

TECHNICAL EVALUATION REPORT

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NRC REVIEW PROCESS

- Conducted an independent review of Honeywell's proposed modifications for seismic and tornado missile events
- Utilized a team of technical staff, as well as contractors
- Followed a standard review plan, NUREG-1520, "Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility"



NRC REVIEW PROCESS

- Issued requests for additional information and conducted site visits, conference calls, and meetings
- Documented review in the Technical Evaluation Report



NRC'S TECHNICAL EVALUATION REPORT (TER)

Conducted reviews in the following areas:

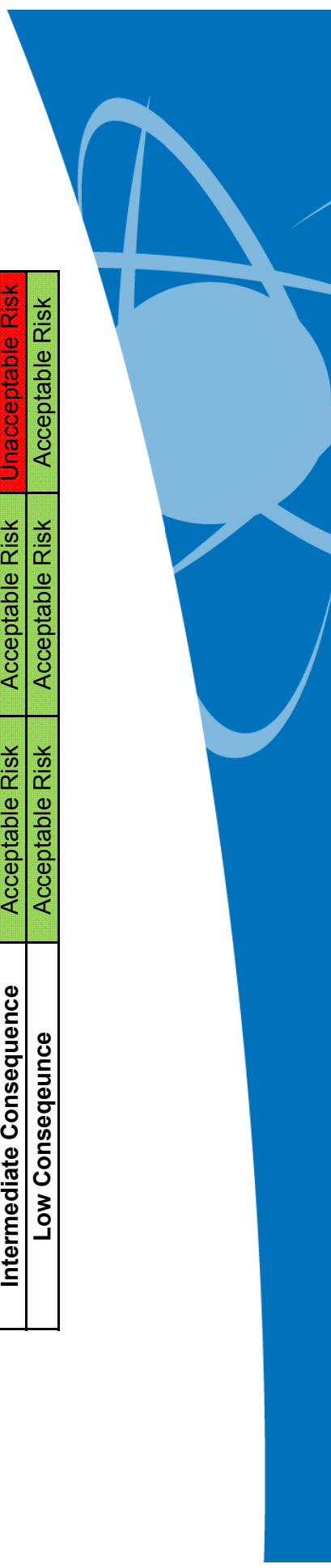
- Risk-informed safety basis
- Seismic hazards
- Design of structures, systems and components
- Chemical consequences
- Emergency plan



EVALUATION OF RISK- INFORMED SAFETY BASIS

- Integrated safety analysis
- Evaluate risk for different scenarios
- Risk matrix
 - Define likelihood
 - Define consequences

Values Severity of Consequences	Likelihood of Occurrence		
	Highly Unlikely	Unlikely	Not Unlikely
High Consequence	Acceptable Risk	Unacceptable Risk	Unacceptable Risk
Intermediate Consequence	Acceptable Risk	Acceptable Risk	Unacceptable Risk
Low Consequence	Acceptable Risk	Acceptable Risk	Acceptable Risk



EVALUATION OF RISK- INFORMED SAFETY BASIS

- For seismic and tornado missile events
 - Honeywell's definitions of likelihood and consequence severity are appropriate for demonstrating risk level
 - Risk levels for modifications are acceptably low



EVALUATION OF DESIGN OF STRUCTURES, SYSTEMS AND COMPONENTS



- Seismic modifications
 - Seismic hazard assessment is adequate for design of modifications
 - Modifications for the building designed to withstand the design basis earthquake and will perform up to seismic loads equivalent to a 1700-year return period earthquake
 - Modified restraints for process equipment and piping are designed to withstand seismic loads equivalent to a 1300-year return period



EVALUATION OF DESIGN OF STRUCTURES, SYSTEMS AND COMPONENTS



- Tornado missile modifications
 - Tornado strike likelihood and impacts are consistent with NRC guidance
 - Design of proposed modifications to shield areas with large inventories of hazardous materials is adequate



EVALUATION OF CHEMICAL CONSEQUENCES

- Structural performance of modified building and equipment will prevent releases from seismic and tornado missile events
- Severe earthquakes may cause releases, however, the likelihood is sufficiently low to demonstrate acceptable risk



SUMMARY

- Modifications are appropriately designed and will perform beyond the design basis
- Modifications will prevent releases as a result of seismic and tornado missile events
- Modifications are protective of the health and safety of workers and the public

