

Risk and Safety Management

Research and development to perform detailed risk analyses necessary to enhance the safe and economic operation of existing and future nuclear power plants.

The Risk and Safety Management (RSM) program conducts research into probabilistic and deterministic safety assessments to provide information that enables nuclear plant owners to make technically sound decisions about plant design and operating and maintenance practices. These decisions contribute to safer and more cost-effective plant operation.

This research is being used to inform a variety of risk-informed operating and engineering decisions at nuclear plants, including online maintenance, surveillance interval extensions, flexible allowed outage times, risk-informed engineering programs, and risk-informed fire, seismic and other external hazards evaluations.

RSM research topics include:



PRA/PSA METHODS



APPLICATION AND USE OF RISK INFORMATION



FIRE RISK ANALYSIS



SEISMIC RISK ANALYSIS



OTHER EXTERNAL HAZARDS



HUMAN RELIABILITY ANALYSIS



SEVERE ACCIDENTS AND THERMAL HYDRAULICS

Benefits of Membership

INPUT



Members can recommend research projects as well as influence the selection and prioritization of projects. Collaborations and experience sharing from nuclear plants around the world in a variety of risk-informed and regulatory frameworks to highlight good practices and insights for all members.

ACCESS



RSM members gain access to the latest tools and methods regarding the implementation of risk informed techniques. Participation in the program provides guidance in risk-informed decision-making to reduce overburden in deterministic requirements. For example, the implementation of risk-informed treatment of structures, systems, and components.

ENGAGEMENT



The program collaborates with and collects experience from nuclear plants around the world in a variety of risk-informed and regulatory frameworks to highlight good practices and insights for all members.

Numerous users groups are available for collaboration, sharing operating experience and gaining useful insights in adopting risk informed initiatives.

AWARENESS



Technical reports and updates define the latest PRA methods in addition to the technical bases and guidance necessary to correctly implement them.

Beta tests and final release versions of EPRI software introduce new features and user enhancements.

COST: Membership is \$375,000 per year, and a requires 3-year commitment. Membership is also available for vendors, please contact for pricing.

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