Arshad Mansoor
Senior Vice President,
Research and Development

From "Big Data" to "Big Picture" Arshad Mansoor directs the changing scope and breadth of EPRI's research, development, and demonstration programs

Arshad Mansoor is senior vice president of research and development for the Electric Power Research Institute (EPRI), responsible for EPRI's portfolio of R&D and demonstration programs, spanning all sources of generation, power delivery and utilization, and the environment.

Leadership

Mansoor's thought leadership drives a broad convergence of energy sector trends, electricity sector strategy, technological development, and the integrated deployment of systems and technologies.

Beginning in 2007, he directed EPRI's Energy Efficiency Initiative to facilitate smarter power delivery and end-use. Notable outcomes included the significant improvement in efficiency of the power supply units used by virtually all digital technology.

Today he is guiding and shaping EPRI's broader Efficient Electrification Initiative, which is examining the potential for economywide electrification to reduce overall energy demand and emissions while improving economic efficiency and enhancing customer satisfaction.

This initiative is closely linked to EPRI's Integrated Energy Network, leading to a more interconnected and integrated energy system and approach to energy services and natural resources. This represents a fundamental shift from the planning, operation, and regulation of these systems today.

In 2012 Mansoor launched EPRI's Integrated Grid initiative, charting a course for the electricity sector to integrate distributed resources such as rooftop solar and onsite energy storage with utilities' central generation, transmission, and distribution systems. Emphasis continues on creating a dynamic, resilient, responsive, and reliable power system even as new technologies, services, and business models serve customers' changing needs.

Mansoor's leadership includes the global expansion of EPRI's nuclear generation R&D portfolio, which is instrumental in extending and enhancing the operation of the world's nuclear generation fleet and in the development and deployment of advanced nuclear technologies. EPRI's work with fossil generation is expanding to address the flexible operation of

fossil-fueled power generation and the growing deployment of large-scale renewable power generation.

He is leading broad discussion and initiatives to examine the application of machine learning and artificial intelligence—coupled with large electricity sector databases—in advancing reliable and resilient power systems.

Mansoor's approach to research emphasizes two points. In a time of rapid technological change researchers, industry leaders, regulators, and stakeholders must think and act decisively. Traditional operating and technological boundaries are still useful and necessary in many contexts, but increasingly must be considered in non-traditional and integrated ways to keep pace with society's needs and expectations.

Professional background

Previously Mansoor served as vice president of EPRI's Power Delivery and Utilization sector where he led research, development, demonstration, and application of transmission and distribution and energy utilization technologies. He was vice president then CEO of the former EPRI subsidary, EPRI Solutions, and vice president and director of engineering of the EPRI Power Electronics Application Center.

Mansoor holds five U.S. patents in power electronics and distributed energy resources. He is a senior member of the IEEE and served as vice president of the U.S. National Committee of CIGRE, the international council on large electric systems, and as a member of the board for the Energy Production and Infrastructure Center (EPIC) at the University of North Carolina, Charlotte. He has published numerous papers in journals and conference proceedings and has given talks and participated in panels at leading technical forums worldwide.

Education

He earned a Bachelor of Science in electrical engineering from the Bangladesh University of Engineering and Technology. Mansoor earned his Master of Science (1992) and doctorate (1994) in electrical engineering focusing on power systems engineering from the University of Texas in Austin. He completed the MIT Reactor Technology Course and Harvard Business School Advanced Management Program (AMP).