

**Lewis Sumner**  
Vice President  
Hatch Project Support

**Southern Nuclear  
Operating Company, Inc.**  
40 Inverness Parkway  
Post Office Box 1295  
Birmingham, Alabama 35201  
  
Tel 205.992.7279  
Fax 205.992.0341



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50-366

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U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

**Edwin I. Hatch Nuclear Plant  
Annual Operating Report for 2000**

Ladies and Gentlemen:

Enclosed is the Annual Operating Report for 2000 for Edwin I. Hatch Nuclear Plant Unit 1, Docket No. 50-321, and Unit 2, Docket No. 50-366. This report is submitted in accordance with the requirements of 10 CFR 50.59(b)(2) and Regulatory Guide 1.16.

Should you have any questions, please contact this office.

Respectfully submitted,

A handwritten signature in cursive script that reads "Lewis Sumner".

H. L. Sumner, Jr.

IFL/sp

Enclosure: 2000 Annual Operating Report for Edwin I. Hatch Nuclear Plant

cc: Southern Nuclear Operating Company  
Mr. P. H. Wells, Nuclear Plant General Manager  
SNC Document Management (R-Type A02.001)

U.S. Nuclear Regulatory Commission, Washington, D.C.  
Mr. L. N. Olshan, Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II  
Mr. L. A. Reyes, Regional Administrator  
Mr. J. T. Munday, Senior Resident Inspector - Hatch

A001

ENCLOSURE

EDWIN I. HATCH NUCLEAR PLANT - UNITS 1 AND 2  
NRC Docket Nos. 50-321 and 50-366  
Operating Licenses DPR-57 and NPF-5

2000 ANNUAL OPERATING REPORT

EDWIN I. HATCH NUCLEAR PLANT  
2000 ANNUAL OPERATING REPORT

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## GLOSSARY

### ACRONYMS AND ABBREVIATIONS

ABN	as-built notice
AC	alternating current
ADS	automatic depressurization system
AHU	air handling unit
ALARA	as low as reasonably achievable
APLHGR	average power linear heat generation rate
APRM	average power range monitor
ARI	alternate rod insertion
ARV	air release valve
ASME	American Society of Mechanical Engineers
ATWS	anticipated transient without scram
ATWS-RPT	anticipated transient without scram-Recirculation pump trip
BOP	balance of plant
BOST	backup overspeed trip
BWR	boiling water reactor
BWROG	Boiling Water Reactor Owners Group
CFR	Code of Federal Regulations
COLR	Core Operating Limits Report
CRD	control rod drive
CS	core spray
CST	condensate storage tank
DAS	data acquisition system
DBA	design basis accident
DBE	design basis earthquake
DC	direct current
DCR	design change request
DCS	dry cask storage
DHR	decay heat removal
dP	differential pressure
DoCR	Document Change Request
EAL	emergency action level
ECCS	emergency core cooling system
ED	electronic dosimeter
EDG	emergency diesel generator
EFCV	excess flow check valve
EPFY	effective full power years
EHC	electrohydraulic control
EIP	emergency implementing procedure
EOC-RPT	end of cycle-recirculation pump trip
EPA	Environmental Protection Agency
EPZ	emergency planning zone

GLOSSARY  
ACRONYMS AND ABBREVIATIONS

FHA	Fire Hazards Analysis
FPC	fuel pool cooling
FSAR	Final Safety Analysis Report
GE	General Electric
GL	Generic Letter
GPC	Georgia Power Company
HCU	hydraulic control unit
HNP	Hatch Nuclear Plant
HPCI	high pressure coolant injection
HVAC	heating, ventilation, and air-conditioning
HWC	hydrogen water chemistry
I&C	instrumentation and control
IE	inspection and enforcement
IGSCC	intergranular stress corrosion cracking
ILRT	integrated leak rate test
IRM	intermediate range monitor
ISFSI	independent spent fuel storage installation
ISI	inservice inspection
ISO	isometric
IST	inservice testing
LCO	limiting condition for operation
LDS	leak detection system
LLRT	local leak rate test
LLS	low-low set
LOCA	loss of coolant accident
LOSP	loss of offsite power
LPAP	low power alarm point
LPCI	low pressure coolant injection
LPM	loose-parts monitor
LPRM	local power range monitor
LPSP	low power setpoint
MCC	motor control center
MCPR	minimum critical power ratio
MCR	main control room
MCRECS	main control room environmental control system
MDC	minor design change
MOV	motor-operated valve
MPL	master parts list
MS	main steam
MSIV	main steam isolation valve
MSL	main steam line
MSLRM	main steam line radiation monitor
MSR	moisture separator reheater

