.47
32	114.29	9.51	8.32%	0.95%	28.57	38.08	2.95	1,000.00	41.60	4.16%	13.15	54.75	14.86
33	85.71	7.13	8.32%	0.71%	28.57	35.70	2.55	1,000.00	41.60	4.16%	13.15	54.75	14.26
34	57.14	4.75	8.32%	0.48%	28.57	33.33	2.20	1,000.00	41.60	4.16%	13.15	54.75	13.69
35	28.57	2.38	8.32%	0.24%	28.57	30.95	1.89	1,000.00	41.60	4.16%	13.15	54.75	13.15
TOTAL/AVG	\$1,497.60		8.32%	4.28%	\$1,000.00	\$2,497.60	\$1,000.00		\$1,456.00	4.16%	\$460.14	\$1,916.14	\$1,000.00

Attachment 3

Table 2

Comparison of Capital Recovery Carrying Charge Approaches (Non-Levelized, Kravtin Levelized, and LG&E Levelized) and Effect of Using Gross versus Net-Based Rate of Return and Discount Factor

			Non-Levelized Capital Carrying Charges						Levelized Capital Carrying Charges per Kravtin						Levelized Capital Carrying Charges per LG&E 2010 w/Correct DF					
Year	Net Investment	Return Charge	ROR as % Net Inv	ROR as % Gross Inv	Straight Line Depr	Carrying Charges	Present Val @8.32%	Gross Investment	Return Charge	ROR as % Gross Inv	Sinking Fund Depr	Carrying Charges	Present Val @Gross ROR	Gross Investment	Return Charge	ROR as % Gross Inv	Sinking Fund	Carrying Charges	Present Val @Gross ROR	
(1)	(2)	(3)=(2)*8.32	(4)	(5)	(4)	(5)	(6)	(7)	(8a)	(11)	(8b)	(8)=8a+8b	(9)	(10)	(11)	(11)	(12)	13)=(11)+(12	(14)	
(a) Average Service Life							35						35							35
(b) Straight Line Depreciation (1/(a)) % of Gross Inv							2.86%						n/a							n/a
(c) Sinking-Fund Depreciation as % of Gross Inv							n/a						1.31%							0.54%
(d) Auth Rate of Return /Discount Factor % of Gross							n/a						4.16%							4.16%
(e) Auth. Rate of Return /Discount Factor % of Net							8.32%						n/a							8.32%
1	\$ 1,000.00	\$ 83.20	8.32%	8.32%	\$ 28.57	\$ 111.77	\$103.19	\$ 1,000.00	\$ 41.60	4.16%	\$ 13.15	\$ 54.75	\$52.56	\$ 1,000.00	\$ 83.20	8.32%	\$ 5.40	\$ 88.60	\$ 85.06	
2	971.43	\$ 80.82	8.32%	8.08%	28.57	109.39	\$93.23	1,000.00	41.60	4.16%	13.15	54.75	\$50.46	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 81.67	
3	942.86	\$ 78.45	8.32%	7.84%	28.57	107.02	\$84.20	1,000.00	41.60	4.16%	13.15	54.75	\$48.45	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 78.41	
4	914.29	\$ 76.07	8.32%	7.61%	28.57	104.64	\$76.01	1,000.00	41.60	4.16%	13.15	54.75	\$46.51	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 75.27	
5	885.71	\$ 73.69	8.32%	7.37%	28.57	102.26	\$68.58	1,000.00	41.60	4.16%	13.15	54.75	\$44.65	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 72.27	
6	857.14	\$ 71.31	8.32%	7.13%	28.57	99.89	\$61.84	1,000.00	41.60	4.16%	13.15	54.75	\$42.87	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 69.38	
7	828.57	\$ 68.94	8.32%	6.89%	28.57	97.51	\$55.73	1,000.00	41.60	4.16%	13.15	54.75	\$41.16	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 66.61	
8	800.00	\$ 66.56	8.32%	6.66%	28.57	95.13	\$50.19	1,000.00	41.60	4.16%	13.15	54.75	\$39.51	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 63.95	
9	771.43	\$ 64.18	8.32%	6.42%	28.57	92.75	\$45.18	1,000.00	41.60	4.16%	13.15	54.75	\$37.94	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 61.40	
10	742.86	\$ 61.81	8.32%	6.18%	28.57	90.38	\$40.64	1,000.00	41.60	4.16%	13.15	54.75	\$36.42	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 58.94	
11	714.29	\$ 59.43	8.32%	5.94%	28.57	88.00	\$36.53	1,000.00	41.60	4.16%	13.15	54.75	\$34.97	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 56.59	
12	685.71	\$ 57.05	8.32%	5.71%	28.57	85.62	\$32.82	1,000.00	41.60	4.16%	13.15	54.75	\$33.57	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 54.33	
13	657.14	\$ 54.67	8.32%	5.47%	28.57	83.25	\$29.45	1,000.00	41.60	4.16%	13.15	54.75	\$32.23	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 52.16	
14	628.57	\$ 52.30	8.32%	5.23%	28.57	80.87	\$26.42	1,000.00	41.60	4.16%	13.15	54.75	\$30.94	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 50.08	
15	600.00	\$ 49.92	8.32%	4.99%	28.57	78.49	\$23.67	1,000.00	41.60	4.16%	13.15	54.75	\$29.71	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 48.08	
16	571.43	\$ 47.54	8.32%	4.75%	28.57	76.11	\$21.19	1,000.00	41.60	4.16%	13.15	54.75	\$28.52	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 46.16	
17	542.86	\$ 45.17	8.32%	4.52%	28.57	73.74	\$18.95	1,000.00	41.60	4.16%	13.15	54.75	\$27.38	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 44.31	
18	514.29	\$ 42.79	8.32%	4.28%	28.57	71.36	\$16.93	1,000.00	41.60	4.16%	13.15	54.75	\$26.29	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 42.54	
19	485.71	\$ 40.41	8.32%	4.04%	28.57	68.98	\$15.11	1,000.00	41.60	4.16%	13.15	54.75	\$25.24	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 40.84	
20	457.14	\$ 38.03	8.32%	3.80%	28.57	66.61	\$13.47	1,000.00	41.60	4.16%	13.15	54.75	\$24.23	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 39.21	
21	428.57	\$ 35.66	8.32%	3.57%	28.57	64.23	\$11.99	1,000.00	41.60	4.16%	13.15	54.75	\$23.26	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 37.65	
22	400.00	\$ 33.28	8.32%	3.33%	28.57	61.85	\$10.66	1,000.00	41.60	4.16%	13.15	54.75	\$22.33	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 36.14	
23	371.43	\$ 30.90	8.32%	3.09%	28.57	59.47	\$9.46	1,000.00	41.60	4.16%	13.15	54.75	\$21.44	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 34.70	
24	342.86	\$ 28.53	8.32%	2.85%	28.57	57.10	\$8.39	1,000.00	41.60	4.16%	13.15	54.75	\$20.58	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 33.31	
25	314.29	\$ 26.15	8.32%	2.61%	28.57	54.72	\$7.42	1,000.00	41.60	4.16%	13.15	54.75	\$19.76	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 31.98	
26	285.71	\$ 23.77	8.32%	2.38%	28.57	52.34	\$6.55	1,000.00	41.60	4.16%	13.15	54.75	\$18.97	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 30.71	
27	257.14	\$ 21.39	8.32%	2.14%	28.57	49.97	\$5.77	1,000.00	41.60	4.16%	13.15	54.75	\$18.22	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 29.48	
28	228.57	\$ 19.02	8.32%	1.90%	28.57	47.59	\$5.08	1,000.00	41.60	4.16%	13.15	54.75	\$17.49	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 28.30	
29	200.00	\$ 16.64	8.32%	1.66%	28.57	45.21	\$4.45	1,000.00	41.60	4.16%	13.15	54.75	\$16.79	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 27.17	
30	171.43	\$ 14.26	8.32%	1.43%	28.57	42.83	\$3.90	1,000.00	41.60	4.16%	13.15	54.75	\$16.12	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 26.09	
31	142.86	\$ 11.89	8.32%	1.19%	28.57	40.46	\$3.40	1,000.00	41.60	4.16%	13.15	54.75	\$15.47	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 25.04	
32	114.29	\$ 9.51	8.32%	0.95%	28.57	38.08	\$2.95	1,000.00	41.60	4.16%	13.15	54.75	\$14.86	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 24.04	
33	85.71	\$ 7.13	8.32%	0.71%	28.57	35.70	\$2.55	1,000.00	41.60	4.16%	13.15	54.75	\$14.26	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 23.08	
34	57.14	\$ 4.75	8.32%	0.48%	28.57	33.33	\$2.20	1,000.00	41.60	4.16%	13.15	54.75	\$13.69	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 22.16	
35	28.57	\$ 2.38	8.32%	0.24%	28.57	30.95	\$1.89	1,000.00	41.60	4.16%	13.15	54.75	\$13.15	1,000.00	\$ 83.20	8.32%	5.40	88.60	\$ 21.28	
TOTALS	\$1,497.60		8.32%	4.28%	\$1,000.00	\$2,497.60	\$1,000.00		\$1,456.00	4.16%	\$460.14	\$1,916.14	\$1,000.00		\$2,912.00	8.32%	\$189.11	\$3,101.11	\$1,618.41	

