

Bryan D. Morlock, P.E.

- 2009-Current Planning Consultant, Otter Tail Power Company. Provide advisory support for the Resource Planning Dept. and work with non-utility generators on their project proposals and PPAs with the Company. Provide technical expertise and assist in regulatory filings in the regulatory and legal areas.
- 1996-2008 Director of Resource Planning, Otter Tail Power Company. Department supervisor of the resource planning, load forecasting (1996-2003), and wholesale marketing functions (1997). Special tasks include developing business plans for a new wholesale marketing activity and an independent generating company (GENCO).
- 1990-1996 Manager of Resource Planning, Otter Tail Power Company. Department supervisor of four staff personnel involved in developing integrated resource plans, maintaining and operating probabilistic planning models and financial models, obtaining regulatory approval of resource plans, recommending courses of action regarding new resources to upper management, meeting all federal, state, and power pool data reporting related to resources, negotiation of long-term capacity transactions, conducting supply-side research including wind and solar monitoring, analysis of supply-side efficiency improvements, development of testimony for regulatory proceedings. Involvement in fuel and freight contract analysis, financial planning and analysis, and hydro licensing.
- 1986-1990 Supervisor of Resource Planning, Otter Tail Power Company. Supervised a staff of two in the analysis of supply-side resources, financial analysis, long-term probabilistic production cost modeling, long-term capacity transactions, fuel and freight contracts, and cost-effectiveness of demand-side management programs.
- 1982-1986 Supervisor of Energy Administration, Otter Tail Power Company. Supervised a staff of three in the System Operations Department involved in short-term capacity and energy transactions, generation commitment and scheduling, deterministic production cost modeling, daily load forecasting, fuel budgeting, control area energy accounting, and operation of the load management system.
- 1979-1982 Division Engineer, Otter Tail Power Company. Supervised five 2 and 3 man area line crews, with total responsibility for the planning, design, budgeting, construction, and operation of company sub-transmission and distribution facilities 69 kV and below in an area covering approximately 7500 square miles.
- 1978-1979 Staff Engineer, Otter Tail Power Company. Worked in support of division engineers in the planning, design, and construction of sub-transmission and distribution facilities 69 kV and below. Conducted motor start, voltage drop, and voltage conversion studies to determine economic solutions to service problems.
- Education Graduated cum laude in 1978 from the University of North Dakota with a Bachelor of Science in Electrical Engineering (BSEE) and a Bachelor of Science in Business Administration (BSBA). Membership in Eta Kappa Nu, an electrical engineering honor society, and Tau Beta Pi, an engineering honor society.

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Military U.S. Air Force, 1971-1975. Held a secret security clearance and worked as a nuclear weapons specialist with responsibilities for the inspection, maintenance, and repair of nuclear warheads. The last 2 1/2 years worked as crew chief of a crew of four. Honorable discharge as staff sergeant (E5).

Certification Registered professional engineer in Minnesota since 1982.

Professional Activities University of North Dakota Electrical Engineering Advisory Council since 1988.
University of North Dakota Alumni Leadership Council since 1990.
National Society of Professional Engineers, including service as a state level director.
Institute of Electrical and Electronics Engineers, including serving as section chair for two years.

Industry Activities Company Alternate Representative to MAPP Engineering Committee, 1987-1993
Company Representative to MAPP Engineering Committee, 1994-1996
Member of MAPP Reserve Requirements Task Force, 1992-1992
Member of MAPP Accreditation Subcommittee, 1993-2005
Chairman of MAPP Accreditation Subcommittee, 1994-2001
Member of MAPP Engineering Steering Committee, 1994-1996
Company Representative to Power & Energy Market Committee, 1997
Company Alternate Representative to MAPP Executive Committee, 1996-2005
Company Alternate Representative to MAPP Reliability Committee, 1996-2005
Member of MAPP Generation Reserves Subcommittee, 1998-2004
Member of MISO Supply Adequacy Working Group, 2005-2008
Member of Midwest Planning Reserve Sharing Group, 2008-2009

