

Steven T. Naumann
Biographical Summary

Mr. Naumann's initial assignment with ComEd was as an Engineer. He was assigned to a six-month "Graduate Development Program" during which he rotated among five engineering assignments. In December 1975, Mr. Naumann was assigned to the Technical Studies Section of the System Planning Department, where his duties involved the performance of stability, dynamic, transient switching, and other detailed studies of the ComEd transmission system. In 1978, he was assigned to the office of the Vice President of Engineering.

Later in 1978, Mr. Naumann was temporarily assigned to the Mid-America Interconnected Network ("MAIN"), first as Assistant Systems Power Coordinator and later as Systems Power Coordinator. In those positions, he was responsible for interconnection and extreme disturbance studies performed by MAIN, as well as monitoring of interconnected operations. As Systems Power Coordinator, he supervised the MAIN Coordination Center, including all engineering and operations functions.

In 1980, Mr. Naumann returned to ComEd as assistant head of the Technical Studies Section. The section was then responsible for dynamic and transient analyses of the ComEd system and surrounding systems as well as reactive or voltage planning of the ComEd transmission system.

In late 1988, Mr. Naumann was assigned as Research Engineer on the staff of the Vice President of Engineering. In 1990, he returned to the System Planning Department, and was placed in charge of the Technical Studies Section. In 1991, he was promoted to Section Engineer, and the duties of the Technical Studies Section were expanded to encompass interconnection planning studies, including ComEd's participation in MAIN studies. In 1993, an

Interconnection Planning Section was formed in the System Planning Department, and Mr. Naumann was named Director of that section.

As Interconnection Planning Director, Mr. Naumann supervised the activities of the Interconnection Planning Section that included all interconnection studies, including the ComEd portion of MAIN studies, analysis of the transmission system in response to requests for bulk power sales, purchases and wheeling, and analysis of impacts of parallel flows on ComEd's transmission system.

As Interconnection Planning Director, and previously as Section Engineer, Mr. Naumann was assigned as the representative of the Northern Illinois subregion of MAIN to the MAIN Transmission Task Force Steering Committee. This Committee was responsible for directing MAIN regional and interregional studies, reviewing such studies, and recommending approval of such studies to the MAIN Engineering Committee. At various times, he has been Chairman of the MAIN Transmission Assessment Studies Group, responsible for conducting seasonal transmission assessment studies, Chairman of the MAIN Future Systems Studies Group, responsible for conducting future interchange and extreme disturbance studies, and a member of the MAIN-ECAR-TVA ("MET") Coordination and Data Exchange Committee, responsible for devising procedures for exchanging information on transfers and identifying actions to take during transmission system emergencies.

In 1995, Mr. Naumann was transferred to the Wholesale Marketing Department as Director of Market Analysis in charge of market analyses in support of ComEd's wholesale sales. While in that position, he also served as a representative on the Real-Time Information Networks "What" Group, which was a group of diverse industry participants that commented to the Federal Energy Regulatory Commission ("FERC" or "Commission") on what information

should be posted on the electronic information-sharing system that became known as the OASIS. He also testified at a FERC Technical Conference on Ancillary Services in 1995.

In January 1996, Mr. Naumann was named Director of T&D Regulatory Services. In that position, he directed the work of the T&D Regulatory Services Department. The Department's responsibilities included the preparation and filing of tariffs and service agreements with FERC, administering those tariffs, and providing cost justifications where required. As part of administering ComEd's Open Access Transmission Tariff ("OATT"), Mr. Naumann was responsible for determining the propriety of rate discounts for transmission services and interpreting the tariff. Mr. Naumann testified before FERC on independent system operator ("ISO") issues in April 1998 and June 1998. He also served as a member of the NERC Interconnected Operations Services Working Group that issued a report in March 1997 providing additional technical information on ancillary services and other services needed for reliability of the interconnected system. In addition, he was a member of the Commercial Practices Working Group ("CPWG") that provided an industry forum to discuss and resolve business practice issues related to the operation of bulk power electric systems in North America. Mr. Naumann later was the MAIN representative on the Interim Market Interface Committee, the CPWG's successor and the IOU representative on the Market Interface Committee.

In October 1999, Mr. Naumann was promoted to Vice President, Transmission Services. In that position, he had executive responsibility for transmission service provided by ComEd to third parties, including the interconnection of new generation to the ComEd transmission system, and had executive responsibilities for ISO and later regional transmission organization ("RTO") development.

In February 2003, Mr. Naumann assumed his present position as Vice President, Wholesale Market Development of Exelon Corporation. He has executive responsibilities for development of markets nationwide, and is one of a team of Exelon executives involved in development of RTO policy, including the integration of ComEd into the PJM Interconnection, L.L.C. ("PJM"), completed in May 2004. Mr. Naumann directs the development of Exelon policy on numerous market issues related to PJM, Midwest Independent Transmission System Operator, Inc. ("MISO"), and the Southwest Power Pool, and in other areas of the country. These issues include questions of capacity requirements, generation retirements, station power, ancillary services markets, reliability must run rules, reactive power compensation, transmission cost allocation and general market structure and development. Mr. Naumann previously served as Vice Chairman of the MAIN Board of Directors and was on the Interim Board of Directors of ReliabilityFirst Corporation. He is one of the representatives for the Investor-owned Utility Sector on the NERC Member Representative Committee and served for a number of years on the NERC Stakeholders Committee.