Attachment 3

Table 3

Comparison of Effects of LG&E Switching from Non-Levelized to Levelized Approach and LG&E Purported Kravtin Switch fom Levelized to Non-Levelized																			
(a) Book Life			35				35				35				35				
(b) Straight Line Depreciation (1/(a))			2.86%				2.86%				2.86%				2.86%				
(c) Sinking-Fund Depreciation (See Formula)			0.54%				0.54%				0.54%				0.54%				
(d) Rate of Return as Fixed % of Net Investment			8.32%	From/To:			8.32%	From/To:			8.32%	From/To:			8.32%				
(e) LG&E Levelized Capital Recovery Factor (CFR) [(c) + (d)]			8.86%	ROR/DF: Levelized (Gross)			8.32%	ROR/DF: Levelized (Gross)			4.16%	ROR/DF: Non-Levelized(Net)			8.32%				
(f) Rate of Return as Avg % of Gross Investment			4.16%	ROR/DF: Non-Levelized(Net)			8.86%	ROR/DF: Non-Levelized(Net)			8.32%	ROR/DF: Levelized (Gross)			4.16%				
Year (1)	Non-Levelized Carrying Charges per LGE			Levelized Carry Chgs. per LGE w/Correct DF			LG&E Purported Kravtin Switch			LGE Purported Kravtin Switch w/Correct DF			LG&E Switch from Non-levelized to Levelized						
	Net Investment (2)	Capital Carry Charges (5)	Present Val @ 8.32% (6)=PV(5)	Gross Investment (7)	Capital Carry Charges (8)	Present Val @ 8.32% (9)=PV(8)	Capital Carry Charges (10)	Diff from "Consistent" (11)=(10)-(8)	Present Val @ 8.32% (12)=PV(10)	Capital Carry Charges (13)	Diff from "Consistent" (14)=(13)-(8)	Pres Val @ Gr/Net ROR (15)=PV(13)	Net Investment (16)	Return Charge (17)	Depreciation (18)	Capital Carry Charges (19)=17+18	Diff from "Consistent" (20)=19-18	Pres Val @ Net/Gr ROR (20)=PV(19)	
1	\$ 1,000.00	\$ 111.77	\$103.19	\$ 1,000.00	\$ 88.60	\$85.06	\$ 88.60	\$ -	\$81.80	\$ 88.60	\$ -	\$85.06	\$ 1,000.00	\$ 83.20	\$ 28.57	\$ 111.77	\$ -	\$ 103.19	
2	971.43	109.39	93.23	1,000.00	88.60	\$81.67	88.60	-	\$75.51	88.60	-	81.67	971.43	80.82	28.57	109.39	-	93.23	
3	942.86	107.02	84.20	1,000.00	88.60	\$78.41	88.60	-	\$69.71	88.60	-	78.41	942.86	78.45	28.57	107.02	-	84.20	
4	914.29	104.64	76.01	1,000.00	88.60	\$75.27	88.60	-	\$64.36	88.60	-	75.27	914.29	76.07	28.57	104.64	-	76.01	
5	885.71	102.26	68.58	1,000.00	88.60	\$72.27	88.60	-	\$59.42	88.60	-	72.27	885.71	73.69	28.57	102.26	-	68.58	
6	857.14	99.89	61.84	1,000.00	88.60	\$69.38	88.60	-	\$54.85	88.60	-	69.38	857.14	71.31	28.57	99.89	-	61.84	
7	828.57	97.51	55.73	1,000.00	88.60	\$66.61	88.60	-	\$50.64	88.60	-	66.61	828.57	68.94	28.57	97.51	-	55.73	
8	800.00	95.13	50.19	1,000.00	88.60	\$63.95	88.60	-	\$46.75	88.60	-	63.95	800.00	66.56	28.57	95.13	-	50.19	
9	771.43	92.75	45.18	1,000.00	88.60	\$61.40	88.60	-	\$43.16	88.60	-	61.40	771.43	64.18	28.57	92.75	-	45.18	
10	742.86	90.38	40.64	1,000.00	88.60	\$58.94	88.60	-	\$39.84	88.60	-	58.94	742.86	61.81	28.57	90.38	-	40.64	
11	714.29	88.00	36.53	1,000.00	88.60	\$56.59	88.00	\$(0.60)	\$36.53	88.00	\$(0.60)	36.53	714.29	59.43	28.57	88.00	-	36.53	
12	685.71	85.62	32.82	1,000.00	88.60	\$54.33	85.62	\$(2.98)	\$32.82	85.62	\$(2.98)	32.82	685.71	57.05	28.57	85.62	-	32.82	
13	657.14	83.25	29.45	1,000.00	88.60	\$52.16	83.25	\$(5.36)	\$29.45	83.25	\$(5.36)	29.45	657.14	54.67	28.57	83.25	-	29.45	
14	628.57	80.87	26.42	1,000.00	88.60	\$50.08	80.87	\$(7.73)	\$26.42	80.87	\$(7.73)	26.42	628.57	52.30	28.57	80.87	-	26.42	
15	600.00	78.49	23.67	1,000.00	88.60	\$48.08	78.49	\$(10.11)	\$23.67	78.49	\$(10.11)	23.67	600.00	49.92	28.57	78.49	-	23.67	
16	571.43	76.11	21.19	1,000.00	88.60	\$46.16	76.11	\$(12.49)	\$21.19	76.11	\$(12.49)	21.19	571.43	47.54	28.57	76.11	-	21.19	
17	542.86	73.74	18.95	1,000.00	88.60	\$44.31	73.74	\$(14.87)	\$18.95	73.74	\$(14.87)	18.95	542.86	45.17	28.57	73.74	-	18.95	
18	514.29	71.36	16.93	1,000.00	88.60	\$42.54	71.36	\$(17.24)	\$16.93	71.36	\$(17.24)	16.93	1,000.00	83.20	5.40	88.60	\$ 17.24	\$ 42.54	
19	485.71	68.98	15.11	1,000.00	88.60	\$40.84	68.98	\$(19.62)	\$15.11	68.98	\$(19.62)	15.11	1,000.00	83.20	5.40	88.60	\$ 19.62	\$ 40.84	
20	457.14	66.61	13.47	1,000.00	88.60	\$39.21	66.61	\$(22.00)	\$13.47	66.61	\$(22.00)	13.47	1,000.00	83.20	5.40	88.60	\$ 21.99	\$ 39.21	
21	428.57	64.23	11.99	1,000.00	88.60	\$37.65	64.23	\$(24.37)	\$11.99	64.23	\$(24.37)	11.99	1,000.00	83.20	5.40	88.60	\$ 24.37	\$ 37.65	
22	400.00	61.85	10.66	1,000.00	88.60	\$36.14	61.85	\$(26.75)	\$10.66	61.85	\$(26.75)	10.66	1,000.00	83.20	5.40	88.60	\$ 26.75	\$ 36.14	
23	371.43	59.47	9.46	1,000.00	88.60	\$34.70	59.47	\$(29.13)	\$9.46	59.47	\$(29.13)	9.46	1,000.00	83.20	5.40	88.60	\$ 29.13	\$ 34.70	
24	342.86	57.10	8.39	1,000.00	88.60	\$33.31	57.10	\$(31.51)	\$8.39	57.10	\$(31.51)	8.39	1,000.00	83.20	5.40	88.60	\$ 31.50	\$ 33.31	
25	314.29	54.72	7.42	1,000.00	88.60	\$31.98	54.72	\$(33.88)	\$7.42	54.72	\$(33.88)	7.42	1,000.00	83.20	5.40	88.60	\$ 33.88	\$ 31.98	
26	285.71	52.34	6.55	1,000.00	88.60	\$30.71	52.34	\$(36.26)	\$6.55	52.34	\$(36.26)	6.55	1,000.00	83.20	5.40	88.60	\$ 36.26	\$ 30.70	
27	257.14	49.97	5.77	1,000.00	88.60	\$29.48	49.97	\$(38.64)	\$5.77	49.97	\$(38.64)	5.77	1,000.00	83.20	5.40	88.60	\$ 38.63	\$ 29.48	
28	228.57	47.59	5.08	1,000.00	88.60	\$28.30	47.59	\$(41.01)	\$5.08	47.59	\$(41.01)	5.08	1,000.00	83.20	5.40	88.60	\$ 41.01	\$ 28.30	
29	200.00	45.21	4.45	1,000.00	88.60	\$27.17	45.21	\$(43.39)	\$4.45	45.21	\$(43.39)	4.45	1,000.00	83.20	5.40	88.60	\$ 43.39	\$ 27.17	
30	171.43	42.83	3.90	1,000.00	88.60	\$26.09	42.83	\$(45.77)	\$3.90	42.83	\$(45.77)	3.90	1,000.00	83.20	5.40	88.60	\$ 45.77	\$ 26.09	
31	142.86	40.46	3.40	1,000.00	88.60	\$25.04	40.46	\$(48.15)	\$3.40	40.46	\$(48.15)	3.40	1,000.00	83.20	5.40	88.60	\$ 48.14	\$ 25.04	
32	114.29	38.08	2.95	1,000.00	88.60	\$24.04	38.08	\$(50.52)	\$2.95	38.08	\$(50.52)	2.95	1,000.00	83.20	5.40	88.60	\$ 50.52	\$ 24.04	
33	85.71	35.70	2.55	1,000.00	88.60	\$23.08	35.70	\$(52.90)	\$2.55	35.70	\$(52.90)	2.55	1,000.00	83.20	5.40	88.60	\$ 52.90	\$ 23.08	
34	57.14	33.33	2.20	1,000.00	88.60	\$22.16	33.33	\$(55.28)	\$2.20	33.33	\$(55.28)	2.20	1,000.00	83.20	5.40	88.60	\$ 55.27	\$ 22.16	
35	28.57	30.95	1.89	1,000.00	88.60	\$21.28	30.95	\$(57.65)	\$1.89	30.95	\$(57.65)	1.89	1,000.00	83.20	5.40	88.60	\$ 57.65	\$ 21.28	
TOTALS	\$2,497.60	\$1,000.00		\$3,101.11	\$1,618.41		(\$728.22)	\$907.26		(\$728.22)	\$1,034.17	TOTALS	\$2,588.71	\$582.97	\$3,171.62	\$ 674.02	\$1,421.55		

