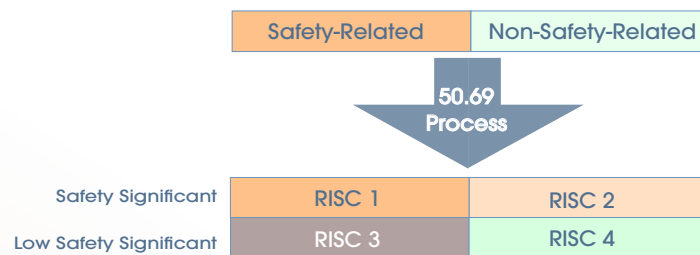




Approach for the Risk Informed Categorization and Treatment of Structures, Systems and Components for Nuclear Power Reactors (10 CFR 50.69)

10 CFR 50.69, Risk Informed Categorization and Treatment of SSCs, provides the ability to focus resources on critical components thereby reducing operational and regulatory burdens making plants more cost-effective while providing a direct path towards the goals of the nuclear promise.



Engineering Planning and Management (EPM) has the experience in risk-informed and deterministic analyses necessary to achieve the most cost effective implementation of 10 CFR 50.69 in the operating environment. EPM's highly experienced Systems Analysis & PRA groups has direct plant experience and is a leader in the application of risk-informed solutions. EPM engineers have extensive experience in plant design analysis, operations, maintenance, safety classification & system categorization, procurement, licensing, etc., all areas necessary to see the greatest benefit from the application of 10 CFR 50.69.

Approach

EPM engineers will use its proven experience in the following areas:

1. Assisting in the development of the Licensing Amendment Request required to implement the 10 CFR 50.69 approach.
2. Evaluating and enhancing the existing plant PRA, if necessary, to ensure it supports a 10 CFR 50.69 approach.
3. Prioritizing the systems and components that will provide the maximum economic benefit under the 10 CFR 50.69 process.
4. Performing the PRA analysis and providing the risk insights supporting the system and component selection process.
5. Preparing the Integrated Decision-Making Panel (IDP) report for a system and assist/facilitate in the IDP meeting.
6. Assisting in the implementation of a 10 CFR 50.69 program in the area of alternate treatments as applied to maintenance, procurement, warehousing, etc. as well as 10 CFR 50.69 program maintenance.

RISCAT 50.69 Risk Categorization Tool

RISCAT is a software application, compatible with EPM's Genesis Solution Suite®, that is designed to efficiently categorize structures, systems, and components (SSCs) in order to maximize the benefits in applying 10 CFR 50.69. The RISCAT software collects the information necessary to perform a 50.69 analysis and processes that information in a manner to provide a clear and auditable path resulting in the categorization of an SSC to a RISC category.

The screenshot displays the RISCAT software interface with several key components:

- Warnings Panel:** Lists items not approved, such as "Equipment M2.25-HBD[B]-137 is not APPROVED." and "PASSIVE Function 2330A.P01.01 is not APPROVED."
- Navigation Tree:** A sidebar menu on the right includes categories like "Favorites", "Ad Hoc Wizard", "Design Change Package", "Electrical", "Plant", "Open Items", "RISCAT", "Plant PRA Types", "PRA Models", "Systems", "Functions", "Equipment", "Passive Segments", "SSCs", "Critical Attributes", "PRA Inputs", "CDF and LERF", and "Administration".
- Main Data Tables:**
 - RISCAT SSCs:** A table listing SSC IDs, Systems, Components, Component Assemblies, RISCAT Status, and CAT Final RISC.
 - RISCAT Functions:** A table listing Function IDs, Systems, Major Functions, Minor Functions, Descriptions, RISCAT Status, and Final Safety Significance.
 - SSC Data:** A detailed view for SSC ID 2330A-M22-RB-13.1A, showing component assembly, reference drawings, remarks, and various attributes.
 - Risk Considerations:** A section detailing responses for various scenarios (Q1 INIT, Q2 RCPB, Q3 RBFB, Q4 EORA).
 - Summary Table:** A table at the bottom with columns for System, Component, PRA Type, and Importance RAW, listing multiple SSC entries.

Experience

EPM's experience in the application of risk-informed solutions and deterministic analyses will provide the utility with the most cost effective application of 10 CFR 50.69.

EPM is an industry leader in the development and maintenance of risk-informed engineering programs providing risk-informed solutions have been provided for the following plants:

Beaver Valley Nuclear Generating Station 1 & 2	Fort Calhoun Nuclear Generating Station
Browns Ferry Nuclear Plant 1, 2, & 3	Joseph Farley Nuclear Generating Plant 1 & 2
Brunswick Steam Electric Plant	Shearon Harris Nuclear Power Plant 1
Callaway Nuclear Generating Station	McGuire Nuclear Ststion 1 & 2
Calvert Cliffs Nuclear Power Plant 1 & 2	Millstone Nuclear Power Plant 3
Comanche Peak Nuclear Power Plant	Point Beach Nuclear Plant 1 & 2
Davis-Besse Nuclear Power Station	H.B. Robinson Nuclear Generating Station
DC Cook Nuclear Generating Station 1 & 2	Sequoyah Nuclear Plant 1 & 2
Cooper Nuclear Station	St. Lucie Nuclear Power Plant 1
Diablo Canyon Power Plant 1 & 2	Westinghouse AP1000
Davis-Besse Nuclear Power Station	Wolf Creek Generating Station

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