

APPENDIX A

WHITFIELD A. RUSSELL

Whitfield A. Russell is an electrical engineer, attorney and President of Whitfield A. Russell and Associates, P.C., a corporate Partner of Whitfield Russell Associates. He holds a Bachelor of Science degree in Electrical Engineering from the University of Maine at Orono, a Master of Science in Electrical Engineering from the University of Maryland, and a Juris Doctor degree from Georgetown University Law Center.

Mr. Russell is experienced in electric utility system planning (transmission and generation), ratemaking and bulk power contracts. He has been qualified as an expert witness in 27 states (as well as in the Provinces of Ontario, Alberta and Manitoba and the District of Columbia) and has been accepted as an expert in approximately 150 proceedings before state and federal courts, arbitration panels, public service commissions, the Federal Energy Regulatory Commission and numerous other administrative agencies. Mr. Russell's clients have included public power utilities, state and federal power marketing agencies, investor- owned utilities, independent power producers, and state regulatory bodies and their staffs. He has written and spoken extensively on matters relating to regulated electric utilities.

Mr. Russell founded Whitfield Russell Associates in 1976.¹ Prior to that, from 1972 to 1976, he served as Engineer and eventually Chief Engineer for the Securities and Exchange Commission's Division of Corporate Regulation. That Division, in administering the Public Utility Holding Company Act of 1935, regulated registered public utility holding company systems representing approximately 20% of the gas and electric industries in the United States.

From 1971 to 1972, Mr. Russell was on the staff of the Federal Power Commission. He served as a consultant to staff attorneys in proceedings, and as an expert witness in an administrative proceeding before the Atomic Energy Commission.

From 1969 to 1971, Mr. Russell served as an Associate Engineer in the System Planning Division of the Potomac Electric Power Company. At PEPCO, he conducted system studies of load flows and stability. He was also a member of numerous study groups concerned with planning and operation of the Pennsylvania-New Jersey-Maryland Interconnection.

¹ Whitfield Russell Associates is located at 4232 King Street Alexandria, VA 22302. (703) 894-2200

**PROCEEDINGS IN WHICH
WHITFIELD A. RUSSELL
HAS TESTIFIED**

1. Anaheim v. Kleppe, U.S. District Court, Arizona (Civil No. 74-542 PHX-WEC), concerning the availability of transmission capacity in the Pacific Southwest.
2. In re: Potomac Electric Power Company, before the Maryland Public Service Commission, Case No. 7004, concerning the need for proposed 500 kV transmission lines in the Washington, D.C. area.
3. In re: Baltimore Gas and Electric Company, and Potomac Electric Power Company, before the Maryland Public Service Commission, Case No. 6984, involving the same transmission lines mentioned in the preceding case.
4. Perry v. The City of Monroe, Louisiana (State of Louisiana, Parish of Ouachita, Fourth District Court; Nos. 111145, 111146, 111147) regarding the necessity of Monroe's disposing of its municipal utility system; Filed August 16, 1977.
5. In re: Potomac Electric Power Company, before the District of Columbia Public Service Commission, in Case No. 685, concerning the system planning of the Potomac Electric Power Company and the PJM Pool.
6. In re: Generic Hearings on Rate Structure, before the Colorado Public Utilities Commission, Case No. 5693, regarding the engineering aspects of marginal cost pricing and power pooling in Colorado; Filed October 1980.
7. In re: Pacific Gas and Electric Company, FERC Docket No. ER76-532, regarding the proper level of rates to be charged by PG&E to the Central Valley Project for transmission service; Filed April 1978, revised January 1979.
8. In re: Pacific Power and Light Company, FERC Docket No. E-7796, regarding the Seven Party Agreement and related matters; Filed May 1978.
9. In re: Pacific Gas and Electric Company, FERC Docket No. E-7777 (II), concerning the provisions of numerous bulk power arrangements governing electric utilities in California; Filed October 1978.
10. In re: Potomac Edison Company, before the Maryland Public Service Commission, Case No. 7055, concerning the need for a 230 kV transmission line in Montgomery County, Maryland.
11. In re: Delmarva Power and Light Company, before the Maryland Public Service Commission, Case Nos. 7239F, 7239G, 7239H, 7239I, 7239J, 7239K, 7239L, 7239M and 7239N concerning fuel rate adjustments; Filed June 17, 1980, March 17, 1981, August 19, 1981 and November 20, 1981.

12. In re: Baltimore Gas and Electric Company, before the Maryland Public Service Commission, Case Nos. 7238G, 7238H, 7238I, 7238J, 7238L and combined dockets 7238P, Q, R and S, concerning fuel rates; Filed June 20, 1980, November 2, 1980, April 14, 1981, July 17, 1981 and September 14, 1981.
13. In re: Potomac Electric Power Company, before the Maryland Public Service Commission, Case Nos. 7240A, 7240B, 7240C, 7240D, 7240E, 7240F and 7240G, concerning fuel rate adjustments; Filed October 1980.
14. In re: Florida Power & Light Company, FERC Docket No. E-9574, concerning system planning for the City of Vero Beach, Florida. FP&L withdrew its application to acquire the Vero Beach system.
15. In re: Oklahoma Gas and Electric Company, FERC Docket No. ER77-465, concerning rates for energy banking and transmission services rendered to the Western Farmers Electric Cooperative; Filed October 20, 1978.
16. In re: Idaho Power Company, before the Idaho Public Utility Commission, Case No. U-1006-158, concerning the value of interruptible industrial loads and Idaho Power Companies entitlement to Federal secondary energy; Filed March 1980.
17. In re: Potomac Electric Power Company, before the District of Columbia Public Service Commission, Case No. 737, concerning the Company's construction program; Filed October 27, 1980.
18. In re: Virginia Electric and Power Company, before the Virginia State Corporation Commission, Case No. PUE 800006, concerning construction of transmission lines in the Charlottesville, Virginia area; Filed 1982.
19. In re: Pacific Gas and Electric Company, FERC Project Nos. 2735 and 1988, concerning the Helms Project, a pumped storage generating unit; Filed August 24, 1979.
20. Southeastern Power Administration v. Kentucky Utilities Company, FERC Docket No. EL 80-7, concerning SEPA's attempt to obtain a FERC wheeling order under the Public Utility Regulatory Policies Act of 1978; Filed October 6, 1980.
21. In re: Sierra Pacific Power Company, before the Public Service Commission of Nevada, Docket No. 81-105, concerning construction and transmission planning; Filed June 29, 1981.
22. In re: Virginia Electric and Power Company, before the North Carolina Utilities Commission, Docket No. E-22, Sub 257, concerning production cost simulation and normalized fuel adjustment clause formula; Filed June 9, 1981.
23. In re: the Investigation of the Capital Expansion For Electric Generation, before the New Mexico Public Service Commission, Case No. 1577, concerning construction

programs of the Public Service Company of New Mexico and El Paso Electric Company; Filed July 2, 1981.

24. In re: Potomac Edison Company, before the Maryland Public Service Commission, Case Nos. 7241A, 7241B, 7241C and 7241D, concerning fuel rate adjustments and productivity of generating units; Filed March 13, 1981.
25. In re: Potomac Edison Company, before the Maryland Public Service Commission, Case No. 7528, concerning the method of calculating Potomac Edison's fuel rate.
26. In re: Delmarva Power & Light Company, before the Maryland Public Service Commission, Docket No. 7570, concerning transmission loss allocation methodology; Filed October 30, 1981.
27. In re: Nebraska Public Power District, before the South Dakota Public Utilities Commission, Docket No. F-3371, concerning proposed construction and operation of the 500 kV MANDAN Transmission Facility; Filed September 29, 1981.
28. In re: Sierra Pacific Power Company, before the Public Service Commission of Nevada, Docket No. 81-660, concerning construction and transmission planning; Filed January 4, 1981.
29. In re: Kentucky Utilities Company, FERC Docket Nos. ER-81-341-000 and ER81-267-000, concerning construction planning and the market for short term power; Filed February 26, 1982 and May 7, 1982.
30. In re: Kentucky Power Company et al., before the Kentucky Public Service Commission, Case No. 8566, concerning cogeneration and avoided costs; Filed September 16, 1982.
31. In re: Appalachian Power Company, before the West Virginia Public Service Commission, Case No. 82-162-42T, concerning the wholesale market and short-term power sales; Filed October 19, 1982.
32. In re: Central Maine Power Company, before the Maine Public Utility Commission, Docket No. 82-137, concerning the application of Central Maine Power Company to reorganize in the form of a holding company; Filed October 25, 1982.
33. In re: Houston Lighting & Power Company, before the Public Utility Commission of Texas, Docket No. 4712, concerning rates to be paid to cogenerators and small power producers; Filed February 28, 1983.
34. In re: Dow Chemical Company, before the Public Utility Commission of Texas, Docket Nos. 4802, 5050 and 5062, concerning rates for interruptible service; Filed September 26, 1983.