Attachment 4

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2014-00372

**Response to Kentucky Cable Telecommunications Association's First Data Requests
Dated January 8, 2015**

Question No. 1-1

Responding Witness: Robert M. Conroy

Q-1-1. Justify your current pole rates under the Commission's pole rate methodology as set forth in PSC Administrative Case No. 251. Please provide all calculations and source data.

A-1-1. The Company's current pole rate was approved by the Commission in Case No. 2012-00222 after discovery regarding the pole attachment methodology on which the Company's rate is based. The rate, as adjusted for the return on equity the parties to Case No. 2012-00222 negotiated as part of a settlement agreement, was presented to the Commission for its review and approval. On December 20, 2012, after a hearing on the agreement, the Commission entered an Order approving the agreement, including the pole attachment rates, to be effective for service rendered on and after January 1, 2013. In Case No. 2012-00222, the Company provided its calculations and workpapers demonstrating how its proposed rate was calculated. The calculations were attached to my testimony at Exhibit M5, a copy of which is attached. The workpapers were provided in electronic format in response to the Staff's Second Request for Information, Question No. 108 in File 16, a copy of which is being provided in electronic format. The Company has not proposed to change the rate in this proceeding.

Conroy Exhibit M5

Cable TV Attachment Charges

LOUISVILLE GAS AND ELECTRIC COMPANY

Calculation Of Attachment Charges for CATV

<u>Pole Size</u>	<u>Quantity</u>	<u>Installed Cost</u>	<u>Average Installed Cost</u>
<u>Weighted Average Bare Pole Cost as of 10/31/2009</u>			
35'	23,130	\$ 11,527,332	\$ 498.37
40'	<u>59,477</u>	<u>27,701,656</u>	<u>465.75</u>
	82,607	\$ 39,228,988	\$ 474.89

Three-User Poles

40'	59,477	\$ 27,701,656	\$ 465.75
45'	<u>22,454</u>	<u>27,726,577</u>	<u>1,234.82</u>
	81,931	\$ 55,428,233	\$ 676.52

<u>Number of Attachments</u>	<u>Weighted Cost</u>
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Pole Cost (Space Factor determined from 3 user Pole)

$$\$676.52 \times .0759 \text{ Usage Space Factor} = \$51.35$$

$$\$ 51.35 \times .1834 \text{ Annual Carrying Charge} = \$9.42$$

86,757	\$	817,205
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Total	<u>86,757</u>	\$	<u>817,205</u>
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Annual Cost		\$	9.42
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LOUISVILLE GAS AND ELECTRIC COMPANY

Calculation Of Annual Carrying Charge

Proposed Rate of Return	7.80%
Depreciation - Sinking Fund	0.61%
Income Tax (1)	3.65%
Property Tax and Insurance	0.22%
Operation and Maintenance (Page 3)	<u>6.07%</u>
Total	18.34%

(1) Derived from rates of equity capital

	<u>Capitalization Ratio</u>	<u>Annual Rate</u>	<u>Composite Rate</u>
Short Term Debt	0.00%	0.41%	0.00%
Long Term Debt	44.36%	3.78%	1.68%
Common Equity	<u>55.64%</u>	11.00%	<u>6.12%</u>
Total Capitalization	100.00%		7.80%

Composite Federal and State Income Taxes rate = 37.37%

Income Tax = $(0.3737 / (1 - 0.3737)) \times 0.0612 = 3.65\%$

LOUISVILLE GAS AND ELECTRIC COMPANY

Operation and Maintenance Expenses for
the 12 Months Ended March 31, 2012

(1) Labor Charged to 593 - Poles, Towers and Fixtures Subaccount	\$ 232,934	
- Tree Trimming	<u>276,515</u>	
		\$ 509,449
Total Labor		\$ 63,964,275
Total Administrative and General Expenses		\$ 83,493,455

Assignment of a Portion of A & G Expenses to Poles

$(\$509,449/\$63,964,275) \times \$83,493,455 = \$664,991$

Expenses Assigned to Poles

Maintenance of Poles, Towers, and Fixtures Subaccount 593001	\$ 564,286
Tree Trimming of Electric Distribution Routes 593004	7,007,225
A & G Expenses Assigned to Poles	<u>664,991</u>
Total	\$ 8,236,502

Adder to Annual Carrying Charges for O & M Expenses

\$ 8,236,502	Expenses Assigned to Poles	=	6.07%
<u>135,724,485</u>	Plant in Service - Account 364		

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2014-00372

**Response to Kentucky Cable Telecommunications Association's First Data Requests
Dated January 8, 2015**

Question No. 1-26

Responding Witness: Robert M. Conroy

Q-1-26. Please provide the amount that an average LG&E residential customer's monthly electric bill would change from the amount forecasted by the Company for the test year if the Commission were to reduce LG&E's current annual pole attachment rates by \$1, \$2, \$3, or \$4 and the amount of that reduction were to be recovered from electric ratepayers. In making these calculations, assume that the Company's revenue requirement, as proposed by the Company, is unchanged. Please also assume that the pole attachment fee reductions are to be recovered from residential users in the same percentage that the Company's revenues are proposed to be recovered from residential customers (according to Ex. MJB-9, page 33, approximately 41%).

A-1-26. LG&E rejects the assumption provided in the question. Pole attachment revenues are allocated to residential customers on the basis of total utility plant, not on the basis of total revenue, the assumption in the question. Therefore, LG&E performed the requested analysis by increasing the residential revenue allocation by 51% of the reduction in pole attachment revenue as described. See Exhibit MJB-9, page 25 of 40, row 765 for the actual allocation.

LGE Current Pole Attachments 87,522
Percent of Pole Attachment revenue allocated to Residential: 51%

Suggested Change in Annual Pole Attachment Rates

Annual Rate Change	Annual Revenue Change	Revenue Change Allocated to Residential	Change in Residential Bill
\$ (1.00)	\$(87,522.00)	\$ 44,636.22	\$ 0.01
\$ (2.00)	\$(175,044.00)	\$ 89,272.44	\$ 0.02
\$ (3.00)	\$(262,566.00)	\$ 133,908.66	\$ 0.03
\$ (4.00)	\$(350,088.00)	\$ 178,544.88	\$ 0.04

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2014-00372

**Response to Kentucky Cable Telecommunications Association's
Supplemental Data Requests
Dated February 6, 2015**

Question No. 2-4

Responding Witness: Christopher M. Garrett

Q-2-4. Provide LG&E's total labor expenses from LG&E's general ledger for all accounts as of March 31, 2012 and October 31, 2014, and if different, the date conforming to Conroy Exhibit M5 from Case No. 2012-00222.

A-2-4. See attached.