Training and Seminars Engineering Economy, Iowa State University, January 1980.
System Operators Course, Iowa State University, February 1983.
EPRI Unit Commitment Software Seminar, November 1983.
Economic Power System Operation Course, Arizona State Univ., March 1984.
EPRI Production Costing and Unit Commitment Seminar, September 1984.
Interchange Transactions Seminar, December 1984.
PTI Power System Scheduling and Operations Course, October 1985.
SAGE Production Costing Seminar, February 1986.
FIN Financial Model Training, May 1986.
Load Management Strategy Testing Model, October 1986.
Coal Transportation Seminar, November 1986.
Load Management Strategy Testing Model, March 1987.
APPA Engineering & Operations Workshop, March 1987 (speaker).
Load Management Strategy Testing Model, March 1988.
Demand-side Management Conference, May 1989.
Load Management Strategy Testing Model, May 1989 (speaker).
Load Management Strategy Testing Model, September 1989.
Coal Market Strategies Conference, October 1989.
Synergy Resources Integrated Resource Planning Course, November 1989.
FIN Financial Software Training Course, March 1990.
End-Use Load Information Seminar, July 1990.
NARUC Least Cost Planning Seminar, April 1991.
MAPP Reliability Seminar, August 1991.
Geothermal Resources Council Seminar, October 1991.

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ND PSC Clean Air Act Amendments Workshop, July 1992.
 Combustion Turbine Seminar, September 1992.
 Load Management Strategy Testing Model (IRP-Manager), Oct. 1992 (speaker).
 MN Department of Public Service Energy Forum, October 1992 (speaker).
 Utility Resource Planning Conference, March 1993 (speaker).
 ND PSC Workshop on 1992 Energy Policy Act, May 1993 (speaker).
 EPRI Coal Gasification Seminar, September 1993.
 IRP-Manager, October 1993 (speaker).
 EPRI Wind Users Support Group Seminar, January 1994 (speaker).
 Joint Regulatory Assistance Workshop, May 1994.
 EEI Environmental Externalities Conference, June 1994.
 ND PSC Workshop on Integrated Resource Planning, June 1994.
 Environmental Externalities Conference, November 1994.
 Risk Management, Futures, Options, & Hedging Seminar, March 1995.
 North Dakota State University Wind Symposium, April 1995 (speaker).
 SD PUC Workshop on Competition and IRP, May 1995.
 EEI Leader/Manager Training, October 15-27, 1995.
 Divesting Generating Assets Seminar, October 1996.
 Risk Management Institute Seminar, November 1996.
 EEI Transmission SAC Meeting, September 1997.
 EEI Transmission SAC Meeting, March 1998.
 PowerGen 1998, December 1998
 MN PUC Technical Conference on Reliability, June 1999
 North Central Electric Association Fuel Cell Conference, March 2000
 NERC/MAPP Reliability Compliance Standards, February 2001
 Energy and Environmental Research Center – Lignite Testing in an Advanced High
 Temperature, High Pressure Transport Reactor Gasifier Project, 2001-2002, project
 sponsor and participant
 MAPP Fall Utility Conference, August 2002
 MAPP Executive Committee Conference, December 2002
 North Central Electric Association Energy Supply and Delivery Workshop, March
 2003
 Wind Energy and Rural Development in North Dakota IV, March 2003
 Univ. of MN-Morris Conference on Renewables, July 2003 (speaker)
 MAPP Fall Utility Conference, August 2003
 MAPP Regional Conference, Transmission, Markets, and Reliability, October 2003
 SD Windpower Conference, October 2003
 EERC Biomass Energy II Heat and Power Workshop, November 2003
 Wind Energy and Rural Development in North Dakota V, February 2004
 Midwest Tradable Renewable Credits Workshop, February 2004
 MAPP Technical Conference on MISO Seams Issues, March 2004
 ND Workshop on Small Power Producer Tariffs, April 2004
 Mid-Continent Energy Marketers Association Fall Conference, September 2004
 Renewable Energy in the Midwest, February 2005
 Energy Security Summit, March 2005
 Powering the Northland Bio-Energy Conference, July 2005 (speaker)
 LaMoure County (ND) Wind Fair, August 2005
 Mid-Continent Energy Marketers Association Fall Conference, September 2005
 Strategist Training Seminar-Part I, August 2006
 Strategist Training Seminar-Part II, August 2006