35. In re: Nevada Power Company, before the Nevada Public Service Commission, Docket No. 83-707, concerning the Reid Gardner No. 4 Participation Agreement, Filed October 11, 1983.
36. Dow Chemical Company vs. Houston Lighting & Power Company, before the District Court of Brazoria County, Texas, 149th Judicial District, No. 79-F-2620, regarding the custom and usage of contract terms in the electric utility industry. Live direct testimony in a jury trial. No transcript available.
37. In re: The Montana Power Company and the Confederated Salish and Kootenai Tribes of the Flathead Reservation, Project Nos. 5-004 and 2776-000, concerning the Tribes' intention and ability to sell its output to one or more entities in the Western states, if obtaining the license to the Kerr Project; Filed July 15, 1983.
38. In re: the Dow Chemical Company vs. Gulf States Utilities Company, before the Louisiana Public Service Commission, Docket No. U-16038, concerning cogeneration and small power production; Filed October 28, 1984.
39. In re: Petition of the Dow Chemical Company, before the Public Utility Commission of Texas, Docket No. 5651, for an order compelling Houston Lighting & Power Company to comply with the Commission Order concerning cogeneration and small power production; Filed December 10, 1984.
40. In re: Oklahoma Gas and Electric Company, before the Oklahoma Corporation Commission, Cause No. 29017, concerning priority for recognition of capacity costs to Qualifying Facilities; Filed January 1985.
41. In re: Kansas City Power & Light Company of Kansas City, Missouri, before the Missouri Public Service Commission, Case Nos. ER-85-128 and EO-85-185, regarding rate design and allocation of production-related costs for the Company's Wolf Creek Generating Station on behalf of the United States Department of Energy; Filed May 3, 1985.
42. In re: Kansas City Power and Light Company, before the State Corporation Commission of the state of Kansas, Docket Nos. 142,099-U and 120,924-U, concerning operating problems caused by excess capacity, mitigation measures and regulatory requirements, on behalf of Johnson County Joint Intervenors; Filed May 6, 1985.
43. In re: Duke Power Company, before the North Carolina Utilities Commission, Docket No. E-7, Sub 391, concerning the Company's use of an Extended Cold Shutdown program to mitigate its excess capacity situation resulting from the Catawba Units, on behalf of the Department of Justice for the State of North Carolina; Filed June 26, 1985.
44. Sierra Pacific Power Company, before the Public Service Commission of the State of Nevada, Docket No. 85-430, on behalf of the State of Nevada Attorney General's

Office of Advocate for Customers of Public Utilities, concerning the effects upon retail rates of placing Valmy Unit No. 2 in service; Filed August 26, 1985.

45. United States of America Department of Energy, before the Bonneville Power Administration, on behalf of the City of Vernon, California, concerning the 1985 Proposed Firm Displacement Power Rate; Filed November 8, 1985.
46. In re: City of Anaheim, et al., v. Southern California Edison, Docket No. 78-0810, on behalf of five partial requirements wholesale customers of Southern California Edison Company, making claims under Federal antitrust laws for access to the Pacific Northwest-Pacific Southwest Intertie.
47. In the Matter of the Application of Sierra Pacific Power Company for Approval of its 1986-2006 Electric Resource Plan, Docket No. 86-701, on behalf of the State of Nevada Attorney General's Office of Advocate for Customers of Public Utilities, concerning efforts of Sierra Pacific Power Company to develop a new interconnection (the SMUD Tie) with the Sacramento Municipal Utility District; Filed September 8, 1986.
48. The Federal Executive Agencies, Complainant v. Public Service Company of Colorado, before the Public Utilities Commission of the State of Colorado, Case No. 6551, on behalf of the Federal Executive Agencies concerning the feasibility of wheeling federal preference power to the Government's facilities at Rocky Flats, the Lowry Air Force Base, the Rocky Flats Technical Center and the Denver Federal Center; Filed December 15, 1986 and February 10, 1987.
49. Commonwealth Edison Company, before the State of Illinois, Illinois Commerce Commission, Docket Nos. 87-0043, 87-0044 and 87-0057 Consolidated, on behalf of Intervenor, Citizen's Utility Board of Illinois, concerning Edison's proposal to form a generating subsidiary.
50. Nevada Power Company, before the Nevada Public Service Commission, Docket No. 87-750, concerning a 345 kV transmission line proposed to connect Nevada Power Company to Utah Power and Light Company; Filed September 28, 1987, October 8, 1987 and October 24, 1987.
51. Utah Power & Light Company, PacifiCorp, PC/UP&L Merging Corporation, FERC Docket No. EC88-2-000, establishing conditions for the proposed merger; also challenging PP&L's/UP&L's assertion that the claimed coordination benefits would not be attainable through power pooling or by contract; Filed February 12, 1988.
52. Rosemount Cogeneration Joint Venture, Biosyn Chemical Corporation and Oxbow Power Corporation vs. Northern States Power Company, before the Minnesota Public Utilities Commission, Docket No. E-002/GG-88-491, on behalf of Petitioners, Rosemount Cogeneration Joint Venture, Biosyn Chemical Corporation and Oxbow Power Corporation, concerning a contract between Northern States Power and Biosyn Chemical Corporation covering the 50 MW output of a yet-to-

be-constructed power plant based on the forecast costs of Sherburne County Unit #3 ("Sherco Unit 3"); Filed October 24, 1988.

53. In re: Potomac Electric Power Company, before the District of Columbia Public Service Commission, Case No. 869, on behalf of the District of Columbia Office of the People's Counsel, concerning the prudence of off-system purchases; Filed June 6, 1988.
54. In re: Wisconsin Public Power Inc. System, Advance Plan 5, before the Public Service Commission of the state of Wisconsin, on behalf of the Wisconsin Public Power System, Inc., concerning transmission planning in the state of Wisconsin; Filed August 15, 1988.
55. In re: Nevada Power Company, before the Public Service Commission of Nevada, Docket No. 88-701, on behalf of the Attorney General's Office of Advocate for Customers of Public Utilities, concerning NPC's 1988 Resource Plan; Filed August 29, 1988.
56. In re: Commonwealth Edison Company, before the Illinois Commerce Commission, Docket Nos. 87-0427, 87-0169, 88-0189 and 88-0219, on behalf of the Citizens Utility Board, concerning rejection of an unfair, Staff-proposed rate order; Filed September 12, 1988.
57. In re: Dow Chemical Company vs. Houston Lighting & Power Company, before the Texas Public Utilities Commission, Docket No. 8425, 8431, on behalf of The Dow Chemical Company, concerning application of Houston Lighting & Power Company for authority to change rates; Fuel Reconciliation, Revenue Requirements and Rate Design; Filed March 15, 1989.
58. Dow Chemical Company vs. Houston Lighting & Power Company, before the Texas Public Utilities Commission, Docket No. 8555, on behalf of The Dow Chemical Company, concerning rate discrimination, cost to serve and class load characteristics; Filed August 7, 1989.
59. In re: Sierra Pacific Power Company, before the Public Service Commission of Nevada, Docket No. 89-676, on behalf of the Attorney General's Office of Advocate for Customers of Public Utilities, concerning Sierra's system planning; Filed August 18, 1989.
60. In re: Northern California Power Agency vs. Pacific Gas and Electric Company, before the Federal Energy Regulatory Commission, Docket No. EL89-4-000, on behalf of the Northern California Power Agency ("NCPA"), concerning the Interconnection Agreement between Pacific Gas & Electric Company and NCPA; Filed October 3, 1989.
61. In re: M-S-R Public Power Agency vs. Tucson Electric Power Company, before the United States District Court of Arizona, No. CIV-86-521-TUC-ACM, on behalf of M-S-R, concerning TEP's breach of contract.