**Louisville Gas and Electric Company
Case No. 2014-00372
Total Labor Expenses**

Type of Cost	March 31, 2012				October 31, 2014			
	Expensed	Capitalized	Other Balance Sheet	Total	Expensed	Capitalized	Other Balance Sheet	Total
Base Pay	\$ 87,967,135	\$ 13,026,506	\$ 11,254,243	\$ 112,247,884	\$ 95,022,128	\$ 20,039,771	\$ 12,323,836	\$ 127,385,735
Overtime/Other Pay	11,159,259	2,679,403	625,656	14,464,318	11,910,729	3,436,019	989,968	16,336,716
Incentive Compensation	7,805,244	1,191,826	894,768	9,891,838	10,879,941	2,275,706	1,334,756	14,490,403
Total	\$ 106,931,638	\$ 16,897,735	\$ 12,774,667	\$ 136,604,040	\$ 117,812,798	\$ 25,751,496	\$ 14,648,560	\$ 158,212,854

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2014-00372

**Response to Kentucky Cable Telecommunications Association's
Supplemental Data Requests
Dated February 6, 2015**

Question No. 2-5

Responding Witness: Christopher M. Garrett

- Q-2-5. Provide all records that reflect LG&E's investment in minor appurtenances. For purposes of this question, minor appurtenances include, but are not limited to, aerial cable clamps, pole top pins, and all other appurtenances and hardware that are not poles or major appurtenances.
- A-2-5. "Minor appurtenances" is not a plant category used by LG&E. Minor items such as aerial cable clamps, pole top pins, and other such items are not retirement units of property, and therefore LG&E does not maintain accounting for these items. The costs of minor items are spread across applicable units of property on a project-by-project basis. The requested information is not available.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2014-00372

**Response to Kentucky Cable Telecommunications Association's
Supplemental Data Requests
Dated February 6, 2015**

Question No. 2-6

Responding Witness: Robert M. Conroy

- Q-2-6. Are the costs of minor appurtenances (as defined in Request 2-5) excluded from the LG&E pole-cost figures used in Conroy Exhibit M5?
- A-2-6. The costs of the minor items referenced in Question No. 2-5, to the extent that they may have been spread to the pole categories identified in Conroy Exhibit M5, have not been excluded. The costs of minor items are spread across applicable units of property on a project-by-project basis. Any of the spread costs that are included in the pole categories are immaterial to the overall amount included in the pole-cost figures used in Conroy Exhibit M5.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2014-00372

**Response to Kentucky Cable Telecommunications Association's
Supplemental Data Requests
Dated February 6, 2015**

Question No. 2-8

Responding Witness: Robert M. Conroy

- Q-2-8. According to Mr. Seelye's Rebuttal Testimony in Case No. 2009-00549, the costs for aerial cable clamps, pole top pins "and other such items that relate to connecting conductors to poles" are recorded by LG&E in Account No. 365 and No. 368. Please provide evidence that this is the case.
- A-2-8. Items such as those listed are not retirement units of property, and therefore LG&E does not maintain accounting for these items. The cost of all minor items is spread across applicable units of property on a project-by-project basis. The requested information is not available.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2014-00372

**Response to Kentucky Cable Telecommunications Association's
Supplemental Data Requests
Dated February 6, 2015**

Question No. 2-13

Responding Witness: Robert M. Conroy

- Q-2-13. With regard to Conroy Exhibit M5, and comparing to the comparable exhibit in Case No. 2009-00549, please provide a detailed explanation (separately for each item) along with supporting cost and continuing property records data, of the reduction in quantity of 40 foot poles from 61,023 poles to 59,477 poles and the corresponding increase in total installed costs from \$25,998,372 to \$27,701,656.
- A-2-13. See attached. The reduction in quantity for the 40' poles is due to the normal retirement process of older assets being retired. The increase in total installed costs for the 40' poles is the result of the retirement of less expensive earlier vintage poles offset by the addition of new poles which are more expensive due to increases in the cost of materials and labor.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2014-00372

**Response to Kentucky Cable Telecommunications Association's
Supplemental Data Requests
Dated February 6, 2015**

Question No. 2-32

Responding Witness: Robert M. Conroy / Counsel

- Q-2-32. According to Mr. Seelye's Rebuttal Testimony in Case No. 2009-00549, LG&E has been using a levelized rate since the early 1980s and including Case No. 90-158. Please provide any and all data to support that statement, including, but not limited to, LG&E's pole rate calculations and supporting work papers pertaining to the early 1980s.
- A-2-32. Mr. Seelye is not a witness in this proceeding. KCTA was an intervener in Case No. 2009-00549; its opportunity to probe the evidence offered by Mr. Seelye was in that proceeding, not this proceeding.

That aside, the Company may no longer possess the requested information, which is over 30 years old, and if and to the extent it exists, it is located off-site in boxes that are not readily searchable within the time allow to respond to this request.

Based on information and belief, the Company believes LG&E has been using a levelized rate since the early 1980s.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2014-00372

**Response to Kentucky Cable Telecommunications Association's
Supplemental Data Requests
Dated February 6, 2015**

Question No. 2-33

Responding Witness: Robert M. Conroy

- Q-2-33. Please identify the basis of the Company's CATV pole attachment charge prior to the early 1980s.
- A-2-33. The Company may no longer possess the requested information, which is over 30 years old, and if and to the extent it exists, it is located off-site in boxes that are not readily searchable within the time allowed to respond to this request.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2014-00372

**Response to Kentucky Cable Telecommunications Association's
Supplemental Data Requests
Dated February 6, 2015**

Question No. 2-35

Responding Witness: Christopher M. Garrett

- Q-2-35. Please indicate whether there are vintages of pole plant remaining in service that are older than 35 years. If the answer is anything other than an unqualified no, please identify the percentage of LG&E's pole plant in service associated with these older vintages of plant.
- A-2-35. LG&E's percentage of pole plant remaining in service that is older than 35 years as of December 31, 2014 is 4.22%.

Attachment 5

Seelye Rebuttal Exhibit 11

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

**Response to Third Data Request of Commission Staff
Dated March 26, 2010**

Question No. 3

Responding Witness: William Steven Seelye

- Q-3. Refer to Seelye Exhibit 11, LG&E's response to Item 119 of Commission Staff's Second Data Request ("Staff's Second Request"), and LG&E's response to Item 28 of the Initial Data Request of the Kentucky Cable Telecommunications Association.
- a. With regard to the response to Item 119, explain in detail the difference between a levelized and non-levelized charge.
 - b. Recalculate the CATV attachment charges with the only change being the use of net plant investment costs and provide an updated Exhibit 11.
 - c. The response to Item 28 discusses the calculation of the operation and maintenance expenses used in the calculation of the CATV charges.
 - (1) Starting with the rates as calculated in the application, recalculate the CATV rates if tree trimming expenses related to services and overhead conductors is excluded from the calculation of the adder for operation and maintenance expenses. If the expenses related to services and overhead conductors cannot be excluded from account 593004, Tree Trimming of Electric Distribution, recalculate the CATV rates if the adder for operation and maintenance expenses is calculated by dividing the Expenses Assigned to Poles of \$6,817,950 by the net book value of Accounts 364, 365, and 369. Include an updated Exhibit 11 in the response.
 - (2) Starting with the rates as calculated in response to part b. of this request, recalculate the CATV rates if tree trimming expenses related to services and overhead conductors is excluded from the calculation of the adder for operation and maintenance expenses. If the expenses related to services and overhead conductors cannot be excluded from account 593004, Tree Trimming of Electric Distribution, recalculate the CATV rates if the adder for operation and maintenance expenses is calculated by dividing the Expenses Assigned to Poles of \$6,817,950 by the net book value of Accounts 364, 365, and 369. Include an updated Exhibit 11 in the response

- A-3. a. A *levelized carrying charge* is a uniform series of payments calculated by applying a uniform series capital recovery factor to the gross original cost investment. A capital recovery factor is equal to the rate of return plus sinking fund depreciation. The calculation of a levelized carrying charge rate is identical to the calculation of a conventional mortgage payment on a home. In calculating a levelized carrying charge -- or a mortgage payment -- a capital recovery factor is applied to the original, un-depreciated investment ("gross investment"). Without considering income taxes, a levelized carrying charge (LCC) is therefore calculated by applying the return on investment (ROR) plus the sinking fund depreciation to the gross investment, as follows:

$$\text{LCC} = \text{Gross Investment} \times [\text{ROR} + \text{Sinking Fund Depreciation Rate}]$$

Mathematically, it is not appropriate to apply a capital recovery factor (which is equal to rate of return plus sinking fund depreciation) to the depreciated investment ("net investment"). In the context of the proposed CATV attachment charge, applying a capital recovery factor -- which reflects *sinking fund depreciation* as opposed to *straight line depreciation* -- to net investment would result in a significant under-recovery of costs and would thus inappropriately shift these costs onto other customers.

A *non-levelized carrying charge* (NLCC) is a non-uniform series of payments calculated by applying the rate of return to net investment and then adding straight-line depreciation, as follows:

$$\text{NLCC} = \text{Net Investment} \times \text{ROR} + \text{Straight Line Depreciation}$$

A non-levelized carrying charge calculation corresponds to the methodology used to determine revenue requirements in a rate case. Importantly, in a rate case *straight line depreciation* rather than *sinking fund depreciation* is used to calculate revenue requirements.

On a present value basis, levelized carrying charges are equivalent to non-levelized carrying charges over the life of the investment. This can be seen in the following attachment (Table I) which compares the present-value non-levelized carrying charges on a \$1,000 investment to the present-value levelized carrying charges on the same \$1,000 investment. Please note that for both calculations, the sum of present value revenue carrying charges is equal to the original \$1,000 investment.

But if sinking fund depreciation rather than straight-line depreciation is applied to net investment then an incorrect result is obtained. As seen in Table II, calculating carrying charges by applying a sinking fund depreciation rate to the net investment results in significant under-recovery of carrying costs. When the levelized and non-levelized carrying charges are properly calculated, the sum of the present-value carrying charges for each series is equal to \$1,000. But when sinking fund depreciation is applied to net investment, the sum of the present value carrying charges is only equal to \$721.54. What this means is that if carrying charges are miscalculated in this manner, only 72.15% of cost will be recovered over the life of the investment.

