



General Electric Company
175 Curtner Avenue, San Jose, CA 95125

October 4, 1993

Docket No. 52-001

Chet Poslusny, Senior Project Manager
Standardization Project Directorate
Associate Directorate for Advanced Reactors
and License Renewal
Office of the Nuclear Reactor Regulation

Subject: Submittal Supporting Accelerated ABWR Schedule - P&R Comment
Incorporation on Technical Specification LCO 3.8.1, AC Sources-
Operating

Dear Chet:

Enclosed find Technical Specification LCO 3.8.1, AC Sources-Operating. This version incorporates review comments discussed between GE and NRC staff on 9/30/93 in San Jose. We have added a new Condition to address the inoperability of one unit auxiliary transformer, as discussed during the meeting in a telecon with Messrs. John Knox and Jim Lazevnick.

We have also enclosed a load list for the CVCF 120 VAC and the DC loads. We would like to arrange a conference call to discuss these loads and the effect of power loss and the appropriate AOTs for the electrical technical specifications. It is important to have AOT consistency between the electrical LCOs, the C&I LCOs, and the supported or actuated system AOTs. For the ABWR, great improvements have been made in the areas of redundant safety systems and instrumentation and controls for these systems. Traditional AOTs for the electrical system LCOs based on a typical BWR/6 are not entirely applicable.

Please provide a copy of this transmittal to Mark Reinhart, Jim Lazevnick, and John Knox.

Sincerely,

Jack Fox
Advanced Reactor Programs

cc: Alan Beard (GE), Norman Fletcher (DOE), Cal Tang (GE)

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LOSS OF ONE DIVISIONAL 120 VAC CVCF
(Typical of one of four divisions)

Loads	Effect of Power Loss	LCO	LCO Condition	Required Action	Completion Time
SSLC logic for RPS and MSIV isolation functions.	Division logic trip for RPS and MSIV isolation resulting from loss of power.	3.3.1.2 RPS/MSIV Actuation	A. One or more Functions with one channel inoperable.	Place affected division in TLU logic output bypass and restore channels.	30 days
Power to one of two redundant scram pilot solenoids.	One of two pilot solenoids de-energized (no control rod motion)	N/A	N/A	N/A	N/A
Power to one of two redundant MSIV pilot solenoids (inboard and outboard MSIVs).	One of two pilot solenoids de-energized (no valve motion).	N/A	N/A	N/A	N/A
Neutron Monitoring System	Loss of divisional neutron monitoring; divisional trip signal to SSLC.	3.3.1.1 SSLC Sensor Instr.	A. One or more Functions with one channel inoperable.	Place affected channel in bypass at the NMS in 6 hours and restore channel.	30 days
Process Radiation Monitoring	Loss of divisional main steam line radiation monitor.	3.3.1.1 SSLC Sensor Instr.	A. One or more Functions with one channel inoperable.	Place affected channel in Sensor bypass at SSLC in 6 hours and restore channel.	30 days

LOSS OF ONE DIVISIONAL 125 VDC (Div. I, II, III)

Loads	Effect of Power Loss	LCO	LCO Condition	Required Action	Completion Time
Divisional sensor logic in SSLC (except those for RPS and MSIV isolation which are AC supplied)	One division of SSLC Sensor logic in trip.	3.3.1.1 SSLC Sensor Instr.	A. One or more Functions with one channel inoperable.	Place affected division in Sensor Bypass and restore channels.	30 days
Essential Multiplex System	Loss of one of four divisions of essential multiplexing.	3.3.3.1 Essential Multiplex System	A. One or more EMS divisions inoperable.	Declare affected Functions and supported Features inoperable in 4 hours. (Affected Functions and supported Features are discussed below.)	
SSLC actuation logic for RHR, RCW, RSW, EPDS, D/G, AC, HVAC, and RCIC(Div. I only).	Loss of actuation logic for supported systems	3.3.1.4 ESF Actuation	D. Required action to restore actuation capability and completion time not met.	Declare supported features inoperable in one hour and enter applicable LCOs for supported systems.	
RHR	Loss of actuation logic for RHR	3.5.1 ECCS	A. One or two ECCS subsystems inoperable.	Restore subsystem(s) to operable status	14 days
RCIC	Loss of actuation logic for RCIC	3.5.1 ECCS	A. One or two ECCS subsystems inoperable.	Restore subsystem(s) to operable status	14 days
ADS solenoids (one of two solenoids)	Loss of power to one of two solenoids (ADS capability maintained)	N/A	N/A	N/A	N/A
LDS (isolation logic)	Loss of isolation actuation power.	3.3.1.4 ESF Actuation	C. One or more Functions with one or more Output Channels inoperable.	Restore actuation capability or actuate associated devices in one hour. If not met, declare supported features inoperable.	
RCW/RSW	Loss of acutation logic for RCW/RSW	3.7.1	B. One of three RCW/RSW divisions inoperable.	Declare supported features inoperable.	
RHR containment spray	Loss of cooling to one of two containment spray systems.	3.6.2.4	A. One containment spray subsystem inoperable.	Restore containment spray subsystem.	14 days
RHR suppression pool cooling mode.	Loss of cooling to one of three suppression pool cooling loops.	3.6.2.3	A. One RHR S/P cooling subsystem inoperable.	Restore RHR S/P cooling subsystem.	14 days
SGTS (Div. II, III)	Loss of actuation logic for one of two SGTS trains	3.6.2.4	A. One SGTS train inoperable.	Restore SGTS train to operable status.	7 days