62. In re: Southern California Edison Company and San Diego Gas & Electric Company, before the Federal Energy Regulatory Commission, Docket No. EC89-5-000, on behalf of the City of Vernon, California concerning expected effects of the proposed merger on competition, system operation and transmission access; Filed January 3, 1990 and March 12, 1990.
63. In re: Farmers Electrical Cooperative Corporation and City Water & Light Plant of the City of Jonesboro, Arkansas, v. Arkansas Power & Light Company, No. LR-C-86-118. Presented deposition testimony on AP&L's liability and assisted in settlement negotiations of treble damage claims for transmission line foreclosure made by plaintiffs, City Water and Light Department of Jonesboro, Arkansas and the Farmers Electric Cooperative.
64. In re: Southern California Edison Company and San Diego Gas & Electric Company, before the California Public Utilities Commission, Docket No. 88-12-035, on behalf of the City of Vernon, California concerning expected effects of the proposed merger on competition, system operation and transmission access; Filed April 1990.
65. In re: Northeast Utilities Service Company and Public Service Company of New Hampshire, before the Federal Energy Regulatory Commission, Docket Nos. EC90-10-000, ER90-143-000, ER90-144-000, ER90-145-000 and EL90-9-000, on behalf of Massachusetts Municipal Wholesale Electric Company, concerning the effect of a proposed merger on competition and transmission access; Filed May 25, 1990.
66. Report to the Public Utilities Board of Manitoba concerning 1990 Manitoba Hydro Capital Projects Review: Generation and Transmission Requirements. Whitfield Russell Associates was appointed to report to The Public Utilities Board on matters regarding the economic consequences to the domestic customers of the Manitoba Hydro capital program; Filed August 28, 1990.
67. In re: Northeast Utilities Service Company, before the Federal Energy Regulatory Commission, Docket Nos. ER90-373-000, et al., on behalf of the Massachusetts Municipal Wholesale Electric Company, evaluating the Preferred Transmission Service Agreement between MMWEC and Northeast Utilities Service Company, for the transmission of MMWEC's power purchase from the New York Power Authority; Filed November 27, 1990.
68. In re: New Hampshire Electric Cooperative Rate Plan Proposal, before the New Hampshire Public Utilities Commission, Docket No. DR90-078, on behalf of the New Hampshire Electric Cooperative, concerning contract valuation; Filed December 11, 1990.
69. Tampa Electric Company v. Zeigler Coal Company. This was an arbitration held in August 1991, concerning provisions of a coal contract in which Mr. Russell offered testimony for Zeigler to the effect that Tampa Electric was not suffering a hardship by measures commonly used in the electric utility industry.

70. In re: The Long Range Forecast of Ohio Power Company, before the Ohio Public Utilities Commission, Docket No. 90-660-EL-FOR (Phase II). Mr. Russell presented and defended testimony on behalf of Ormet Aluminum Corporation concerning Ormet's right to allowances to emit sulfur dioxide from the Kammer Power Plant of Ohio Power Company under the Clean Air Act Amendments of 1990 and the propriety of Ohio Power's Compliance Plan; Filed July 17, 1991.
71. In re: Application of Tex-La Electric Cooperative to Increase Rates. Mr. Russell presented testimony in 1991, demonstrating that Tex-La was prudent in selling its entitlement in a nuclear plant and in settling its 1988 claims against Texas Utilities concerning Texas Utilities' fraud and imprudence in the construction of the Comanche Peak Nuclear Plant; Filed June 1991.
72. In re: Southern California Edison Company, before the Federal Energy Regulatory Commission, Docket No. ER88-83, on behalf of the City of Vernon, California concerning expected effects of Edison's administration of its transmission network on competition, system operation and transmission access; Filed June 1991.
73. In the Matter of the Application of the Public Service Company of New Mexico for Approval to Construct, Own, Operate and Maintain the Ojo Line Extension and for Related Approvals before the New Mexico Public Service Commission, Case No. 2382, on behalf of the United States Department of Energy, concerning transmission line construction programs of the Public Service Company of New Mexico; Filed November 8, 1991.
74. In re: Wisconsin Public Power Inc. System et al., Advance Plan 6, before the Public Service Commission of the state of Wisconsin, Docket No. 05-EP-6, concerning Eastern Wisconsin Utility Joint Transmission System and Interface Study; Filed December 31, 1991.
75. In re: MidAtlantic Energy v. Monongahela Power Company and the Potomac Edison Company, before the Public Service Commission of West Virginia, Case No. 89-783-E-C, on behalf of MidAtlantic Energy, concerning need for capacity and the appropriate avoided cost; Filed January 6, 1992, June 8, 1992 and February 13, 1992..
76. In re: Northeast Utilities Service Company, before the Federal Energy Regulatory Commission, Docket No. EL91-36-000, on behalf of the Massachusetts Municipal Wholesale Electric Company evaluating the tie-line adjustment charge borne by MMWEC that arose under a Transmission Service Agreement between New England Power Company and Northeast Utilities; Filed May 1, 1992 and August 24, 1992.
77. In re: Application of Houston Lighting & Power Company for a Certificate of Convenience and Necessity for the DuPont Project, before the Public Utility Commission of Texas, Docket No. 11000, on behalf of Destec Energy, Inc; Filed September 28, 1992, June 24, 1993 and June 29, 1993.

78. In re: Investigation on the Commission's Own Motion into Barriers to Contracts Between Electric Utilities and Nonutility Cogenerators and Certain Related Policy Issues, before the Public Service Commission of the state of Wisconsin, Docket No. 05-EI-112, on behalf of JOINT PARTIES: DESTEC Energy, Inc., EnerTran Technology Company, LS Power Corporation, The AES Corporation, LG&E Development Corporation, National Independent Energy Producers, and Citizens' Utility Board, concerning appropriate QF contract provision; Filed November 23, 1992.
79. In re: Application of Cap Rock Electric Cooperative, Inc. for a Certificate of Convenience and Necessity, before the Public Utility Commission of Texas, Docket No. 11248, on behalf of Cap Rock Electric Cooperative, Inc., concerning its proposed transmission system improvements; Filed December 30, 1992.
80. In re: Application of Texas Utilities for Authority to Change Rates, before the Public Utility Commission of Texas, Docket No. 11735, on behalf of Cap Rock Electric Cooperative, Inc., concerning standby rates, wholesale rate contracts and terms and conditions of the Power Sales Agreement, Filed May 18, 1993.
81. In re: Determination of Houston Lighting & Power Company's Standard Avoided Cost Calculation for the Purchase of Firm Energy and Capacity from Qualifying Facilities Pursuant to P.U.C. Subst. R. 23.66(H)(3), before the Public Utility Commission of Texas, Docket No. 10832, on behalf of Destec Energy, Inc; Filed August 11, 1993.
82. In re: Complaint of Phibro Refining, Inc. v. HL&P, Docket No. 11989, before the Public Utility Commission of Texas, on behalf of Phibro Energy, USA, Inc., concerning electric service contracts and terms and conditions of HL&P's industrial rate schedule; Filed August 3, 1993.
83. In re: Application of Texas Utilities Electric Company for Authority to Implement Economic Development Service, General Service Competitive Pricing, Wholesale Power Competitive Pricing, and Environmental Technology Service, Docket No. 13100, before the Public Utility Commission of Texas, on behalf of Rayburn Country Electric Cooperative, Inc., concerning TU Electric's so-called "competitive rates."; Filed August 8, 1994
84. In re: Complaint of Kenneth D. Williams v. HL&P, Docket No. 12065, on behalf of Destec before the Public Utility Commission of Texas; Filed January 10, 1995.
85. In re: Rebuttal testimony in a Complaint of Tex-La v. TUEC, Docket No. 12362, on behalf of Rayburn County Electric Coop. before the Public Utilities Commission of Texas; Filed March 6, 1995.
86. In re: Application for Authorization and Approval of Merger Between Wisconsin Electric Power Company, Northern States Power Company (Minnesota), Northern States Power Company (Wisconsin), and Cenergy, Inc., in Docket No. EC-95-16-

000, before the Federal Energy Regulatory Commission (on behalf of Certain Intervenor, including Madison Gas & Electric Company, Wisconsin Public Service Corporation, Minnesota Power & Light Company, Otter Tail Power Company and the Lincoln Electric System), in Docket Nos. 6630-UM-100 and 4220-UM-101, before the Wisconsin Public Service Commission and Docket No. 6-2500-10601-2 before the Minnesota Office of Administrative Hearings for the Minnesota Public Utilities Commission (both on behalf of Madison Gas & Electric, Wisconsin Industrial Energy Group, Wisconsin Federation of Cooperatives and the Citizen's Utility Board), concerning the effect upon transmission access of the merger of NSP and WEPCO into Primergy; Filed May 10, 1996.