The conclusion reached is that either methodology – either a levelized fixed charge calculation or non-levelized fixed charge calculation – is reasonable assuming that the methodologies are properly applied and assuming that the same methodology is consistently applied over time. While on a present value basis both methodologies will yield the same result over the life of the investment, during any particular year the carrying charges will likely be different. For this reason, generally it is not appropriate to switch back and forth between the two methodologies. While LG&E does not have a fundamental objection with using a non-levelized carrying charge calculation to determine the CATV attachment charges as long as straight-line depreciation is used in the calculation, the Company does not believe that it is appropriate to switch back and forth between the two methodologies.

The use of levelized versus non-levelized carrying charge rates has been considered extensively by the Federal Energy Regulatory Commission (“FERC”). The FERC will allow the application of a levelized carrying charge rate (with sinking fund depreciation) to gross plant -- which it calls the “levelized gross plant method” -- or the application of a non-levelized carrying charge rate (with straight-line depreciation) to net plant – which it calls “nonlevelized net plant method”. The FERC, however, is reluctant to allow a utility to switch back and forth between the two methodologies. In a series of cases involving levelized carrying charges, the FERC rejected attempts to switch from a “net plant” approach to a “levelized” approach in midstream, finding that “allowing Consumers to switch pricing methodologies from the nonlevelized approach ... to the levelized approach ... is inappropriate.” *Consumers Energy Co., Opinion No. 429*, 85 FERC ¶ 61,100 at 61,366 (1998), *reh'g granted, Opinion No. 429-A*, 89 FERC ¶ 61,138 (1999), *reh'g denied, Opinion No. 429-B*, 95 FERC ¶ 61,084 (2001); *accord Ky. Utils. Co., Opinion No. 432*, 85 FERC ¶ 61,274 at 62,105 (1998). In the *Opinion 432*, the FERC did not allow Kentucky Utilities Company (“KU”) to change methodologies, stating as follows:

In conclusion, we believe that either a levelized gross plant or a non-levelized rate design can produce comparable, reasonable results if they are used consistently. Here, however, KU proposes

to switch methods. In supporting such a switch, a utility must prove that its proposed method is reasonable in light of its past recovery of capital costs using a different method. Here, KU has not persuaded us that the switch is appropriate in the circumstances of this case.

Regarding CATV attachment charges, considering the historical practice of calculating the charges using the leveled gross plant methodology, the Company maintains that the historical practice should be continued in the current proceeding.

- b. As indicated in response to LG&E KCTA 1-8, the Company does not have information concerning the net plant costs related to the types of poles (35 foot, 40 foot, and 45 foot poles) used to calculate the proposed CATV attachment charge. A *rough estimate* can be developed by applying the ratio of net plant to gross plant for Account 364 – Poles, Towers and Fixtures to the applicable gross plant unit costs for 35, 40, and 45 foot poles. As explained above, using net plant necessitates the application of straight line depreciation rather than sinking fund depreciation. A non-levelized carrying charge calculation using *roughly estimated* net plant data is attached.
- c. (1) Expenses related to services and overhead conductors cannot be excluded from account 593004. Attached is a recalculation of Seelye Exhibit 11 with the operation and maintenance expense adder calculated by dividing the Expenses Assigned to Poles by the *net* book value of Accounts 364, 365, and 369. Because the operation and maintenance expense adder is applied to *gross* plant costs in Seelye Exhibit 11, a recalculation of Seelye Exhibit 11 is also attached, with the operation and maintenance expense adder calculated by dividing the Expenses Assigned to Poles by the *gross* book value of Accounts 364, 365, and 369.
- (2) Attached is a recalculation of the attachment to the response to sub-part b of this Question, with the operation and maintenance expense adder calculated by dividing the Expenses Assigned to Poles by the *net* book value of Accounts 364, 365, and 369.

Table I

(a) Book Life	35 Years							
(b) Straight Line Depreciation (1/(a))	2.86%							
(c) Sinking-Fund Depreciation (see formula)	0.54%							
(d) Rate of Return	8.32%							
(e) Capital Recovery Factor (CFR) [(c) + (d)]	8.86%							
Year (1)	Non-Levelized Carrying Charges					Levelized Carrying Charges		
	Net Investment (2)	Return (3)	Straight Line Depreciation (4)	Non-Levelized Carrying Charges (5)	Present Value at 8.32% ROR (6)	Gross Investment (7)	Non-Levelized Carrying Charges (8)	Present Value at 8.32% ROR (6)
							[(e) x (7)]	
1	\$1,000.00	\$83.20	\$28.57	\$111.77	\$103.19	\$1,000.00	\$88.60	\$81.80
2	971.43	80.82	28.57	109.39	93.23	1,000.00	88.60	75.51
3	942.86	78.45	28.57	107.02	84.20	1,000.00	88.60	69.71
4	914.29	76.07	28.57	104.64	76.01	1,000.00	88.60	64.36
5	885.71	73.69	28.57	102.26	68.58	1,000.00	88.60	59.42
6	857.14	71.31	28.57	99.89	61.84	1,000.00	88.60	54.85
7	828.57	68.94	28.57	97.51	55.73	1,000.00	88.60	50.64
8	800.00	66.56	28.57	95.13	50.19	1,000.00	88.60	46.75
9	771.43	64.18	28.57	92.75	45.18	1,000.00	88.60	43.16
10	742.86	61.81	28.57	90.38	40.64	1,000.00	88.60	39.84
11	714.29	59.43	28.57	88.00	36.53	1,000.00	88.60	36.78
12	685.71	57.05	28.57	85.62	32.82	1,000.00	88.60	33.96
13	657.14	54.67	28.57	83.25	29.45	1,000.00	88.60	31.35
14	628.57	52.30	28.57	80.87	26.42	1,000.00	88.60	28.94
15	600.00	49.92	28.57	78.49	23.67	1,000.00	88.60	26.72
16	571.43	47.54	28.57	76.11	21.19	1,000.00	88.60	24.67
17	542.86	45.17	28.57	73.74	18.95	1,000.00	88.60	22.77
18	514.29	42.79	28.57	71.36	16.93	1,000.00	88.60	21.02
19	485.71	40.41	28.57	68.98	15.11	1,000.00	88.60	19.41
20	457.14	38.03	28.57	66.61	13.47	1,000.00	88.60	17.92
21	428.57	35.66	28.57	64.23	11.99	1,000.00	88.60	16.54
22	400.00	33.28	28.57	61.85	10.66	1,000.00	88.60	15.27
23	371.43	30.90	28.57	59.47	9.46	1,000.00	88.60	14.10
24	342.86	28.53	28.57	57.10	8.39	1,000.00	88.60	13.01
25	314.29	26.15	28.57	54.72	7.42	1,000.00	88.60	12.02
26	285.71	23.77	28.57	52.34	6.55	1,000.00	88.60	11.09
27	257.14	21.39	28.57	49.97	5.77	1,000.00	88.60	10.24
28	228.57	19.02	28.57	47.59	5.08	1,000.00	88.60	9.45
29	200.00	16.64	28.57	45.21	4.45	1,000.00	88.60	8.73
30	171.43	14.26	28.57	42.83	3.90	1,000.00	88.60	8.06
31	142.86	11.89	28.57	40.46	3.40	1,000.00	88.60	7.44
32	114.29	9.51	28.57	38.08	2.95	1,000.00	88.60	6.87
33	85.71	7.13	28.57	35.70	2.55	1,000.00	88.60	6.34
34	57.14	4.75	28.57	33.33	2.20	1,000.00	88.60	5.85
35	28.57	2.38	28.57	30.95	1.89	1,000.00	88.60	5.40
Sum of Present Value Carrying Charges					\$1,000.00			\$1,000.00

