

Alexander Marion SENIOR DIRECTOR, ENGINEERING NUCLEAR GENERATION DIVISION

July 30, 2004

Dr. P. T. Kuo
Program Director, License Renewal and Environmental Impacts
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

PROJECT NUMBER: 690

Dear Dr. Kuo:

We provided to you our proposed method for updating the GALL report, NUREG-1801, on May 11, 2004. As discussed during our meeting on June 3, 2004, we are enclosing additional industry comments to address such issues as new material, environment, aging effects, and program (MEAP) combinations and aging management program (AMP) description changes and additions.

Please contact me (202-739-8090; <u>am@nei.org</u>) or Fred Emerson (202-739-8137; <u>fae@nei.org</u>) with any questions or concerns.

Sincerely.

Alex Marion Enclosure

Alex Marion

c: K. Steven West, NRC

Ira Dozier, NRC

Ram Subbaratnam, NRC NRC Document Control Desk

Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Include in GALL Chapter
General piping and components	Aluminum	Fuel Oil	Loss of material	XI.M30 Fuel Oil Chemistry	VII
General piping and components	Aluminum	Air-Indoor Controlled (Ext)	None	None	VII
General piping and components	Aluminum	Gas	None	None	VII, VIII
General piping and components	Aluminum	Treated Water	Loss of material	XI.M2 Water Chemistry	V, VII, VIII
Heat Exchanger shell side components	Carbon Steel	Lubricating Oil	Loss of Material	Plant Specific	VII
Heat Exchanger Tubes	Carbon Steel	Air-Outdoor (Ext)	Loss of Material	Plant Specific	VII
Heat Exchanger Tubes	Carbon Steel	Air-Indoor Uncontrolled (Ext)	Loss of Material	Plant Specific	IV, VII
General piping and components	Carbon Steel	Closed Cycle Cooling Water	Loss of material	XI.M21 Closed Cycle Cooling Water System	IV
General piping and components	Carbon Steel	Steam	Loss of material	Plant Specific	VII
General piping and components	Carbon Steel	Lubricating Oil	Loss of Material	Plant Specific	VII, VIII
General piping and components	Gray Cast Iron	Soil	Loss of Material– Selective Leaching	Plant Specific	VII, VIII
General piping and components	Gray Cast Iron	Treated Water	Loss of Material– Selective Leaching	Plant Specific	VII, VIII
General piping and components	Gray Cast Iron	Untreated Water	Loss of material – Selective Leaching	Plant Specific	VII, VIII
General piping and components	Copper Alloy	Closed Cycle Cooling Water	Loss of Material	XI.M21 Closed Cycle Cooling Water System	IV, V, VII, VIII

Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Include in GALL Chapter
General piping and components	Copper Alloy	Fuel Oil	Loss of Material	XI.M30 Fuel Oil Chemistry	VII
General piping and components	Copper Alloy	Raw Water	Loss of Material	Plant Specific	VII, VIII
General piping and components	Copper Alloy	Raw Water	Loss of Material- selective leaching	Plant Specific	VII, VIII
General piping and components	Copper Alloy	Raw Water	Cracking	Plant Specific	VII, VIII
General piping and components	Copper Alloy	Lubricating Oil	Loss of material	Plant Specific	IV, VII, VIII
General piping and components	Glass	Air and Steam	None	None	VII, VIII
General piping and components	Glass	Fuel Oil	None	None	VII
General piping and components	Glass	Raw Water	None	None	V, VII, VIII
General piping and components	Glass	Treated water	None	None	V, VII, VIII
General piping and components	Glass	Treated Borated Water	None	None	V, VII
General piping and components	Nickel-alloy	Raw Water	Loss of material	XI.M20 Open Cycle Cooling Water System	VII
General piping and components	Stainless Steel	Fuel Oil	Loss of Material	XI.M30 Fuel Oil Chemistry	VII
General piping and components	Stainless Steel	Raw Water	Loss of Material	Plant Specific	VII, VIII
General piping and components	Stainless Steel	Soil	Loss of Material	Plant Specific	V, VII, VIII
General piping and components	Stainless Steel	Treated water	Loss of Material	Plant Specific	V, VII, VIII
General piping and components	Stainless Steel	Steam	Loss of Material	XI.M2 Water Chemistry	IV

Structure and/or Component	Material	Environment		Aging Management Program (AMP)	Include in GALL Chapter
General piping and Components	Stainless Steel	Treated water > 140	Cracking	XI.M2 Water Chemistry	V, VII, VIII
General piping and components	Stainless Steel	Lubricating oil	Loss of material	Plant Specific	VII, VIII

Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Include in GALL Chapter
General piping and components	Stainless Steel	Closed Cycle Cooling Water	Loss of Material	XI.M21 Closed-Cycle Cooling Water System	V, VIII
General piping and components	Stainless Steel	Lubricating Oil	Loss of Material	Plant Specific Program	VII, VIII
General piping and Components	Stainless Steel	Closed Cycle Cooling Water > 140	Cracking	Plant Specific	V, VII, VIII
Heat Exchanger- Tubes	Stainless Steel	Raw water	Reduction of heat transfer	XI.M20 Open Cycle Cooling Water System	VII, VIII
Heat Exchanger - Tubes	Stainless Steel	Treated water	Reduction of heat transfer	XI.M2 Water Chemistry	V, VII, VIII
Heat Exchanger - Tubes	Stainless Steel	Closed Cycle Cooling Water	Reduction of heat transfer	XI.M21 Closed-Cycle Cooling Water System	V, VII, VIII
Tanks	Stainless Steel	Treated water > 140	Cracking	XI.M2 Water Chemistry	V, VII, VIII

Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management	Include in GALL Chapter
General piping and components	Aluminum	Fuel Oil	Loss of material	XI.M30 Fuel Oil Chemistry	VII
General piping and components	Aluminum	Air-Indoor Controlled (Ext)	None	None	VII
General piping and components	Aluminum	Gas	None	None	VII, VIII
General piping and components	Aluminum	Treated Water	Loss of material	XI.M2 Water Chemistry	V, VII, VIII
Heat Exchanger shell side components	Carbon Steel	Lubricating Oil	Loss of Material	Plant Specific	VII.
Heat Exchanger Tubes	Carbon Steel	Air-Outdoor (Ext)	Loss of Material	Plant Specific	VII
Heat Exchanger Tubes	Carbon Steel	Air-Indoor Uncontrolled (Ext)	Loss of Material	Plant Specific	IV, VII
General piping and components	Carbon Steel	Closed Cycle Cooling Water	Loss of material	XI.M21 Closed Cycle Cooling Water System	IV
General piping and components	Carbon Steel	Steam	Loss of material	Plant Specific	VII
General piping and components	Carbon Steel	Lubricating Oil	Loss of Material	Plant Specific	VII, VIII
General piping and components	Gray Cast Iron	Soil	Loss of Material– Selective Leaching	Plant Specific	VII, VIII
General piping and components	Gray Cast Iron	Treated Water	Loss of Material– Selective Leaching	Plant Specific	VII, VIII
General piping and components	Gray Cast Iron	Untreated Water	Loss of material – Selective Leaching	Plant Specific	VII, VIII
General piping and components	Copper Alloy	Closed Cycle Cooling Water	Loss of Material	XI.M21 Closed Cycle Cooling Water System	IV, V, VII, VIII

Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Include in GALL Chapter
General piping and components	Copper Alloy	Fuel Oil	Loss of Material	XI.M30 Fuel Oil Chemistry	VII
General piping and components	Copper Alloy	Raw Water	Loss of Material	Plant Specific	VII, VIII
General piping and components	Copper Alloy	Raw Water	Loss of Material- selective leaching	Plant Specific	VII, VIII
General piping and components	Copper Alloy	Raw Water	Cracking	Plant Specific	VII, VIII
General piping and components	Copper Alloy	Lubricating Oil	Loss of material	Plant Specific	IV, VII, VIII
General piping and components	Glass	Air and Steam	None	None	VII, VIII
General piping and components	Glass	Fuel Oil	None	None	VII
General piping and components	Glass	Raw Water	None	None	V, VII, VIII
General piping and components	Glass	Treated water	None	None	V, VII, VIII
General piping and components	Glass	Treated Borated Water	None	None	V, VII
General piping and components	Nickel-alloy	Raw Water	Loss of material	XI.M20 Open Cycle Cooling Water System	VII
General piping and components	Stainless Steel	Fuel Oil	Loss of Material	XI.M30 Fuel Oil Chemistry	VII
General piping and components	Stainless Steel	Raw Water	Loss of Material	Plant Specific	VII, VIII
General piping and components	Stainless Steel	Soil	Loss of Material	Plant Specific	V, VII, VIII
General piping and components	Stainless Steel	Treated water	Loss of Material	Plant Specific	V, VII, VIII
General piping and components	Stainless Steel	Steam	Loss of Material	XI.M2 Water Chemistry	IV

Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Include in GALL Chapter
General piping and Components	Stainless Steel	Treated water > 140	Cracking	XI.M2 Water Chemistry	V, VII, VIII
General piping and components	Stainless Steel	Lubricating oil	Loss of material	Plant Specific	VII, VIII

Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Include in GALL Chapter
General piping and components	Stainless Steel	Closed Cycle Cooling Water	Loss of Material	XI.M21 Closed-Cycle Cooling Water System	V, VIII
General piping and components	Stainless Steel	Lubricating Oil	Loss of Material	Plant Specific Program	VII, VIII
General piping and Components	Stainless Steel	Closed Cycle Cooling Water > 140	Cracking	Plant Specific	V, VII, VIII
Heat Exchanger- Tubes	Stainless Steel	Raw water	Reduction of heat transfer	XI.M20 Open Cycle Cooling Water System	VII, VIII
Heat Exchanger - Tubes	Stainless Steel	Treated water	Reduction of heat transfer	XI.M2 Water Chemistry	V, VII, VIII
Heat Exchanger - Tubes	Stainless Steel	Closed Cycle Cooling Water	Reduction of heat transfer	XI.M21 Closed-Cycle Cooling Water System	V, VII, VIII
Tanks	Stainless Steel	Treated water > 140	Cracking	XI.M2 Water Chemistry	V, VII, VIII