87. In re: Merger of The Washington Water Power Company and Sierra Pacific Power Company, Docket Nos. EC94-23-000 and ER95-808-000, before the Federal Energy Regulatory Commission, on behalf of Truckee Donner Public Utility District, concerning ancillary services and single system transmission rates; Filed May 22, 1996.
88. In re: Alberta Electric Utilities 1996 Tariff Application before the Alberta Energy And Utilities Board, on behalf of the Industrial Power Consumers Association of Alberta concerning calculation of charges for ancillary services; Filed June 3, 1996.
89. In re: Surrebuttal Testimony in Docket Nos. EC95-16-000, ER95-1357-000 and ER95-1358-000, on behalf of Madison Gas & Electric Company, Citizens Utility Board and Wisconsin Electric Cooperative Association; Filed June 10, 1996.
90. In re: City Public Service Board of San Antonio Filing in Compliance with Subst. Rule 23.67, Docket No. 15613, before the Public Utility Commission of Texas, on behalf of Certain Power Marketers and Independent Power Producers, Destec Power Services and Enron Power Marketing, concerning Ancillary Services under the state-wide rate in Texas; Filed September 5, 1996.
91. In re: City of Austin Filing in Compliance with Subst. Rule 23.67, Docket No. 15645, before the Public Utility Commission of Texas, on behalf of Certain Power Marketers and Independent Power Producers, Destec Power Services and Enron Power Marketing, concerning Ancillary Services under the state-wide rate in Texas; Filed September 5, 1996.
92. In re: Central Power and Light and West Texas Utilities Filing in Compliance with Subst. Rule 23.67, Docket No. 15643, before the Public Utility Commission of Texas, on behalf of Certain Power Marketers and Independent Power Producers, Destec Power Services and Enron Power Marketing, concerning Ancillary Services under the state-wide rate in Texas; Filed September 5, 1996.
93. In re: Texas Utilities Electric Company, Filing in Compliance with Subst. Rule 23.67, Docket No. 15638, before the Public Utility Commission of Texas, on behalf of Certain Power Marketers and Independent Power Producers, Destec Power Services and Enron Power Marketing, concerning Ancillary Services under the state-wide rate in Texas; Filed September 18, 1996.

94. In re: Docket No. 15840, Regional Transmission Proceeding to Establish Postage Stamp Rate and Statewide Load Flow Pursuant to P.U.C. Subst. Rule. 23.67 on behalf of Certain Power Marketers and Independent Power Producers, Destec Power Services and Enron Power Marketing, concerning Ancillary Services under the state-wide rate in Texas; Filed August 30, 1996.
95. In re: Application of Wisconsin Energy Corporation, Wisconsin Electric Power Company, Northern States Power Company, and Northern States Power Company-Wisconsin for Approval of a Series of Transactions by Which Northern States Power Company-Wisconsin is merged into Wisconsin Electric Power Company, Northern States Power Company becomes a Subsidiary of Wisconsin Energy Corporation, and Wisconsin Energy Corporation is Renamed Primergy Corporation: Direct Testimony, Rebuttal Testimony and Surrebuttal Testimony on behalf of The Wisconsin Industrial Energy Group ("WIEG"), The Citizens' Utility Board ("CUB"), The Wisconsin Federation of Cooperatives ("WFC") and Madison Gas and Electric ("MG&E") in Docket Nos. 6630-UM-100 and 4220-UM-101 before the Public Service Commission of Wisconsin. The purpose of the direct testimony was to address Certain Intervenors' Transmission System Control Agreement and ISO Bylaws; October 8, 1996. The purpose of the rebuttal testimony was to address Applicants' Unilateral Settlement Offer which was submitted to FERC in their FERC merger proceeding; October 24, 1996. The purpose of the surrebuttal testimony was to address two sets of Rebuttal testimony of Jose Delgado and the Rebuttal Testimonies of Malcolm Bertsch of the Applicants and Don Carlson of Minnesota Power and Light; Filed November 5, 1996.
- 95a. In re: In the Matter of Northern States Power Company's Petition for Approval to Merge with Wisconsin Energy Corporation; OAH Docket No. 6-2500-10601-2: Direct Testimony and Exhibits and Rebuttal Testimony and Exhibits on behalf of Madison Gas and Electric ("MG&E"), The Wisconsin Federation of Cooperatives ("WFC"), and The Citizens' Utility Board ("CUB") in Docket No. E,G-002 and PA-95-500 before the Minnesota Office of Administrative Hearings for the Minnesota Public Utilities Commission. The purpose of the direct testimony is to remedy a Wisconsin Energy Corporation merger, in order to prevent anti-competitive effects with an Independent System Operation which actually operates the transmission system and which is truly independent of the proposed Primergy; October 21, 1996. The purpose of the rebuttal testimony is to address the direct testimony of Dr. Eilon Amit of Minnesota Department of Public Service and Dan Carlson of Minnesota Power and Light; Filed November 8, 1996.
- 95b. In re: Joint Application of WPL Holdings, Inc. and Wisconsin Power & Light Company for all Requisite Approvals in Connection with a Series of Related Transactions by which Interstate Power Company Becomes a Subsidiary of WPL Holdings, Inc., IES Industries, Inc. is Merged into WPL Holdings, Inc. and is Renamed Interstate Power Corporation and for Certain Related Transactions and Matters: Direct Testimony and two Surrebuttal Testimonies on behalf of Badger Cooperative Group ("BCG"), The Citizens' Utility Board ("CUB"), Madison Gas and Electric ("MG&E"), The Wisconsin Federation of Cooperatives ("WFC"),

Wisconsin Industrial Energy Group ("WIEG") and Municipal Wholesale Power Group ("MWPG") in Docket No. 6680-UM-100 before the Public Service Commission of Wisconsin. The purpose of the direct testimony was to discuss the characteristics of an appropriate ISO and present the ISO recommended by Certain Intervenor; May 7, 1997. The purpose of surrebuttal testimony #1 was to answer the rebuttal testimony of WP&L's witness Rodney Frame, Arnold Kehrli and Scott Wallace; May 30, 1997. The purpose of surrebuttal testimony #2 was to address the rebuttal testimony of WP&L's witness Arnold Kehrli; Filed May 30, 1997.

96. In re: Houston Lighting & Power Company Filing in Compliance with Subst. Rule 23.67, Docket No. 15639, before the Public Utility Commission of Texas, on behalf of Certain Power Marketers and Independent Power Producers, Destec Power Services and Enron Power Marketing, concerning Ancillary Services under the state-wide rate in Texas; Filed September 30, 1996.
97. In re: IES Utilities, Inc., Interstate Power Company, Wisconsin Power & Light Company, South Beloit Water, Gas & Electric Company, Heartland Energy Services, and Industrial Energy Applications, Inc., Docket Nos. EC96-13-000, ER96-1236-000, and ER96-2560-000, before the Federal Energy Regulatory Commission, on behalf of Wisconsin Intervenor ("WI"). Mr. Russell simultaneously filed 2 sets of testimony; the first, sponsored by the intervenors listed above as well as by Wisconsin Public Service Corporation ("Pub Service"), and Dairyland Power Cooperative. ("Dairyland") analyzed engineering and operating problems created by the merger of WP&L, IPW and IES. The second set of testimony discusses how the IEC Independent System Operator ("ISO") fails in general to meet the rigorous and comprehensive ISO standards promulgated by the Wisconsin Public Service Commission (WPSC). Both sets of testimony (Engineering and ISO) were filed before the Federal Energy Commission; Filed March 27, 1997.
98. In re: Joint Application of WPL Holdings, Inc. and Wisconsin Power & Light Company for all Requisite Approvals in Connection with a Series of Related Transactions by which Interstate Power Company Becomes a Subsidiary of WPL Holdings, Inc., IES Industries, Inc. is Merged into WPL Holdings, Inc. and is Renamed Interstate Power Corporation and for Certain Related Transactions and Matters, in Docket No. 6680-UM-100, before the Public Service Commission of Wisconsin; Filed May 7, 1997.
99. In re: City of College Station, FERC Docket No. TX 96-2-000, concerning transmission rates; Filed November 7, 1997.
100. In re: Application for Approval of Restructuring Plan Under Section 2806 of the Public Utility Code, in Docket No. R-00973981 on behalf of Mid-Atlantic Power Supply Association, before the Pennsylvania Public Utility Commission; Filed November 7, 1997.
101. In re: Application for Approval of Restructuring Plan Under Section 2806 of the Public Utility Code, in Docket No. R-00974104 on behalf of Mid-Atlantic Power

Supply Association, before the Pennsylvania Public Utility Commission; Filed November 7, 1997.