Mid-Continent Area Marketers Association, May 2007
 UMCEE-Biomass Energy Seminar, August 2007
 MN State University Resource Planning Class, October 2007 (instructor)
 MISO Loss of Load Expectation Workshop, April 2008
 MN State University Resource Planning Class, June 2008 (instructor)
 EERC Biomass Conference, July 2008
 UMCEE Electrical Energy Storage Seminar, July 2008
 Mid-Continent Energy Marketers Association Fall Conference, August 2008
 MISO Interconnection Queue Workshop, September 2008
 MN State University Resource Planning Class, October 2008 (instructor)
 MN State University Resource Planning Class, February 2009 (instructor)
 UMCEE Smart Grid Seminar, August 2009
 MN State University Resource Planning Class, October 2009 (instructor)
 Wind Generation Presentation to UND Law School, March 2010 (Presenter)
 Biomass' 10 Renewable Power, Fuels, and Chemicals Workshop, July 2010
 NRRI Transmission: The Fundamentals, the Frontier, and Everything in Between,
 August 2010

Regulatory E017/RP-92-484, 1993-2007 IRP in Minnesota
Proceedings E999/CI-93-583, Environmental Externalities and Socioeconomics Docket in
 Minnesota
 E017/RP-94-443, 1995-2009 IRP in Minnesota
 E017/M-95-307, Commission Certification of Eligibility for Conservation and
 Renewable Energy Reserve SO₂ Allowances in Minnesota
 E017/RP-96-660, 1997-2011 IRP in Minnesota
 E017/M-96-903, Commission Certification of Eligibility for Conservation and
 Renewable Energy Reserve SO₂ Allowances in Minnesota
 E017/RP-99-909, 2000-2016 IRP in Minnesota
 E017/M-00-994, Commission Certification of Eligibility for Conservation and
 Renewable Energy Reserve SO₂ Allowances in Minnesota
 E999/CI-00-1636, Environmental Externalities and Socioeconomics Docket in
 Minnesota
 E017/RP-02-1168, 2003-2017 IRP in Minnesota
 E999/CI-03-869, Protocols for the Trading of RECs Through M-RETS in Minnesota
 E999/CI-04-1616, Protocols for the Trading of RECs Through M-RETS in Minnesota
 E017/RP-05-968, 2006-2020 IRP in Minnesota
 E017/CN-05-619, Big Stone II Project Certificate of Need in Minnesota
 EL05-022, Big Stone II Project Siting in South Dakota
 PU-06-481, Big Stone II Project Advance Determination of Prudence in North Dakota
 E017/GR-07-1178, Otter Tail General Rate Case in Minnesota
 EL09-030, Otter Tail General Rate Case in South Dakota
 PU-08-862, Otter Tail General Rate Case in North Dakota
 E017/M-08-119, Renewable Energy Cost Recovery Rider in Minnesota
 E999/M-08-1163, Compliance and Standards for Renewable Energy
 Objective/Renewable Energy Standard in Minnesota
 E017/CI-09-753, Standard Otter Tail Power PPA for Wind Resources Under 5 MW in
 Minnesota
 E017/M-09-883, Renewable Energy Cost Recovery Rider in Minnesota
 PU-10-18, Renewable Energy Cost Recovery Rider in North Dakota
 E017/GR-10-239, Otter Tail General Rate Case in Minnesota

E017/M-10-1013, District 45 Dairy, LLP PPA in Minnesota
E017/M-10-1061, Transmission Cost Recovery Tariff in Minnesota
EL10-011, Otter Tail General Rate Case in South Dakota
EL10-015, Transmission Cost Recovery Tariff in South Dakota