

Narasimham Vempati, Ph.D.

Project Role: Engineering, Analytics, Testing, Technology to Market

Affiliated Organization: Nexant

Job Title: Senior Vice President, Grid Management

Relevant Job Experience:

Narsi Vempati leads the Grid Management software group at Nexant. He manages all aspects of the business operations, including logistics, strategic direction for the team, marketing/sales, budgets, supervising staff members, and managing customer relationships. His team develops, implements, and supports Nexant's Grid360 and iHedge suite of software products.

Dr. Vempati has over 31 years of experience in the electric power industry, including research and development, product testing, customer training, and support. He designs and develops analytical techniques and software related to sparse matrix techniques, network topology analysis, generalized state-status estimation, and fault analysis. He has led software development teams in the disciplines of fault-level analysis, financial transmission rights (FTR) calculation engines, and comprehensive web-based systems designed to support FTR markets.

Dr. Vempati's areas of expertise include Software Solution Oversight and Management: Leading the team that develops and supports the implementation of Nexant's FTR software/systems at the Midcontinent ISO, California ISO, ERCOT, SPP, New York ISO, and New Zealand and Software Design and Delivery Leadership: Directing the requirements, design, development, testing, delivery, and implementation of the comprehensive web-based iHedge FTR Market system and developer of Nexant's Generalized State Estimator.

Significant Accomplishments:

Midcontinent Independent System Operator (ISO) – iHedge FTR Market System (2002–Present)

ERCOT – iHedge FTR Market System (2006–Present)

Southwest Power Pool (SPP) – iHedge FTR Market System (2010–Present)

Dr. Vempati oversaw the review of client requirements, along with the development, testing, and delivery of a web-based iHedge FTR Market system for various ISOs. He guided new ideas, inclusions, and initiatives. Narsi also acted as the primary point of contact and offered full support to the ISOs.

Energy Market Services (EMS) – New Zealand (2011–Present): Dr. Vempati developed, tested, and delivered the iHedge FTR Market system to meet the requirements provided by EMS. He and his team explored and offered support on new initiatives, operations, and more to facilitate the best experience.

Education:

Ph.D., Electric Power Engineering, University of Texas at Arlington, TX

M.S., Electrical Engineering, University of Texas at Arlington, TX

B.S., Electrical Engineering, Indian Institute of Technology, Madras, India

Professional Affiliations and Committee Memberships:

- Institute of Electrical and Electronics Engineers (IEEE), Fellow
- Co-recipient of the 2005 IEEE Power Engineering Society - Power System Operations Committee Prize Paper Award for the paper entitled The Rights to Fight Price Volatility
- Co-recipient of the 1993 W.R.G. Baker Prize for his work on orthogonal transformations in state estimation