GLOSSARY  
ACRONYMS AND ABBREVIATIONS

NPSH	net positive suction head
NRC	Nuclear Regulatory Commission
NSSS	nuclear steam supply system
ODCM	Offsite Dose Calculation Manual
OPRM	oscillation power range monitor
PA	protected area
PAM	post accident monitoring
PASS	post accident sampling system
PCIS	primary containment isolation system
PCIV	primary containment isolation valve
P&ID	pipng and instrumentation diagram
PESB	Plant Entry and Security Building
PLU	power load unbalance
PRB	Plant Review Board
PRNM	power range neutron monitor
PSW	plant service water
QA	quality assurance
RBM	rod block monitor
RCIC	reactor core isolation cooling
RCPB	reactor coolant pressure boundary
RCS	reactor coolant system
REA	Request For Engineering Assistance
RES	Request For Engineering Services
RFO	refueling outage
RFP	reactor feed pump
RFPT	reactor feed pump turbine
RG	Regulatory Guide
RHR	residual heat removal
RHRSW	residual heat removal service water
RLA	reload licensing analysis
RLP	reference loading pattern
RMCS	reactor manual control system
RPS	reactor protection system
RPT	recirculation pump trip
RPV	reactor pressure vessel
RRS	reactor recirculation system
RWCU or RWC	reactor water cleanup
RWCS	reactor water cleanup system
RWE	rod withdrawal error
RWM	rod worth minimizer

GLOSSARY  
ACRONYMS AND ABBREVIATIONS

SAER	Safety Audit and Engineering Review
SAT	station auxiliary transformer
SBGT or SGTS or SGT	standby gas treatment
SCM	stress corrosion monitor
SDC	setpoint design change
SED	System Evaluation Document
SJAE	steam jet air ejector
SNC	Southern Nuclear Operating Company
SRB	Safety Review Board
SR	Surveillance Requirement
SRM	source range monitor
SRV	safety relief valve
SSAR	Safe Shutdown Analysis Report
SSC	system, structure, or component
TCV	turbine control valve
TER	Test or experiment request
TIL	Technical Information Letter
TIP	traversing incore probe
TLD	thermoluminescent dosimeter
TRM	Technical Requirements Manual
TSV	turbine stop valve

## INTRODUCTION

The Edwin I. Hatch Nuclear Plant is a two-unit facility located approximately 11 miles north of Baxley, Georgia, on U.S. Highway 1. The plant consists of two light water reactors. Unit 1 is currently licensed to operate at 2763 MWt and Unit 2 is currently licensed to operate at 2763 MWt. The maximum dependable capacity for 2000 on Unit 1 was 863 net MWe. The maximum dependable capacity for 2000 on Unit 2 was 878 net MWe. General Electric furnished the boiling water reactor, the nuclear steam supply system, the turbine, and the generator for both units. The plant was designed by Southern Company Services, Inc., with assistance provided by Bechtel Power Corporation. The condenser cooling method employs induced-draft cooling towers and recirculating water systems with normal makeup supplies drawn from the Altamaha River.

The plant is a co-owned facility with ownership delegated as follows:

Georgia Power Company	50.1%
Oglethorpe Electric Membership Cooperative	30.0%
Municipal Electrical Authority of Georgia	17.7%
City of Dalton, Georgia	2.2%

Licensing information for the units is as follows:

	<u>Unit 1</u>	<u>Unit 2</u>
Docket Number	50-321	50-366
License Issued	08/06/74 (DPR-57)	06/13/78 (NPF-5)
Initial Criticality	09/12/74	07/04/78
Initial Synchronization	11/11/74	09/22/78
Commercial Operation	12/31/75	09/05/79

Southern Nuclear Operating Company has sole responsibility for overall planning, design, construction, operation, maintenance, and decommissioning of the Edwin I. Hatch Nuclear Plant.