Testimony

Before the Federal Energy Regulatory Commission

Commonwealth Edison	ER93-777-000, ER95-1545-000, ER95-1539-000, and ER95-371-000
Ancillary Services	RM95-8 (Oct. 26, 1995)
IES Utilities (Alliant Merger)	EC96-13-000, ER96-1236-000, and ER96-2560-000
Midwest ISO	ER98-1438-000, EC98-24-000
ISO Policy	PL98-5-000 (Apr. 16, 1998) PL98-5-004 (June 4, 1998)
AEP-CSW	EC98-40-000, ER98-2770-000 and ER98-2786-000 (withdrawn)
Commonwealth Edison	ER01-2992-000
Unicom-PECO Merger	EC00-26-000
SMD	RM01-12
	RTO Markets and Design: Optional RTO Markets (Oct. 15, 2001)
	Transmission Rights and Financial Rights (Feb. 5, 2002)
AEP Integration Into PJM	ER03-262-009
Joint Boards on Security	AD05-13-000 (PJM/MISO)
Constrained Economic Dispatch	
PJM Rate Design	EL05-121
SECA Case	EL02-111 et. al
PJM RPM Technical Conference	EL05-148
OATT Reform Technical Conference	RM05-17, RM05-25

Before the Illinois Commerce Commission

Docket No. 95-0314/0338
Docket Nos. 98-0147/0148 (State IDC/Standards of Conduct)
Docket No. 98-0649 (ARES Certification)
Docket No. 98-0680 (ComEd Unbundled Tariff Provisions)
Docket No. 98-0745 (ComEd Elwood CCPN)
Docket No. 98-0818 (MISO)
Docket No. 98-0894 (ComEd Transmission/Distribution Refunctionalization)
Docket No. 99-0117 (ComEd DST)
Docket Nos. 99-0124/0125/0132/0133 (Alliant DST)
Docket No. 00-0259 (ComEd MVI)
Docket No. 01-0423 (ComEd DST)
Docket No. 05-0159 (ComEd Procurement)
Electric Policy Committee (FERC SMD) Oct. 15, 2002

Public Service Commission of Wisconsin

Docket Nos. 6630-UM-100, 4420-UM-101 (Primergy Merger)

McHenry Co. Zoning Board of Appeals (Special Use Permit re: Reliant IPP)

Publications and Presentations

Naumann, S.T., *Active Markets and Reactive Policies: Requirements Rules, Incentives and Business Models for Reactive Power*, Presented at the Harvard Electricity Policy Group (December 2, 2004). Available at

<http://www.ksg.harvard.edu/hepg/Papers/Naumann.act.mkts.1204.pdf>

Naumann, S.T., *Commercial Incentives and Reliability Rules*, Presented at the Harvard Electricity Policy Group (June 3, 2004). Available at

<http://www.ksg.harvard.edu/hepg/Papers/Naumann.Commercial.Incentives.060304.pdf>

Naumann, S.T., *Too Little Money*, Presented at the Harvard Electricity Policy Group (May 21, 2003). Available at

http://www.ksg.harvard.edu/hepg/Papers/Naumann_too.little.money_5-21-03.pdf

Wang, C., White, R.L., Illian, H.F., and Naumann, S.T., *Emergency Redispatch to Relieve Other Control Area Constraints*, 60 Proceedings of the American Power Conference (1998).

Naumann, S.T., *The Impact of FERC Order 888 and 889 on Transmission Providers*, Presented at the 1997 American Power Conference.

Paserba, Larsen, Lauby, Leonard, Naumann, Millere and Sener, *Feasibility Study for A Distribution-Level STATCON*, IEEE FACTS Applications 96-TP-116 8-22 (1996).

McCoy, P.D., Naumann, S.T., Terhune, H.L., *Curtailments and Priorities Under Open Access*, Presented at EPRI Conference The Future of Power Delivery: The 4Rs: Research, Reliability, Reputation and Regional Transmission Groups (April 10, 1996).

Shanahan, P.J., and Naumann, S.T., *Evaluation of Simultaneous Transfer Capabilities*, 57 Proceedings of the American Power Conference 1463 (1995).

Naumann, S.T., *Assessment of Transfer Capability*, 56 Proceedings of the American Power Conference 289 (1994).

Paserba, Leonard, Miller, Naumann, Lauby and Sener, *Coordination Of A Distribution Level Continuously Controlled Compensation Device With Existing Substation Equipment For Long Term Var Management*, 9 IEEE Transactions On Power Delivery 1034 (April 1994).

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Carlson, McGarrah, Naumann and Shah, *Voltage Stability Analysis As Part of An Interchange Capability Study*, 55 Proceedings of the American Power Conference 1196 (1993).

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Pinnello and Naumann, *Review of an Underfrequency Protection Scheme Using a Large Transient Stability Program*, 45 Proceedings of the American Power Conference 599 (1983).

Van Ness, Brasch, Landgren and Naumann, *Analytical Investigation of Dynamic Instability at Powerton Station*, 99 IEEE Transactions on Power Apparatus & Systems 1386 (July/August 1980).

Naumann, Landgren, Jovanovich, Larson and Swann, *Underexcited Operation and Stability Tests at the Powerton Station*, 41 Proceedings of the American Power Conference (1979).