Table II

(a) Book Life	35 Years							
(b) Straight Line Depreciation (1/(a))	2.86%							
(c) Sinking-Fund Depreciation (see formula)	0.54%							
(d) Rate of Return	8.32%							
(e) Capital Recovery Factor (CFR) [(c) + (d)]	8.86%							
Year (1)	Non-Levelized Carrying Charges					Misapplied Levelized Carrying Charges		
	Net Investment (2)	Return (3)	Straight Line Depreciation (4)	Non-Levelized Carrying Charges (5)	Present Value at 8.32% ROR (6)	Net Investment (7)	Non-Levelized Carrying Charges (8)	Present Value at 8.32% ROR (6)
							[(e) x (7)]	
1	\$1,000.00	\$83.20	\$28.57	\$111.77	\$103.19	\$1,000.00	\$88.60	\$81.80
2	971.43	80.82	28.57	109.39	93.23	971.43	86.07	73.36
3	942.86	78.45	28.57	107.02	84.20	942.86	83.54	65.73
4	914.29	76.07	28.57	104.64	76.01	914.29	81.01	58.84
5	885.71	73.69	28.57	102.26	68.58	885.71	78.48	52.63
6	857.14	71.31	28.57	99.89	61.84	857.14	75.95	47.02
7	828.57	68.94	28.57	97.51	55.73	828.57	73.41	41.96
8	800.00	66.56	28.57	95.13	50.19	800.00	70.88	37.40
9	771.43	64.18	28.57	92.75	45.18	771.43	68.35	33.29
10	742.86	61.81	28.57	90.38	40.64	742.86	65.82	29.60
11	714.29	59.43	28.57	88.00	36.53	714.29	63.29	26.27
12	685.71	57.05	28.57	85.62	32.82	685.71	60.76	23.29
13	657.14	54.67	28.57	83.25	29.45	657.14	58.22	20.60
14	628.57	52.30	28.57	80.87	26.42	628.57	55.69	18.19
15	600.00	49.92	28.57	78.49	23.67	600.00	53.16	16.03
16	571.43	47.54	28.57	76.11	21.19	571.43	50.63	14.10
17	542.86	45.17	28.57	73.74	18.95	542.86	48.10	12.36
18	514.29	42.79	28.57	71.36	16.93	514.29	45.57	10.81
19	485.71	40.41	28.57	68.98	15.11	485.71	43.04	9.43
20	457.14	38.03	28.57	66.61	13.47	457.14	40.50	8.19
21	428.57	35.66	28.57	64.23	11.99	428.57	37.97	7.09
22	400.00	33.28	28.57	61.85	10.66	400.00	35.44	6.11
23	371.43	30.90	28.57	59.47	9.46	371.43	32.91	5.24
24	342.86	28.53	28.57	57.10	8.39	342.86	30.38	4.46
25	314.29	26.15	28.57	54.72	7.42	314.29	27.85	3.78
26	285.71	23.77	28.57	52.34	6.55	285.71	25.32	3.17
27	257.14	21.39	28.57	49.97	5.77	257.14	22.78	2.63
28	228.57	19.02	28.57	47.59	5.08	228.57	20.25	2.16
29	200.00	16.64	28.57	45.21	4.45	200.00	17.72	1.75
30	171.43	14.26	28.57	42.83	3.90	171.43	15.19	1.38
31	142.86	11.89	28.57	40.46	3.40	142.86	12.66	1.06
32	114.29	9.51	28.57	38.08	2.95	114.29	10.13	0.78
33	85.71	7.13	28.57	35.70	2.55	85.71	7.59	0.54
34	57.14	4.75	28.57	33.33	2.20	57.14	5.06	0.33
35	28.57	2.38	28.57	30.95	1.89	28.57	2.53	0.15
Sum of Present Value Carrying Charges					\$1,000.00			\$721.54

LOUISVILLE GAS AND ELECTRIC COMPANY

Calculation Of Attachment Charges for CATV

Pole Size	Quantity	Gross Installed Cost	Gross Average Installed Cost	Net / Gross Factor for Account 364	Estimate of Net Installed Cost
<u>Weighted Average Bare Pole Cost as of 10/31/2009</u>					
35'	21,992	\$ 9,895,841	\$ 449.97	0.4413117	\$ 198.58
40'	61,023	25,998,372	426.04	0.4413117	188.02
	<u>83,015</u>	<u>\$ 35,894,213</u>	<u>\$ 432.38</u>		<u>190.82</u>
<u>Three-User Poles</u>					
40'	61,023	\$ 25,998,372	\$ 426.04	0.4413117	\$ 188.02
45'	22,136	23,008,391	1,039.41	0.4413117	458.70
	<u>83,159</u>	<u>\$ 49,006,763</u>	<u>\$ 589.31</u>		<u>260.07</u>
<u>Two-User Pole Charge</u>					
		\$190.82 x .1224 Usage Space Factor = \$ 23.36			
		\$ 23.36 x .2075 Annual Carrying Charge = \$ 4.85	17,699	\$	85,774
<u>Three-User Pole Charge</u>					
		\$260.07 x .0759 Usage Space Factor = \$19.74			
		\$ 19.74 x .2075 Annual Carrying Charge = \$4.10	68,646	\$	281,162
Weighted Total			<u>86,345</u>	<u>\$</u>	<u>366,937</u>
Weighted Average Monthly Cost				\$	4.25

LOUISVILLE GAS AND ELECTRIC COMPANY

Calculation Of Annual Carrying Charge

Proposed Rate of Return	8.32%
Depreciation - Straight Line	2.86%
Income Tax (1)	3.63%
Property Tax and Insurance	0.22%
Operation and Maintenance (Page 3)	5.73%
Total	20.75%

(1) Derived from rates of equity capital

	<u>Capitalization Ratio</u>	<u>Annual Rate</u>	<u>Composite Rate</u>
Common	53.86%	11.50%	6.19%
Preferred	0.00%	0.00%	0.00%
Total Equity	53.86%		6.19%
Debt	46.14%	4.61%	2.13%
Total Capitalization	100.00%		8.32%

Composite Federal and State Income Taxes rate = 36.93%

Income Tax = $(0.3693 / (1 - 0.3693)) \times 0.0619 = 3.63\%$

LOUISVILLE GAS AND ELECTRIC COMPANY

Operation and Maintenance Expenses for
the 12 Months Ended October 31, 2009

(1) Labor Charged to 592 - Poles, Towers and Fixtures Subaccount	\$ 289,969	
- Tree Trimming	<u>225,900</u>	
		\$ 515,870
Total Labor		\$ 56,166,593
Total Administrative and General Expenses		\$ 73,557,685

Assignment of a Portion of A & G Expenses to Poles

$$(\$515,870/\$56,166,593) \times \$73,557,685 = \$675,600$$

Expenses Assigned to Poles

Maintenance of Poles, Towers, and Fixtures Subaccount 593001	\$ 1,366,766
Tree Trimming of Electric Distribution Routes 593004	4,775,583
A & G Expenses Assigned to Poles	<u>675,600</u>
Total	\$ 6,817,950

Adder to Annual Carrying Charges for O & M Expenses

\$ 6,817,950	Expenses Assigned to Poles	=	5.73%
<u>119,084,747</u>	Plant in Service - Account 364		

Net Plant to Gross Plant Ratio for Account 364

Gross Plant	Depreciation	Net Plant	Net to Gross Ratio
\$ 119,084,747	\$ 66,531,254	\$ 52,553,493	44.131%

LOUISVILLE GAS AND ELECTRIC COMPANY

Calculation Of Attachment Charges for CATV

Pole Size	Quantity	Gross Installed Cost	Gross Average Installed Cost
<u>Weighted Average Bare Pole Cost as of 10/31/2009</u>			
35'	21,992	\$ 9,895,841	\$ 449.97
40'	61,023	25,998,372	426.04
	<u>83,015</u>	<u>\$ 35,894,213</u>	<u>\$ 432.38</u>
<u>Three-User Poles</u>			
40'	61,023	\$ 25,998,372	\$ 426.04
45'	22,136	23,008,391	1,039.41
	<u>83,159</u>	<u>\$ 49,006,763</u>	<u>\$ 589.31</u>
<u>Two-User Pole Charge</u>		<u>Number of Attachments</u>	<u>Weighted Cost</u>
\$432.38 x .1224 Usage Space Factor = \$ 52.92			
\$ 52.92 x .1465 Annual Carrying Charge = \$ 7.75		17,699	\$ 137,222
<u>Three-User Pole Charge</u>			
\$589.31 x .0759 Usage Space Factor = \$44.73			
\$ 44.73 x .1465 Annual Carrying Charge = \$6.55		68,646	\$ 449,804
Weighted Total		<u>86,345</u>	<u>\$ 587,026</u>
Weighted Average Monthly Cost			\$ 6.80

LOUISVILLE GAS AND ELECTRIC COMPANY

Calculation Of Annual Carrying Charge

Proposed Rate of Return	8.32%
Depreciation - Sinking Fund	0.54%
Income Tax (1)	3.63%
Property Tax and Insurance	0.22%
Operation and Maintenance (Page 3)	<u>1.94%</u>
 Total	 14.65%

(1) Derived from rates of equity capital

	<u>Capitalization Ratio</u>	<u>Annual Rate</u>	<u>Composite Rate</u>
Common	53.86%	11.50%	6.19%
Preferred	<u>0.00%</u>	0.00%	<u>0.00%</u>
Total Equity	53.86%		6.19%
Debt	<u>46.14%</u>	4.61%	<u>2.13%</u>
Total Capitalization	100.00%		8.32%

Composite Federal and State Income Taxes rate = 36.93%

Income Tax = $(0.3693 / (1 - 0.3693)) \times 0.0619 = 3.63\%$

LOUISVILLE GAS AND ELECTRIC COMPANY

Operation and Maintenance Expenses for
the 12 Months Ended October 31, 2009

(1) Labor Charged to 592 - Poles, Towers and Fixtures Subaccount - Tree Trimming	\$ 289,969 <u>225,900</u>	\$ 515,870
Total Labor		\$ 56,166,593
Total Administrative and General Expenses		\$ 73,557,685