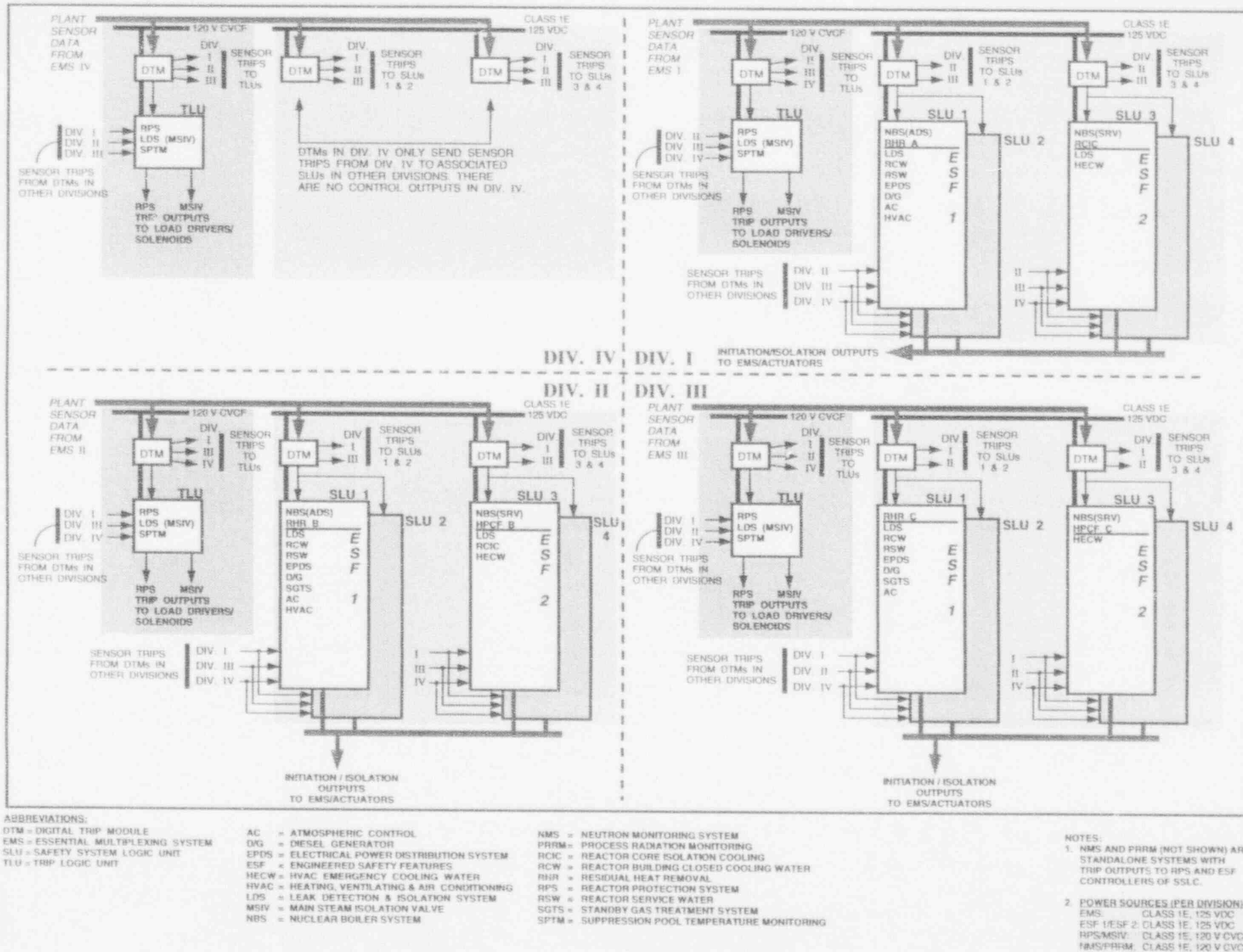


Figure 7A-3 Assignment of Interfacing Safety System Logic to SSLC Controllers