

**USED FUEL STORAGE AND TRANSPORTATION ISSUE RESOLUTION PLAN**

**Issue Number:** N-10-01

**Title:** ISFSIs Located in Marine Environments

**I. Summary of Resolution Plan**

Marine atmospheric corrosion of storage casks located in a marine environment is possible in the short term.

NRC sponsored research indicates that austenitic stainless steel dry cask storage canisters may be susceptible to stress corrosion cracking when exposed to a coastal marine atmosphere. The Office of Nuclear Regulatory Research published NUREG/CR-7030 entitled: "Atmospheric stress corrosion cracking susceptibility of welded and unwelded 304, 304L, and 316L austenitic stainless steels commonly used for dry cask storage containers exposed to marine environments."

The study does not suggest the marine atmosphere corrosion issue is limited only to long term storage. There is not information to suggest a time-line for any possible effects. The study indicates under accelerated test conditions, a problem does result.

Industry proposal to adopt a mitigation method such as periodic washing at locations near the ocean or industry address how FSAR Chapter 9 maintenance programs of casks and sites near marine environments are addressing the possibility of marine atmosphere corrosion in the short term.

**Comment [N1]:** NEI 10-03 states that the following should be in the Summary section.

Provide a brief summary of the plan of action to resolve the issue that supports the listing of the issues assigned to NRC and/or Industry in Sections II and III. The level of detail should be dependent on the complexity of the issue. The focus of the summary is to achieve the success criteria on the Issue Screening Form.

**Comment [N2]:** The resolution plan does not need to contain a re-statement of the problem statement from the screening form.

**Comment [N3]:** The resolution plan does not need to contain a re-statement of the background information from the screening form.

**Comment [N4]:** If it is desired to re-state the success criteria from the screening form, then this paragraph should be updated when the screening form is finalized.

**II. Actions and Due Dates**

ACTION	RESPONSIBLE PARTY	DUE DATE
NRC release Final Report NUREG/CR-7030	NRC	Oct. 2010
Industry/NRC Public Meeting to exit planning phase	Industry/NRC	April 1, 2011
NEI send letter and closure form to state EPRI and EST Task Force will work resolution of the issue and to address possible short term effects	Industry	May 2011

**Comment [N5]:** NUREG/CR-7030 is a reference in the Screening Form. Therefore, it should not be an action in the resolution plan.

**Comment [N6]:** This is a step to obtain agreement on the Resolution Plan. Therefore, it should not be an action in the resolution plan.

**Comment [N7]:** The actions to meet the success criteria of the Screening Form will need to be determine after the Success Criteria are agreed upon between NRC and Industry.

**III. Date:** \_\_\_\_\_