Assignment of a Portion of A & G Expenses to Poles

$$(\$515,870/\$56,166,593) \times \$73,557,685 = \$675,600$$

Expenses Assigned to Poles

Maintenance of Poles, Towers, and Fixtures Subaccount 593001	\$ 1,366,766
Tree Trimming of Electric Distribution Routes 593004	4,775,583
A & G Expenses Assigned to Poles	<u>675,600</u>
Total	\$ 6,817,950

Adder to Annual Carrying Charges for O & M Expenses

\$ 6,817,950	Expenses Assigned to Poles	=	1.94%
351,061,565	Plant in Service - 364, 365, and 369		

Net Plant to Gross Plant Ratio for Accounts 364,365 and 369

Gross Plant	Depreciation	Net Plant	Net to Gross Ratio
\$ 351,061,565	\$ 173,586,068	\$ 177,475,497	50.554%

LOUISVILLE GAS AND ELECTRIC COMPANY

Calculation Of Annual Carrying Charge

Proposed Rate of Return	8.32%
Depreciation - Sinking Fund	0.54%
Income Tax (1)	3.63%
Property Tax and Insurance	0.22%
Operation and Maintenance (Page 3)	<u>3.84%</u>
 Total	 16.55%

(1) Derived from rates of equity capital

	<u>Capitalization Ratio</u>	<u>Annual Rate</u>	<u>Composite Rate</u>
Common	53.86%	11.50%	6.19%
Preferred	<u>0.00%</u>	0.00%	<u>0.00%</u>
Total Equity	53.86%		6.19%
Debt	<u>46.14%</u>	4.61%	<u>2.13%</u>
Total Capitalization	100.00%		8.32%

Composite Federal and State Income Taxes rate = 36.93%

Income Tax = $(0.3693 / (1 - 0.3693)) \times 0.0619 = 3.63\%$

LOUISVILLE GAS AND ELECTRIC COMPANY

Operation and Maintenance Expenses for
the 12 Months Ended October 31, 2009

(1) Labor Charged to 592 - Poles, Towers and Fixtures Subaccount - Tree Trimming	\$ 289,969 <u>225,900</u>	\$ 515,870
Total Labor		\$ 56,166,593
Total Administrative and General Expenses		\$ 73,557,685

Assignment of a Portion of A & G Expenses to Poles

$$(\$515,870/\$56,166,593) \times \$73,557,685 = \$675,600$$

Expenses Assigned to Poles

Maintenance of Poles, Towers, and Fixtures Subaccount 593001	\$ 1,366,766
Tree Trimming of Electric Distribution Routes 593004	4,775,583
A & G Expenses Assigned to Poles Total	<u>675,600</u> \$ 6,817,950

Adder to Annual Carrying Charges for O & M Expenses

\$ 6,817,950	Expenses Assigned to Poles	=	3.84%
<u>177,475,497</u>	Plant in Service - 364, 365, and 369		

Net Plant to Gross Plant Ratio for Accounts 364,365 and 369

Gross Plant	Depreciation	Net Plant	Net to Gross Ratio
\$ 351,061,565	\$ 173,586,068	\$ 177,475,497	50.554%

LOUISVILLE GAS AND ELECTRIC COMPANY

Calculation Of Attachment Charges for CATV

Pole Size	Quantity	Gross Installed Cost	Gross Average Installed Cost	Net Gross Factor for Account 364	Estimate of Net Installed Cost
<u>Weighted Average Bare Pole Cost as of 10/31/2009</u>					
35'	21,992	\$ 9,895,841	\$ 449.97	0.50554	\$ 227.48
40'	<u>61,023</u>	<u>25,998,372</u>	<u>426.04</u>	0.50554	<u>215.38</u>
	83,015	\$ 35,894,213	\$ 432.38		218.59
<u>Three-User Poles</u>					
40'	61,023	\$ 25,998,372	\$ 426.04	0.50554	\$ 215.38
45'	<u>22,136</u>	<u>23,008,391</u>	<u>1,039.41</u>	0.50554	<u>525.46</u>
	83,159	\$ 49,006,763	\$ 589.31		297.92
<u>Two-User Pole Charge</u>					
			<u>Number of Attachments</u>	<u>Weighted Cost</u>	
		\$218.59 x .1224 Usage Space Factor = \$ 26.75			
		\$ 26.75 x .1887 Annual Carrying Charge = \$ 5.05	17,699	\$ 89,338	
<u>Three-User Pole Charge</u>					
		\$297.92 x .0759 Usage Space Factor = \$22.61			
		\$ 22.61 x .1887 Annual Carrying Charge = \$4.27	68,646	\$ 292,844	
			<u>86,345</u>	<u>\$ 382,181</u>	
				\$ 4.43	

LOUISVILLE GAS AND ELECTRIC COMPANY

Calculation Of Annual Carrying Charge

Proposed Rate of Return	8.32%
Depreciation - Straight Line	2.86%
Income Tax (1)	3.63%
Property Tax and Insurance	0.22%
Operation and Maintenance (Page 3)	<u>3.84%</u>
Total	18.87%

(1) Derived from rates of equity capital

	<u>Capitalization Ratio</u>	<u>Annual Rate</u>	<u>Composite Rate</u>
Common	53.86%	11.50%	6.19%
Preferred	<u>0.00%</u>	0.00%	<u>0.00%</u>
Total Equity	53.86%		6.19%
Debt	<u>46.14%</u>	4.61%	<u>2.13%</u>
Total Capitalization	100.00%		8.32%

Composite Federal and State Income Taxes rate = 36.93%

Income Tax = $(0.3693 / (1 - 0.3693)) \times 0.0619 = 3.63\%$

LOUISVILLE GAS AND ELECTRIC COMPANY

Operation and Maintenance Expenses for
the 12 Months Ended October 31, 2009

(1) Labor Charged to 592 - Poles, Towers and Fixtures Subaccount - Tree Trimming	\$ 289,969 <u>225,900</u>	\$ 515,870
Total Labor		\$ 56,166,593
Total Administrative and General Expenses		\$ 73,557,685

Assignment of a Portion of A & G Expenses to Poles

$$(\$515,870/\$56,166,593) \times \$73,557,685 = \$675,600$$

Expenses Assigned to Poles

Maintenance of Poles, Towers, and Fixtures Subaccount 593001	\$ 1,366,766
Tree Trimming of Electric Distribution Routes 593004	4,775,583
A & G Expenses Assigned to Poles	<u>675,600</u>
Total	\$ 6,817,950

Adder to Annual Carrying Charges for O & M Expenses

\$ 6,817,950	Expenses Assigned to Poles	=	3.84%
<u>177,475,497</u>	Plant in Service - 364 , 365, and 369		

Net Plant to Gross Plant Ratio for Accounts 364,365 and 369

Gross Plant	Depreciation	Net Plant	Net to Gross Ratio
\$ 351,061,565	\$ 173,586,068	\$ 177,475,497	50.554%