**10 CFR 50.59 SUMMARIES FOR 2000**

**UNIT 1/COMMON AS-BUILT NOTICES****94-0143, Rev. 0**

This change corrects drawings that show the shunt size 75 amp to 100 amp in panels 1H21-P294 and 1H21-P295 to eliminate confusion. 100 amp shunts are as-found and verified by field personnel. The meters on panel 1H11-P655 appear to be 75 amp meters. Further investigation confirms the meter scale is - 25 to 0 to + 75 amps. This is also stated in the FSAR. These meters were calibrated with 100mv-100A shunts on MWOs 1-74-161 and 1-74-166. This also corresponds to a 1mv per 1A to the meter.

The 24/48Vdc instrumentation battery 1A (1R42-S017A) and battery 1B (1R42-S017B) which feed panels 1H21-P294 and 1H21-P295 are not safety-related. The change to drawings due to this ABN has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**96-0092, Rev. 0**

This change revises the diesel engine and fuel oil system P&ID to show the proper configuration of the diesel generator air start compressors safety relief valves. This change does not modify the function or operation of this system.

The diesel air start system air compressors and their associated safety relief valves are not safety related. This change does not challenge or have any adverse effect on the system or any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**97-0192, Rev. 0****97-0193, Rev. 0**

This change clarifies the equipment area cooler system (safeguard equipment room coolers) to describe the normal handswitch position to be in "AUTO." This change does not modify the function of this system by placing cooler handswitches in "AUTO." The room temperature will be maintained within design parameters.

The equipment area cooler system (safeguard equipment room coolers) is safety-related. Placing both coolers handswitches in "AUTO" has no adverse effect on the safeguard equipment it is cooling. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**97-0214, Rev. 0**

This change replaces GV-228 type globe valves with NV-612 type globe valves for valves 1P41-F891A-D in the PSW system. These valves are manual instrument root valves. This change does not modify the function of the PSW system.

Valves 1P41-F891A/B/C/D are safety related. The changing of these valves from GV-228 to NV-612 type valves has no adverse effect on the PSW or the function of pressure indicators PI-N001A/B/C/D. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**UNIT 1/COMMON AS-BUILT NOTICES****97-0349, Rev. 0****97-0350, Rev. 0**

This change replaces the TIP system major components of operation: drive mechanism, indexing mechanism, and TIP control unit. Replacement of the TIP system major components does not constitute a change to the system.

The TIP system major components of operation; i.e., drive mechanism, indexing mechanism, and TIP control unit, are not safety related. However, system design change by this DCR could impact safety-related equipment. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-0188, Rev. 0**

This change documents the existence of condensate drains on AHUs in the nonsafety-related waste gas treatment HVAC system by depicting them on the P&ID.

The waste gas treatment HVAC system is not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0033, Rev. 0**

This change revises Unit 1 FSAR subsection 10.7.6 to delete the reference to restricting orifices near the PSW supply MOVs to each MCR air-conditioner. The stated function of the orifices was to limit flow to a value that does not cause "starvation" in the event of a failure of the piping downstream of the MCR air-conditioners. These orifices are not shown on the P&ID as the result of a system walkdown that found the orifices were not installed. A calculation performed demonstrated that the orifices were not necessary to prevent "starvation" of any safety-related equipment in the event of a failure of the piping downstream of the MCR air-conditioners. This change does not modify the function or operation of this system.

The PSW system is safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0082, Rev. 0**

This change modifies drawing H-10167 to clarify lift heights when using any hoist other than the Unit 1 reactor building crane main hoist. This change does not modify the function or operation of this system.

Drawing H-10167 is not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0217, Rev. 0**

This change modifies the RBCCW system to depict the actual as-found physical configuration of the system. Per system walkdown, root valves 1P42-F3002A/B and associated pressure test points 1P42-PX-N036A/B do not exist as depicted in the RBCCW

**UNIT 1/COMMON AS-BUILT NOTICES**

system P&ID, and ISOs S-00640 and S-03456. This change does not modify the function or operation of this system.

