UCLA ENGINEERING
B. John Garrick Institute for the Risk Sciences

Seminar Series: Spring 24'

Perspectives Risk-Informed Regulatory Decision-Making

Thursday, May 09, 2024, 12-1 PM PT
Location: Engineering 6 BLDG, Room 580B
Zoom: https://ucla.zoom.us/j/94778587870

Abstract

The U.S. Nuclear Regulatory Commission (NRC) is responsible for licensing and regulating the Nation's civilian use of radioactive materials. Since its inception in 1975, the NRC has applied probabilistic risk assessment (PRA) methods and tools to support risk-informed decision-making for licensing; inspection and oversight; regulatory analysis; and the resolution of safety issues. This seminar will provide a historical perspective on the NRC's development of PRA tools and policy and describe how the NRC uses risk information to support its mission to protect public health and safety. Topics covered will include motivations for performing early risk studies, Commission policy related to the use of PRA, the NRC's risk-informed decision-making framework, examples how risk information is used in licensing and oversight activities, and current research activities.

Kevin Coyne, PhD

Kevin Coyne is a Senior Level Advisor for Probabilistic Risk Assessment in the U.S. Nuclear Regulatory Commission's (NRC) Office of Nuclear Regulatory Research. He has over 35 years of nuclear power experience including 6 years as test engineer at Norfolk Naval Shipyard and 29 years at the NRC. Dr. Coyne has worked in a variety of areas within the NRC's nuclear reactor safety programs, including as an on-site resident inspector, reliability and risk analyst, and as a manager overseeing the development and application of Probabilistic Risk Assessment tools and methods for new reactor licensing, inspection oversight, and regulatory rulemaking. He has a doctorate in reliability engineering from the University of Maryland and is a licensed Professional Engineer in the Commonwealth of Virginia.