Attachment 6

Seelye Rebuttal Exhibit 12

		35 Years					Levelized Carrying Charges			Ms. Kravtin's Inconsistent Approach							
		2.86% 0.54% 8.32% 8.86%					Present Value at 8.32% ROR			Choosing the Charge that Results in the Lowest Rate			Difference From Consistently Applied Levelized Approach				
(a)	(b)	(c)	(d)	(e)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(10) - (8)	Present Value Difference at 8.32% ROR
Year	Net Investment	Return	Straight Line Depreciation	Non-Levelized Carrying Charges	Present Value at 8.32% ROR	Gross Investment	Levelized Carrying Charges	Present Value at 8.32% ROR	Levelized Carrying Charges	Present Value at 8.32% ROR	Levelized Carrying Charges	Levelized Carrying Charges	Present Value at 8.32% ROR	Lowest Rate	Difference From Consistently Applied Levelized Approach	Value Difference at 8.32% ROR	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
1	\$1,000.00	\$83.20	\$28.57	\$111.77	\$103.19	\$1,000.00	[(e) x (7)]	\$81.80	\$88.60	\$81.80	\$1,000.00	\$88.60	\$81.80	\$88.60	\$0.00	\$81.80	
2	971.43	80.82	28.57	109.39	93.23	1,000.00	88.60	75.51	88.60	75.51	1,000.00	88.60	75.51	88.60	\$0.00	\$75.51	
3	942.86	78.45	28.57	107.02	84.20	1,000.00	88.60	69.71	88.60	69.71	1,000.00	88.60	69.71	88.60	\$0.00	\$69.71	
4	914.29	76.07	28.57	104.64	76.01	1,000.00	88.60	64.36	88.60	64.36	1,000.00	88.60	64.36	88.60	\$0.00	\$64.36	
5	885.71	73.69	28.57	102.26	68.58	1,000.00	88.60	59.42	88.60	59.42	1,000.00	88.60	59.42	88.60	\$0.00	\$59.42	
6	857.14	71.31	28.57	99.89	61.84	1,000.00	88.60	54.85	88.60	54.85	1,000.00	88.60	54.85	88.60	\$0.00	\$54.85	
7	828.57	68.94	28.57	97.51	55.73	1,000.00	88.60	50.64	88.60	50.64	1,000.00	88.60	50.64	88.60	\$0.00	\$50.64	
8	800.00	66.56	28.57	95.13	50.19	1,000.00	88.60	46.75	88.60	46.75	1,000.00	88.60	46.75	88.60	\$0.00	\$46.75	
9	771.43	64.18	28.57	92.75	45.18	1,000.00	88.60	43.16	88.60	43.16	1,000.00	88.60	43.16	88.60	\$0.00	\$43.16	
10	742.86	61.81	28.57	90.38	40.64	1,000.00	88.60	39.84	88.60	39.84	1,000.00	88.60	39.84	88.60	\$0.00	\$39.84	
11	714.29	59.43	28.57	88.00	36.53	1,000.00	88.60	36.78	88.60	36.78	1,000.00	88.60	36.78	88.60	\$0.00	\$36.78	
12	685.71	57.05	28.57	85.62	32.82	1,000.00	88.60	33.96	88.60	33.96	1,000.00	88.60	33.96	88.60	(\$2.98)	\$32.82	
13	657.14	54.67	28.57	83.25	29.45	1,000.00	88.60	31.35	88.60	31.35	1,000.00	88.60	31.35	88.60	(\$5.36)	\$29.45	
14	628.57	52.30	28.57	80.87	26.42	1,000.00	88.60	28.94	88.60	28.94	1,000.00	88.60	28.94	88.60	(\$7.73)	\$26.42	
15	600.00	49.92	28.57	78.49	23.67	1,000.00	88.60	26.72	88.60	26.72	1,000.00	88.60	26.72	88.60	(\$10.11)	\$23.67	
16	571.43	47.54	28.57	76.11	21.19	1,000.00	88.60	24.67	88.60	24.67	1,000.00	88.60	24.67	88.60	(\$12.49)	\$21.19	
17	542.86	45.17	28.57	73.74	18.95	1,000.00	88.60	22.77	88.60	22.77	1,000.00	88.60	22.77	88.60	(\$14.87)	\$18.95	
18	514.29	42.79	28.57	71.36	16.93	1,000.00	88.60	21.02	88.60	21.02	1,000.00	88.60	21.02	88.60	(\$17.24)	\$16.93	
19	485.71	40.41	28.57	68.98	15.11	1,000.00	88.60	19.41	88.60	19.41	1,000.00	88.60	19.41	88.60	(\$19.62)	\$15.11	
20	457.14	38.03	28.57	66.61	13.47	1,000.00	88.60	17.92	88.60	17.92	1,000.00	88.60	17.92	88.60	(\$22.00)	\$13.47	
21	428.57	35.66	28.57	64.23	11.99	1,000.00	88.60	16.54	88.60	16.54	1,000.00	88.60	16.54	88.60	(\$24.37)	\$11.99	
22	400.00	33.28	28.57	61.85	10.66	1,000.00	88.60	15.27	88.60	15.27	1,000.00	88.60	15.27	88.60	(\$26.75)	\$10.66	
23	371.43	30.90	28.57	59.47	9.46	1,000.00	88.60	14.10	88.60	14.10	1,000.00	88.60	14.10	88.60	(\$29.13)	\$9.46	
24	342.86	28.53	28.57	57.10	8.39	1,000.00	88.60	13.01	88.60	13.01	1,000.00	88.60	13.01	88.60	(\$31.51)	\$8.39	
25	314.29	26.15	28.57	54.72	7.42	1,000.00	88.60	12.02	88.60	12.02	1,000.00	88.60	12.02	88.60	(\$33.88)	\$7.42	
26	285.71	23.77	28.57	52.34	6.55	1,000.00	88.60	11.09	88.60	11.09	1,000.00	88.60	11.09	88.60	(\$36.26)	\$6.55	
27	257.14	21.39	28.57	49.97	5.77	1,000.00	88.60	10.24	88.60	10.24	1,000.00	88.60	10.24	88.60	(\$38.64)	\$5.77	
28	228.57	19.02	28.57	47.59	5.08	1,000.00	88.60	9.45	88.60	9.45	1,000.00	88.60	9.45	88.60	(\$41.01)	\$5.08	
29	200.00	16.64	28.57	45.21	4.45	1,000.00	88.60	8.73	88.60	8.73	1,000.00	88.60	8.73	88.60	(\$43.39)	\$4.45	
30	171.43	14.26	28.57	42.83	3.90	1,000.00	88.60	8.06	88.60	8.06	1,000.00	88.60	8.06	88.60	(\$45.77)	\$3.90	
31	142.86	11.89	28.57	40.46	3.40	1,000.00	88.60	7.44	88.60	7.44	1,000.00	88.60	7.44	88.60	(\$48.15)	\$3.40	
32	114.29	9.51	28.57	38.08	2.95	1,000.00	88.60	6.87	88.60	6.87	1,000.00	88.60	6.87	88.60	(\$50.52)	\$2.95	
33	85.71	7.13	28.57	35.70	2.55	1,000.00	88.60	6.34	88.60	6.34	1,000.00	88.60	6.34	88.60	(\$52.90)	\$2.55	
34	57.14	4.75	28.57	33.33	2.20	1,000.00	88.60	5.85	88.60	5.85	1,000.00	88.60	5.85	88.60	(\$55.28)	\$2.20	
35	28.57	2.38	28.57	30.95	1.89	1,000.00	88.60	5.40	88.60	5.40	1,000.00	88.60	5.40	88.60	(\$57.65)	\$1.89	
Sum of Present Value Carrying Charges										\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$907.26	

Attachment 7

Amanda Lanham

From: Riggs, Kendrick R. <kendrick.riggs@skofirm.com>
Sent: Wednesday, March 04, 2015 4:15 PM
To: Amanda Lanham
Subject: RE: KU/LG&E Responses to KCTA's Data Requests

Amanda,

In response to your first question regarding the Companies' responses to KCTA 2-4, Conroy Exhibits M5 (LGE) and M4 (KU) correspond to the labor expense contained in each company's cost of service study prepared in the prior rate case and marked respectively as Conroy Exhibit C3 for each company. Thus the LG&E \$63.9 million referenced in your email represents electric, only direct labor and the KU \$135.5 million is the Kentucky jurisdiction direct and burden labor expense. KCTA 2-4 data request asked for LG&E's and KU's total labor expense from the general ledger for all accounts. This data will be different than the labor expense in the cost of service study. With respect to KCTA's request for October 31, 2014 labor data, the Companies did not develop a cost of service study for that time period.

In response to your second question regarding the Companies' responses to KCTA 1-21, there is not a typographical error. In June 2013 KU and LG&E began charging IT Prepaid amortization expenses to FERC Account 923 rather than FERC Account 935 to better align with the Uniform System of Accounts. The account description in the attachment labeled "Transportation Expenses" however is incorrect. It should be labeled "Maintenance of General Plant." IT Prepaid amortization expenses represent costs associated with software maintenance contracts which are amortized over the life of the agreements.

Regards,

Kendrick R. Riggs
Stoll Keenon Ogden PLLC
2000 PNC Plaza
500 West Jefferson Street
Louisville, Kentucky 40202
Direct Dial: 502.560.4222
Direct Fax: 502.627.8722
Cell Phone: 502.262.0172
Firm: 502.333.6000
Email: kendrick.riggs@skofirm.com

From: Amanda Lanham [<mailto:ALanham@sheppardmullin.com>]
Sent: Tuesday, March 03, 2015 11:38 AM
To: Riggs, Kendrick R.
Subject: KU/LG&E Responses to KCTA's Data Requests

Kendrick,

We have a couple of more questions for KU and LG&E regarding their responses to our data requests.

First, in response to KCTA's supplemental request 2-4, which asked for total labor expenses from KU's general ledger for all accounts as of March 31, 2012 and October 31, 2014, KU responded that, for 2012, the number was \$152,010,675. But this does not match the total labor used in Conroy Exhibit M4, which we understand from KU's response to 2-3 provides data as of March 31, 2012. There, the total labor provided was \$135,498,603. There is a much larger discrepancy with regard to LG&E's response. There, Conroy M5 from the 2012 rate case said that the total labor figure was \$63,964,275, but the total labor figure LG&E provided in response to 2-4 was \$136,604,040. Could you check with KU and LG&E to ask what the discrepancy is, and to the extent it also affects the 2014 numbers, let us know the appropriate total labor numbers for use in the formula?

Second, with regard to KU's response to 1-21, we believe there is a typographical error. The data for KU Account 935 as of March 31, 2012 is nearly \$10M more than the same account as of October 31, 2014, which would be unusual for this type of expense. This could explain why our calculations using KU's response to 1-21 are off of Conroy's M4 calculations of total A&G by the same amount. Could you confirm that the figure for KU Account 935 as of March 31, 2012 should be \$3,215,869.40 rather than \$13,215,869.40?

Thanks for your assistance.

Best regards,

Amanda M. Lanham

202.747.2195 | direct

202.747.3848 | direct fax

ALanham@sheppardmullin.com | [Bio](#)

SheppardMullin

Sheppard Mullin Richter & Hampton LLP

2099 Pennsylvania Avenue, NW, Suite 100

Washington, DC 20006-6801

202.747.1900 | main

www.sheppardmullin.com

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