102. In re: New England Power Company, FERC Docket No. OA96-74-000, concerning proposed formula rates for Tariffs No. 9 and 4, on behalf of the Massachusetts Municipals; Filed December 12, 1997.
103. In re: Sierra Pacific Power Company before the Federal Energy Regulatory Commission in Docket Nos. ER97-3593-000, ER97-3779-000, ER97-4462-000 on behalf of Truckee Donner Public Utility District, addressing lack of comparable access to transmission systems; Filed February 23, 1998.
104. In re: Application for Approval of Restructuring Plan Under Section 2806 of the Public Utility Code, on behalf of Newmont Gold Company and Barrick Goldstrike Mines, in Docket Nos. 97-11018 and 97-11028, before the Public Service Commission of Nevada; Filed February 1, 1998.
105. In re: Southern California Edison Company before the Federal Energy Regulatory Commission in Docket No. ER97-2355-000 on behalf of Department of Water Resources of the State of California, regarding lower pricing for off-peak transmission services; Filed April 1998.
106. In re: Response to Procedural Order Number Three Load Pockets, on behalf of Newmont Gold Company and Barrick Goldstrike Mines, Docket Number 97-8001, before the Public Utilities Commission of Nevada; Filed May 15, 1998.
107. In re: Supplemental Testimony in an Application for Approval of Restructuring Plan Under Section 2806 of the Public Utility Code, on behalf of Newmont Gold Company and Barrick Goldstrike Mines, Docket Numbers 97-11018 and 97-11028, before the Public Utilities Commission of Nevada, Filed May 22, 1998.
108. In re: Southern California Edison Company, on behalf of The Department of Water Resources of The State of California, Docket No. ER97-2355, before FERC in reference to Transmission Revenue Balancing Account Adjustment ("TRBAA"); Filed November 16, 1998.
109. In re: Ormet Primary Aluminum Corporation, on behalf of Ormet Primary Aluminum Corporation, Arbitration Number 55-199-0051-94, before the American Arbitration Association, concerning the relationship between AEP and other power systems within NERC and ECAR; Filed July 14 1998.
110. In re: Rebuttal Testimony in response to Mr., Walter R. Kelley and Mr. Thomas Kennedy, on behalf of Ormet Primary Aluminum Corporation, Arbitration Number 55-199-0051-94, before the American Arbitration Association; Filed September 2, 1998.
111. In re: Application No. RE95081 – TransAlta Utilities Corp., on behalf of Albchem Industries Ltd., CXY Chemicals and Dow Chemicals Canada Ltd., before the

Alberta Energy & Utilities Board addressing ACD's interest in providing interruptible service; Filed October 1998.

112. In re: Tri-State Generation and Transmission Assoc., Inc., in Arbitration No. 77 Y 181 0023097 before the American Arbitration Association; Filed September 14, 1998.
113. In re: Joint Application for Approval of Merger, Docket No. 98-7023 on behalf of The Staff of the Public Utilities Commission, before the Public Utilities Commission of Nevada; Filed November 9, 1998.
114. In re: Independent System Administrator, Docket No. 97-8001 on behalf of The Staff of the Public Utilities Commission, before the Public Utilities Commission of Nevada; Filed December 11, 1998.
115. In re: Petition for Order Concerning Delineation of Transmission and Local Distribution Facilities, Docket No. 98-0894 on behalf of The City of Chicago, before the Illinois Commission in reference to re-functionalization; Filed April 2, 1999.
116. In re: Consolidated Edison Company, Docket No. EL99-58-000 on behalf of The Village of Freeport, New York, before FERC in reference to remedies for the breach of contract to provide firm service on a non-discriminatory basis; Filed July 22, 1999, August 3, 1999, August 18, 1999 and September 9, 1999.
117. In re: Wisconsin Public Power, Inc. Docket No. 05-EI-119 on behalf of Wisconsin Transmission Customer Group (WTCG"), before the Public Service Commission of Wisconsin to address the concerns of municipally-owned utilities within Wisconsin; Filed March 6, 2000.
118. In re: Joint Application of Utilicorp United Inc. & St. Joseph Light & Power Co., Docket No. EM-2000-292 on behalf of Springfield (MO) City Utilities before the PSC of the State of Missouri to address why the merger between the two is detrimental to the public interest; Filed May 1, 2000.
119. In re: Utilicorp United Inc, and Empire District Electric Co. Docket No. EM-2000-369 on behalf of Springfield (MO) City Utilities before the Public Service Commission of the State of Missouri to explain why the merger between the two is detrimental to the public interest; Filed June 19, 2000.
- 119A. In re: Mobil Oil Corporation vs. Southern California Edison, Oral Testimony in a jury trial before the Superior Court of the State of California for the County of Los Angeles in Docket No. BC 175784, on behalf of Mobil Oil Corporation. The purpose of the testimony was to explain how Southern California Edison's actions contributed to substantial damage to equipment at Mobil's Torrance, California refinery during the cascading blackout on August 10, 1996; Testimony on July 17, 2000.

120. In re: Arrowhead - Westin Transmission Line Project, Docket No. 05-CE-113 on behalf of the Wisconsin Public Service Corporation ("WPSC"), before the Public Service Commission of the State of Wisconsin to provide support for the transmission project as proposed by WPSC and Minnesota Power; Filed November 22, 2000.
121. In re: Kansas Municipal Energy Agency ("KMEA"), Docket No. ER00-2644-000 on behalf of the Kansas Municipal Energy Agency ("Kansas Municipal"), before the Federal Energy Regulatory Commission ("FERC") to review, assess and comment on the actions taken by the Southwest Power Pool in connection with two transmission service requests made by the Kansas Municipal Energy Agency aggregating 39 MW of contract demand; Filed December 8, 2000.
122. In re: Arrowhead - Weston 345 kV Transmission Line, Rebuttal testimony in Docket No. 05-CE-113 on behalf of the Wisconsin Public Service Corporation ("WPSC"), before the Public Service Commission of the State of Wisconsin to address matters set forth in the direct testimony of Dr. Richard A. Rosen on behalf of Save Our Unique Lands ("SOUL"), Mr. David Schoengold on behalf of Wisconsin's Environmental Decade, and Mr. George R. Edgar on behalf of the Citizens' Utility Board ("CUB"); Filed December 18, 2000.
123. In re: Ethyl Corporation verses Gulf States Utilities Company, Civil Docket No. M, live direct testimony in a dispute over direct assignment of substation facilities; Filed April 2001.
124. In re: Joint Application of Entergy Louisiana, Inc. and Entergy Gulf States, Inc., Docket No. U-25533 on behalf of Occidental Chemical Corporation ("OxyChem"), before the Louisiana Public Service Commission for authorization to participate in contracts for the purchase of capacity and electric power for the Summer of 2001; Filed May 3, 2001.
125. In re: Petitioners' Joint Proposal for Merger & Rate Plan, testimony in Case No. 01-M-0075 on behalf of Alliance for Municipal Power before the New York State Public Service Commission. The purpose of this testimony is explain (1) the inappropriateness of Rule 52 in the post merger competitive energy markets; (2) to have stranded transmission cost and distribution costs expunged; and (3) to show how merged Companies exacerbates the incentive to abuse Rule 52 against newly formed municipal utilities; Filed November 5, 2001.
126. In re: Northeast Utilities Service Company Transmission Line Project, direct testimony in Docket No. 217 before the Connecticut Siting Council of the State of Connecticut on behalf of the Attorney General, State of Connecticut for the purpose of (1) Whether there is a need for the 345 f transmission line from Plum-tree to Norwalk; (2) whether the proposed transmission system design is the best option based on current transmission design and (3) whether any approval of the project by the Siting Council should be conditioned upon CL&P and NU's agreement; Filed March 12, 2002.

