Engineering Safety: Completing Work Safely and Successfully

Data from the Institute of Nuclear Power Operations (INPO) indicates more than two-thirds of human error-driven events are attributable to organizations and systems. By focusing on Human Performance Improvement, organizations can use Human and Organizational Performance (HOP) to address organizational and system issues, including addressing systems and processes in a highly dynamic and hazardous work environment. HOP implementation can help improve safety, security, and productivity and create a healthy work culture, promoting management and worker mutual respect and trust.

HOP focuses on improvements to make it easier and simpler for workers to be successful. HOP shifts the emphasis from individual human error to organizational learning and what needs to be done to complete work safely and successfully. There is a shift from focusing on what to fix towards determining what work steps must go as planned to successfully complete work safety. Workers aren't looked upon as a weak link, but as the essential cog that makes everything work. A key management role is to empower workers, understanding what knowledge, experience and training workers have.

Bio

Howard Nekimken has been at Los Alamos National Lab (LANL) for 32 years. He received his Ph.D. in Analytical Chemistry at the University of Illinois in 1986. He came to LANL as a post-doctoral fellow and then continued as a research staff member originally in Analytical Chemistry, but then transitioned to Control Engineering. Howard then served as Team Leader for a Control and Instrumentation Team and was a Deputy Group Leader for Waste Management and Environmental Compliance. He now provides operations support for the Los Alamos Science Center (LANSCE) accelerator facility and the Experimental Physical Sciences Directorate. Howard has also been involved with Human Performance Improvement (HPI) implementation for over 15 years and in particular has focused on HPI implementation over the past two years.