The RBCCW system is safety-related. Changes per the ABN do not challenge or impose any adverse effect on the RBCCW system or any other safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0219, Rev. 0**

This change modifies the zinc injection system to allow the removal of valve 1N21F685 and its associated tubing as per MWO 19601638. P&ID H-11604 is revised to reflect this modification. Valve 1N21F685 was used as the injection point for the old and temporary zinc injection active system that has since been replaced by a permanent zinc injection passive system. This valve is not needed and is no longer in use. This change does not modify the function of the zinc injection system.

The zinc injection system has no safety design basis. The system was installed for improvement in plant feedwater chemistry resulting in lower radiation level. The zinc injection system is a non-Q system associated with the condensate and feedwater system that is classified as Seismic Category I. Removing this valve and capping its associated tubing line does not challenge or have an adverse effect on the zinc injection system performance or any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0222, Rev. 0**

This change replaces the obsolete jet pump flow transmitters identified as GE 555 flow transmitters with suitable replacement Rosemount 1151DP transmitters. The Rosemount 1151DP transmitters perform the same function as the existing transmitters, as well as exhibit similar reliability characteristics.

The jet pump flow transmitters MPL nos. 1/2B21-N034A-W are not safety related. This modification has no adverse effect on the B21-nuclear boiler system or any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0227, Rev. 0**

This as-found ABN adds the existing pipe cap attached to the RHR injection condensate makeup line vent valve to P&ID H-16329. This change to the P&ID does not modify RHR the system or its operation in any way. This change only reflects the true as-built configuration of the vent line.

The RHR system is safety related. Adding the pipe cap to the P&ID has no adverse effect on the RHR system or any component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**UNIT 1/COMMON AS-BUILT NOTICES****99-0256, Rev. 0**

This change adds the depiction of isolation valves 1N38-F136 and 1N38-F137 for the MSR C shell exit pressure transmitter 1N38-N775 and MSRs C & D 2<sup>nd</sup> stage steam supply pressure transmitter 1N38-N769, respectively, to sheet 2 of control air system P&ID H-11028. Also, sheet 2 of main and auxiliary steam system P&ID H-11601 is added to ABN 99-0256 and revised to depict the isolation valve 1N38-F137 for the 1N38-N769 pressure transmitter. MPL nos. 1N38-F136 and 1N38-F137 are new numbers assigned to the existing valves identified in site procedure 34GO-OPS-042-1S as 1N38-N775-IV1 and 1N38-N769-IV1, respectively. Thus, since these valves already exist in the plant and are addressed in a plant operating procedure, this change to the control air system and the main and auxiliary steam system P&IDs to depict these valves does not modify the function or operation of these systems.

The control air system and the main and auxiliary steam system are not safety related. These drawing changes to depict these existing isolation valves do not challenge or have any adverse effect on these systems or any safety-related system or component. These changes do not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0371, Rev. 0**

This change modifies Unit 1 liquid radwaste system P&ID, sheet 4, H-16179, Rev. 34, to depict a second instrument isolation valve (MPL no. 1G11-F2050) for pressure indicator, 1G11-R124, that exists but is not depicted on any design drawings. This change to the radwaste system does not modify the function or operation of this system by the addition of a second isolation valve for PI R124.

This system is not safety related, but is treated as safety related. However, pressure indicator 1G11-R124 and its two isolation valves are not safety related. Revising this system P&ID to depict the existing second isolation valve for the R124 pressure indicator does not result in a change to any portion of this system that monitors effluent releases, effect isolation of the effluent flow to the environment; or affect any setpoint for alarm or isolation of the effluent release monitoring equipment. Therefore, this change does not challenge or have any adverse effect on the radwaste system or any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0435, Rev. 0**

This change modifies the radwaste and condensate storage and transfer systems to remove the internal seal water line and associated 1G11-F096 valve to the 1G11-C022A condensate backwash transfer pump. Also, external seal water isolation valves 1P11-F180B and -F181B to 1G11-C022B condensate backwash transfer pump are changed from CLOSED to OPEN. These changes are made to reflect as-found conditions. These changes do not modify the function or operation of these systems.