127. In re: Alliance Companies, et al., Affidavit in Docket Nos. RM01-12-000, RT01-87-000 and RT01-88-000, before the Federal Energy Regulatory Commission on behalf of the Ormet Primary Aluminum Corporation, for the purpose of providing relevant engineering fundamentals related to the proper design of methodology for quantifying transmission losses and for allocating such losses to the customers of regional transmission organizations; Filed March 12, 2002.
128. In re Cannon Power Corporation., Affidavit in Docket No. ER02-2189-000, before the Federal Energy Regulatory Commission on behalf of Whitewater Hill Wind Partners, LLC developing a 66 MW wind power project to be interconnected to Southern California Edison Company; Filed July 29, 2002.
129. In re Cannon Power Corporation., Affidavit in Docket No. ER02-1764, before the Federal Energy Regulatory Commission on behalf of Cabazon Wind Partners, LLC developing a 66 MW wind power project to be interconnected to Southern California Edison Company; Filed August 2, 2002.
130. In re: Response to Pacificorp's Motion: Affidavit in Response to Pacificorp's Daubert Motion Regarding Richard Slaughter and Supplemental Expert Report on behalf of Snake River Valley Electric Association; Filed September 10, 2002.
131. In re: Pacific Gas & Electric Company : Direct Testimony in Docket No. ER01-2998, before the Federal Energy Regulatory Commission on behalf of Northern California Power Agency to explain what level of firmness is required of transmission service under the Stanislaus Commitments; Filed December 20, 2002.
132. In re: American Electric Power Corp.: Affidavit in Docket No. ER03-242, before the Federal Energy Regulatory Commission on behalf of Ormet Primary Aluminum Corp. to respond to AEP's proposed electric transmission rates to be included in the OATT of the PJM Interconnection; Filed December 24, 2002.
133. In re: Application of the CT Light & Power Company: Supplemental Direct Testimony in Docket No. 217, before the State of CT Siting Council on behalf of The Attorney General, State of CT as a follow-up to the direct testimony filed on March 12, 2002 and to address various studies and reports that have been filed since that original testimony; Filed January 14, 2003.
134. In re: Pacific Gas & Electric: Rebuttal Testimony before the Federal Energy Regulatory Commission in Docket No. ER01-2998 on behalf of Northern California Power Agency ("NCPA") to respond to testimony from witnesses Judi K. Mosley, Kevin J. Dasso, Dr. Roy Shanker and Linda Patterson; Filed April 1, 2003.
135. In re: Order Instituting Investigation into implementation of Assembly Bill 970 regarding the identification of electric transmission and distribution constraints, actions to resolve those constraints, and related matters affecting the reliability of electric supply: Direct testimony before the Public Utilities Commission of California on behalf of Oak Creek Energy Systems. The purpose of the testimony is to provide comments on and recommendations with respect to the Tehachapi

Transmission Conceptual Facility Study ("Tehachapi CFS" or "TCFS"), performed by Southern California Edison ("SCE" or "Edison"); Filed April 22, 2003.

136. In re: Order Instituting Investigation into implementation of Assembly Bill 970 regarding the identification of electric transmission and distribution constraints, actions to resolve those constraints, and related matters affecting the reliability of electric supply: Rebuttal testimony before the Public Utilities Commission of California on behalf of Oak Creek Energy Systems. The purpose of the testimony is to rebut the testimony of Mr. Jorge Chacon and Mr. Melvin Stark on behalf of Southern California Edison Company, taking into account the testimony of Mr. Robert Sparks filed on behalf of the California Independent System Operator ("CA ISO" or "ISO"); Filed May 13, 2003.
137. In re: California Independent System Operator Corporation: Direct testimony before the Federal Energy Regulatory Commission in Docket No. ER00-2019 on behalf of State Water Contractors and the Metropolitan Water District of Southern California. The purpose of the testimony is to provide a critical analysis of ISO's proposed Transmission Access Charge; Filed June 2, 2003.
138. In re: Ameren Services Company, et al.: Affidavit in Docket No. EL03-212-000, before the Federal Energy Regulatory Commission on behalf of Ormet Primary Aluminum Corp. to respond to AEP's Submission in Response to the Commission's Section 206 Investigation; Filed September 2, 2003.
139. In re: Pacific Gas and Electric Company: Direct Testimony in Phase I before the Federal Energy Regulatory Commission in Docket Nos. ER00-565-000, ER00-565-003, and ER00-565-007 on behalf of the Northern California Power Agency. The purpose of the testimony is to explain the nature of the costs for which Pacific Gas and Electric Company seeks recovery through its Scheduling Coordinator Service Tariff; Filed September 15, 2003.
140. In re: California Independent System Operator Corporation: Surrebuttal Testimony before the Federal Energy Regulatory Commission in Docket Nos. ER00-2019-006, ER01-819-002, and ER03-608-000 on behalf of State Water Contractors and the Metropolitan Water District of Southern California. The purpose of the testimony is to respond to the Prepared Rebuttal Testimony of Mr. Johannes P. Pfeifenberger on behalf of the ISO; Filed October 20, 2003.
141. In re: Midwest Independent Transmission System Operator, Inc. and Public Utilities With Grandfathered Agreements in the Midwest ISO Region: Prepared Testimony before the Federal Energy Regulatory Commission in Docket Nos. ER04-691-000 and EL04-104-000 on behalf of Marshfield Electric & Water District. The purpose of the testimony is to review Marshfield Electric & Water District's transmission arrangements in order to respond to the Commission's May 26, 2004 Order in this proceeding; Filed June 25, 2004.
142. In re: Pacific Gas and Electric Company: Direct Testimony in Phase II before the Federal Energy Regulatory Commission in Docket Nos. ER00-565-000 and

ER00-565-003 on behalf of the Northern California Power Agency ("NCPA"). The purpose of the testimony is to discuss PG&E's propriety in passing through ISO Charge Type costs as Scheduling Coordinator Service charges to NCPA under the terms of the NCPA-PG&E Interconnection Agreement; Filed September 13, 2004.

143. In re: Southern California Edison Company: Prepared Direct Testimony before the Federal Energy Regulatory Commission in Docket No. ER02-2189-003 on behalf of Whitewater Wind Hill Partners. The purpose of the testimony is to provide support for Whitewater's request that the Commission revise the Interconnection Facilities Agreement ("IFA") between Whitewater and Southern California Edison Company ("SCE or Edison"); Filed September 14, 2004.
144. In re: Cabazon Wind Partners, LLC Complainant vs. Southern California Edison Company Respondent: Affidavit in Docket No. EL04-137 before the Federal Energy Regulatory Commission on behalf of Cabazon Wind Partners, LLC ("Cabazon"). This Affidavit provides support for Cabazon's request that Southern California Edison Company ("SCE") grant Cabazon reimbursement, in the form of a transmission credit or otherwise, for the cost of certain upgrades Cabazon has borne to interconnect its generation to SCE; Filed September 27, 2004.
145. In re: Southern California Edison Company: Cross Answering Testimony before the Federal Energy Regulatory Commission in Docket No. ER02-2189-003 on behalf of Whitewater Hill Wind Partners. The purpose of the testimony is to respond to testimony filed on October 28, 2004, in this proceeding by Commission Staff witnesses, Ms. Tania Martinez Navedo and Mr. Edward W. Mills. As discussed in my prior testimony, the issue in this case involve the designation of disputed upgrades contained in the IFA between Whitewater and Southern California Edison Company; Filed November 22, 2004.
146. In re: Pacific Gas and Electric Company: Direct and Answering Testimony before the Federal Energy Regulatory Commission in Docket No. ER01-1639-006 on behalf of Northern California Power Agency. The purpose of this testimony is to explain 1) PG&E's failure to justify the pass-through of Reliability Service charges to Western and PG&E's additional failure to "unbundle the rates in its ETCs and provide a full cost of service analysis supporting the unbundled rates," 2) PG&E's attempt to pass-through Scheduling Coordinator Service Charges to Western, and 3) The inappropriateness of PG&E's imposition of interest charges; Filed November 23, 2004.
147. In re: Petition for a Declaratory Order or Advisory Opinion as to the Applicability of the Commission's Decision in Docket No. 03-10003, Plant Project in Orange County, California: Affidavit in Docket No. 04-10023, before the Public Utilities Commission of Nevada on behalf of Ridgewood Renewable Power, LLC ("Ridgewood") with respect to a landfill methane gas powered electric generating project located at the Olinda/ Alpha landfill in Orange County, California; Filed December 30, 2004.

148. In re: Southern California Edison Company and Cabazon Wind Partners, LLC: Prepared Direct Testimony before the Federal Energy Regulatory Commission in Docket No. EL04-137, on behalf of Cabazon Wind Partners, LLC. The purpose of this testimony is to provide support for Cabazon's request that Southern California Edison ("SCE") grant Cabazon reimbursement, in the form of transmission credit or otherwise, for the cost of certain upgrades Cabazon has borne to interconnect generation to SCE; Filed February 4, 2005.
149. In re: Pacific Gas and Electric Company: Phase II Answering Testimony to PG&E's Supplemental Testimony; Cross Answering Testimony; and Errata of Whitfield A. Russell before the Federal Energy Regulatory Commission in Docket No. ER00-565-000, et al and ER04-1233-000, on behalf of Northern California Power Agency. The purpose of this testimony is to respond to Mr. Bray's contention that the SCS Tariff is a formula rate, to respond to aspects of the Prepared Direct and Answering Testimony of Ms. Linda M. Patterson on behalf of the Federal Energy Regulatory Commission Staff and to provide updates to my previously filed testimony, Filed March 8, 2005.
150. In re: Southern California Edison Company: Affidavit before the Federal Energy Regulatory Commission in Docket No. EL05-80-000, on behalf of the California Wind Energy Association ("CalWEA"). The purpose of this affidavit is to explain how and why the proposed Antelope-Tehachapi 230 kV line will be integrated into the regional transmission grid and thereby constitute a network upgrade facility; Filed April 14, 2005.
151. In re: American Electric Power Service Corporation: Affidavit before the Federal Energy Regulatory Commission in Docket No. ER05-751-000, on behalf of Ormet Primary Aluminum Corporation. The purpose of this affidavit is to respond to American Electric Power Corporation's (AEP's) request (a) to increase its annual Network Integration Transmission Service (NTS) revenue requirements to \$486 million per year and (b) to increase the NTS rates; Filed April 29, 2005.
152. In re: Southern California Edison Company and Cabazon Wind Partners, LLC: Prepared Rebuttal Testimony before the Federal Energy Regulatory Commission in Docket No. EL04-137, on behalf of Cabazon Wind Partners, LLC. The purpose of this testimony is to respond to direct testimony filed on March 14, 2005 and cross answering testimony filed on May 3, 2005 by Mr. Daniel J. Allstun, the witness of Southern California Edison and to respond to testimony filed on April 14, 2005 by Commission Staff witness, Ms. Emily White; Filed May 20, 2005.
153. In re: In the Matter of the Arbitrations between PG&E Energy Trading-Power, LP Claimant, Counter-Respondent and Southaven Power, LLC, and Caledonia Generating, LLC, Respondents, Counter-Claimants: Expert Report and litigation before the American Arbitration Association in AAA Nos. 16-198-00206-03 & 16-198-00207-03, on behalf of Williams & Connolly LLP (counsel of Southaven Power, LLC) and Bingham McCutchen LLP (counsel for Caledonia Generating, LLC). The purpose of this expert report was to provide my opinion on certain

elements of the matters in dispute between PG&E Energy Trading-Power, L.P., on the one hand, and each of Southaven and Caledonia, on the other hand. These disputes have arisen in connection with two similar tolling agreements, each titled "Dependable Capacity and Conversion Services Agreement;" Filed September 8, 2005.

154. In re: Midwest Independent Transmission System Operator, Inc.: Pre-Filed Answering Testimony before the Federal Energy Regulatory Commission in Docket No. ER05-6-001, et al, on behalf of Ormet Primary Aluminum Corporation. The purpose of this testimony is to analyze the proposed SECA rate design as it relates to Ormet; Filed October 24, 2005.
155. In re: Berkshire Power Company, LLC: Affidavit before the Federal Energy Regulatory Commission in Docket No. ER05-1179-001, on behalf of Massachusetts Municipal Wholesale Electric Company, Chicopee Municipal Lighting Plant, and South Hadley Electric Light Department. The purpose of this affidavit is to review the engineering analysis performed by ISO New England in support of its determination of the system reliability for the Springfield, Massachusetts area in Western Massachusetts and, more specifically, the ISO's analysis of the reliability need for two units in that area: (1) the 245 MW Berkshire facility operated by Berkshire Power Company; and (2) the 107 MW West Springfield Unit 3 operated by Consolidated Edison Energy Massachusetts, Inc.; Filed November 7, 2005.
156. In re: Consolidated Edison Energy Massachusetts, Inc.: Affidavit before the Federal Energy Regulatory Commission in Docket No. ER05-903-002, on behalf of Massachusetts Municipal Wholesale Electric Company, Chicopee Municipal Lighting Plant, and South Hadley Electric Light Department. The purpose of this affidavit is to review the engineering analysis performed by ISO New England in support of its determination of the system reliability for the Springfield, Massachusetts area in Western Massachusetts and, more specifically, the ISO's analysis of the reliability need for two units in that area: (1) the 245 MW Berkshire facility operated by Berkshire Power Company; and (2) the 107 MW West Springfield Unit 3 operated by Consolidated Edison Energy Massachusetts, Inc.; Filed November 10, 2005.
157. In re: Pittsfield Generating Company, LP: Affidavit before the Federal Energy Regulatory Commission in Docket No. ER06-262-000, on behalf of Massachusetts Municipal Wholesale Electric Company, Chicopee Municipal Lighting Plant, and South Hadley Electric Light Department. The purpose of this affidavit is to review the engineering analysis performed by ISO New England in support of its evaluation of the system reliability for the Pittsfield, Massachusetts area of Western Massachusetts and, more specifically, the ISO's analysis of the reliability need for the 160 MW facility operated by Pittsfield Generating Company, L.P.; Filed December 21, 2005.
158. In re: Mystic Development LLC: Affidavit before the Federal Energy Regulatory Commission in Docket No. ER06-427-000, on behalf of Massachusetts Municipal Wholesale Electric Company, Wellesley Municipal Light Plant, Reading

Municipal Light Department and Concord Municipal Light Plant. The purpose of this affidavit is to (a) respond to portions of the testimony offered by Mystic witnesses Messrs. Theodore Horton, Robert B. Stoddard, and Alan C. Heintz; and (b) review the engineering analysis of the December 7, 2004, "Need for Mystic Units 7, 8 and 9 for System Reliability," performed by ISO New England ("ISO") and included by Mystic in its filing as support for the assertion that Mystic Units 8 and 9 are needed to ensure system reliability in the Northeast Massachusetts/Boston Area load pocket; Filed January 19, 2006.

159. In re: In the Matter of the Application of Ohio Power Company for Approval of a Special Contract Arrangement with Ormet Primary Aluminum Corporation, In the Matter of the Joint Petition of Ohio Power Company and South Central Power Company for Reallocation of Territory, In the Matter of: Ormet Primary Aluminum Corporation and Ormet Primary Mill Products Corporation v. South Central Power Company and Ohio Power Company: Pre-Filed Testimony before the Public Utilities Commission of Ohio in Docket Nos. 96-999-EL-AEC, 96-1000-EL-PEB and 05-1057-EL-CSS, on behalf of Ormet Primary Aluminum Corporation. The purpose of this testimony is to analyze: (a) the effect upon the ratepayers of South Central and Buckeye of requiring South Central to serve Ormet and (b) the effect upon the ratepayers and stockholders of Ohio Power Company ("OPCO") of requiring OPCO to serve Ormet's full requirements under OPCO's retail GS-4 rate schedule; Filed September 8, 2006.
160. In re: Mystic Development, LLC: Direct Testimony before the Federal Energy Regulatory Commission in Docket No. ER06-427-000, on behalf of Massachusetts Municipal Wholesale Electric Company, Reading Municipal Light Department Wellesley Municipal Light Plant and Concord Municipal Light Plant. The purpose of this testimony is to assess whether a cost-of-service ("COS"), Reliability Must-Run ("RMR") Agreement is needed in order to keep Mystic Development LLC's ("Mystic's") Units 8 and 9 available to provide reliability service and if, contrary to my testimony, the Commission finds that a COS RMR agreement is needed to keep Mystic Units 8 and 9 available to provide reliability service, the Commission would be required to determine a just and reasonable COS rate to be imposed on customers under the RMR agreement. I testify regarding adjustments that need to be made to Mystic's proposed COS rates in order to render them just and reasonable; Filed November 9, 2006.
161. In re: Hydroelectric Production Rates and Rate Modification Plan-2007 and 2008 Rate Years: Direct Testimony and Supporting Exhibits before the New York Power Authority, on behalf of the New York Association of Public Power. The purpose of this testimony is to address the understatement of capacity at the Niagara and St. Lawrence Projects of the New York Power Authority ("NYPA") and how that understatement of capacity improperly reduces the amount of capacity made available to preference customers of the Niagara Project and improperly increases the rates applicable to capacity sold to those customers; Filed April 9, 2007.

162. In re: ISO New England Inc.: Affidavit before the Federal Energy Regulatory Commission in Docket No. ER08-190-000, on behalf of Massachusetts Municipal Wholesale Electric Company ("MMWEC"). The purpose of this testimony is to review the engineering analysis performed by ISO New England Inc. in support of its determination that MMWEC's Phase II Stony Brook Unit is not qualified to participate in the first Forward Capacity Market auction, scheduled to be held in February 2008; Filed November 21, 2007.
163. In re: Columbus Southern Power Company and Ohio Power Company: Affidavit before the Public Utilities Commission of Ohio in Case Nos. 07-1132-EL-UNC, 07-1191-EL-UNC, 07-1278-EL-UNC, and 07-1156-EL-UNC, on behalf of Ormet Primary Aluminum Company. The purpose of this affidavit is in the matter of the Application of Columbus Southern Power Company and Ohio Power Company for approval of an additional generation service rate increase pursuant to their post-market development period rate stabilization plans and to update each company's transmission cost recovery rider; Filed February 28, 2008.
164. In re: Niagara Mohawk Power Corporation: Affidavit before the Federal Energy Regulatory Commission in Docket No. ER08-552-000, on behalf of the New York Association of Public Power and several of its members which include Green Island Power Authority, Jamestown Board of Public Utilities, City of Salamanca Board of Public Utilities, City of Sherrill Power & Light and Oneida-Madison Electric Cooperative, Inc. The purpose of this affidavit is review the filing by NMPC for Amendments to its Wholesale Transmission Service Charge for Point-to-Point Transmission service and Network Integration Transmission Service; Filed March 17, 2008.
165. In re: Braintree Electric Light Department, Hingham Municipal Lighting Plant, Hull Municipal Lighting Plant, Mansfield Municipal Electric Department, Middleborough Gas and Electric Department and Taunton Municipal Light Plant v. ISO New England Inc.: Direct Testimony and Exhibits before the Federal Energy Regulatory Commission in Docket No. EL08-48-000, on behalf of the individually municipally-owned power systems serving the Massachusetts communities of Hull, Mansfield, Middleborough, Taunton, Braintree and Hingham. The purpose of this testimony is to provide technical support for the MPS complaint; Filed March 28, 2008.
166. In re: Entergy Nuclear Operations Inc. and Entergy Nuclear Palisades, Inc. (Palisades Nuclear Plant), Entergy Nuclear Operations Inc. and Entergy Nuclear Fitzpatrick, Inc. (James A. Fitzpatrick Nuclear Power Plant), Entergy Nuclear Operations Inc. and Entergy Nuclear Generation Company (Pilgrim Nuclear Power Station), Entergy Nuclear Operations Inc. and Entergy Nuclear Vermont Yankee, Inc. (Vermont Yankee Nuclear Power Station), Entergy Nuclear Operations Inc., Entergy Nuclear Indian Point 2, LLC; and Entergy Nuclear Indian Point 3, LLC (Indian Point Nuclear Generating Units Nos. 1, 2, and 3), and Entergy Nuclear Operations Inc. and Entergy Nuclear Palisades, LLC. (Big Rock Point): Affidavit before the Nuclear Regulatory Commission in Docket Nos. 50-255-LT and 72-7-LT, 50-333-LT and 72-12-LT, 50-293-LT, 50-271-LT,

50-003-LT, 50-247-LT and 50-286-LT and 50-155-LT and 72-43-LT, on behalf of the Locals 369 and 590, Utility Workers Union of America, AFL-CIO. The purpose of this affidavit is to provide support for the April 15, 2008 Reply of Locals 369 and 590, Utility Workers Union of America, AFL-CIO to Answer of Energy Nuclear Operations, Inc. Opposing Petitions for Leave to Intervene, Request for Hearing, and Related Requests for Relief; Filed April 15, 2008.

167. In re: ISO New England, Inc.: Affidavit before the Federal Energy Regulatory Commission in Docket No. ER08-633-000, on behalf of The Connecticut Department of Public Utility Control. The purpose of this affidavit is to review the reliability analyses performed by the ISONE on the need to retain NRG's Norwalk Harbor Units 1 and 2 as listed Capacity Resources in the Forward Capacity Market for the 2010/2011 Capacity Year; Filed April 17, 2008.
168. In re: In the Matter of the Ontario Energy Board Act, 1998, S.O. 1998, C.15 (Sched. B); In the Matter of an Application by Hydro One Networks Inc. pursuant to section 92 of the Act, for an Order or Orders granting leave to construct a transmission reinforcement project between the Bruce Power Facility and Milton Switching Station, all in the Province of Ontario: Affidavit and Exhibits before the Ontario Energy Board in Docket No. EB-2007-0050, on behalf of the Saugeen Ojibway Nations. The purpose of this affidavit is to review the analyses performed by the Ontario Power Authority, Hydro One and the Independent Electric System Operator of Ontario in support of the application to construct a proposed Bruce-to-Milton double circuit 500 kV transmission line project; Filed April 18, 2008.
169. In re: Braintree Electric Light Department, Hingham Municipal Lighting Plant, Hull Municipal Lighting Plant, Mansfield Municipal Electric Department, Middleborough Gas and Electric Department and Taunton Municipal Light Plant v. ISO New England Inc.: Second Affidavit before the Federal Energy Regulatory Commission in Docket No. EL08-48-000, on behalf of the individually municipally-owned power systems serving the Massachusetts communities of Hull, Mansfield, Middleborough, Taunton, Braintree and Hingham. The purpose of this affidavit is to responds to the testimony of Messrs. Peter Brandien and Gregory Sullivan, which are part of the respective responses to the Complaint submitted by Independent System Operator New England, Inc and NSTAR Energy Company; Filed May 23, 2008.
170. In re: In the Matter of sections 25.30 and 25.31 of the Electricity Act and In the Matter of an Application by Ontario Power Authority for review and approval of its integrated power system plan and approval of its proposed procurement process. Affidavit and Exhibits before the Ontario Energy Board in Docket No. EB-2007-0707, on behalf of the Saugeen Ojibway Nations. The purpose of this affidavit is to review the Integrated Power System Plan ("IPSP") prepared by the Ontario Power Authority, and discuss that Plan as it relates to the concerns of the Saugeen Ojibway Nations; Filed August 1, 2008.

171. In re: Ashburnham Municipal Light Plant, Boylston Municipal Light Department, Chester Municipal Electric Light Department, Groton Electric Light, Holden Municipal Light Department, Holyoke Gas & Electric Department, Paxton Municipal Light Department, Princeton Municipal Light Department, Shrewsbury Electric Light and Cable, Sterling Municipal Light Department, Templeton Municipal Light, West Boylston Municipal Light Plant, Westfield Gas & Electric, Chicopee Municipal Lighting Plant, Hudson Light & Power Department, South Hadley Electric Light Department and the Massachusetts Municipal Wholesale Electric Company, Complainants, v. Berkshire Power Company, LLC, and ISO New England Inc., Respondents. Affidavit and Exhibits before the Federal Energy Regulatory Commission in Docket No. EL09-3, on behalf of Ashburnham Municipal Light Plant, et al. The purpose of this affidavit is to present the results of an analysis I conducted concerning whether Berkshire Power Company, LLC (“Berkshire”), the operator of the Massachusetts-based Berkshire Plant, is earning sufficient revenues in the market to cover its “facility costs.” The Berkshire Unit is currently operated pursuant to a Reliability Must Run (“RMR”) Agreement between Berkshire and ISO New England Inc; Filed October 8, 2008.
172. In re: Missouri River Energy Services and Midwest Independent Transmission System Operator, Inc. and Missouri River Energy Services and Western Minnesota Municipal Power Agency. Rebuttal Testimony before the Federal Energy Regulatory Commission in Docket No. ER08-370-008 and EL08-22-006, on behalf of Missouri River Energy Services and the Western Minnesota Municipal Power Agency. The main purpose of my testimony is to respond to portions of Mr. Alan Heintz’s Prefiled Answering Testimony, Cross Answering Testimony and Corrections to Testimony on behalf of Otter Tail Power Company (“OTP”) and of Mr. Lotfy N. Sidrak’s Prepared Answering Testimony on behalf of the Commission Staff; Filed October 9, 2009.
173. In re: Southwest Power Pool, Inc. Affidavit before the Federal Energy Regulatory Commission in Docket No. ER10-1069-000 on behalf of Nebraska Public Power District, Omaha Public Power District, City Utilities of Springfield, Missouri, Lincoln Electric System and The Empire District Electric Company. The purpose of this affidavit is respond to Southwest Power Pool, Inc.’s “Submission of Tariff Revisions to Modify Transmission Cost Allocation Methodology,” and, in particular, the Prepared Direct Testimony of Mr. Leslie E. Dillahunty; Filed May 17, 2010.
174. In re: Southwest Power Pool, Inc. Affidavit before the Federal Energy Regulatory Commission in Docket No. ER10-1269-000 on behalf of Nebraska Public Power District. The purpose of this affidavit is to respond to SPP’s Integrated Transmission Plan filing in Docket No. ER10-1269 on May 17, 2010 and the prepared testimony of Mr. Bruce Rew, which summarizes and purports to provide a justification for SPP’s modified transmission planning process, the Integrated Transmission Plan (“ITP”); Filed June 7, 2010.

EXHIBIT 1