The radwaste and condensate storage and transfer systems are not safety related. These changes do not challenge nor do they have any adverse effect on the radwaste and condensate storage and transfer systems or any safety-related system or component.

**UNIT 1/COMMON AS-BUILT NOTICES**

These changes do not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0440, Rev. 0****99-0441, Rev. 0**

This change documents the replacement of PSW system pressure switch 1P41-N512 with a pressure switch manufactured by Static O-Ring due to obsolescence. This change does not modify the function or operation of this system.

The replacement PSW system pressure switch is safety related. The switch replacement has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0455, Rev. 0**

This change replaces the requirement of using rigid steel conduit for RPS and PCIS circuit with the requirement that only a rigid metal conduit be used. This will allow the use of rigid aluminum conduits and will agree with the wording used in the GE separation criteria from which our criteria were developed. This change does not modify the operation of any system.

The criteria involved deal with safety-related circuits, raceways, and equipment. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0470, Rev. 0**

This change modifies drawing H-10167 to include: 1) the use of Unit 1 reactor building crane only for lifting the 125 ton cask, 2) the use of 125 ton cask instead of a 90 ton cask, 3.) placing of the cask in Unit 1 and Unit 2 washdown area, 4) addition of load paths and heavy loads and lift heights when not using the single failure proof hoist. Along with the above drawing changes, evaluations have been made of all structural considerations to support these changes. This change does not modify the function or operation of the reactor building overhead crane or the elevation 228 ft refueling floor.

The reactor building crane is not safety related but the reactor building 228 ft floor is safety related. The text changes to the drawing and the subsequent analysis of these changes do not challenge and have no adverse effect on the 228 ft floor or the overhead crane. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**UNIT 2 AS-BUILT NOTICES****97-0194, Rev. 0**

This change clarifies the ECCS room coolers (safeguard equipment room coolers) to describe the normal handswitch position to be in "AUTO." This change does not modify the function of this system by placing the coolers handswitches in "AUTO." The room temperature will be maintained within design parameters.

The ECCS room coolers (safeguard equipment room coolers) are safety-related. Placing both coolers handswitches in "AUTO" has no adverse effect on the safeguard equipment it is cooling. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0223, Rev. 0**

This change replaces the obsolete jet pump flow transmitters identified as GE 555 flow transmitters with suitable replacement Rosemount 1151DP Transmitters. The Rosemount 1151DP transmitters perform the same function as the existing transmitters as well as exhibit similar reliability characteristics.

The jet pump flow transmitters 1/2B21-N034A-W are not safety related. This modification has no adverse effect on the B21 nuclear boiler system or any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0289, Rev. 0****99-0290, Rev. 0**

This change modifies the drywell chilled water system P&ID to delete the refrigerant cycle flow diagram of the chillers and reference the vendor drawing for this information. This change does not modify the function and operation of this system.

The drywell chilled water system is not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-0363, Rev. 0****99-0364, Rev. 0**

This change revises P&IDs H-26027, Rev. 18, and H-26028, Rev. 23, to remove dust evacuator 2G11-D046 from the filter aid tank 2G11-A007 and dust evacuator 2G11-D061 from the waste precoat tank 2G11-A003. While performing a routine review of the radwaste P&IDs listed above, it was discovered that these dust evacuators did not exist as indicated on the P&IDs. Removal of the dust evacuators does not change the intended operation of the radwaste system.

The dust evacuators, 2G11-D046 and 2G11-D061, are not safety related. The removal of this equipment has no adverse effect on the operation of the radwaste system or any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**UNIT 2 AS-BUILT NOTICES****99-0386, Rev. 0**

This change adds 1-in. caps to the drain lines downstream of valves 2P41-FD051 and 2P41-FD053 on the PSW, division 2, discharge header. This change modifies the PSW system P&ID H-21033, Rev. 39, to depict the actual as-found configuration of the plant. This change does not modify the function or operation of the PSW system as valves 2P41-FD051 and 2P41-FD053 functions are drain points and are normally closed during system operation.

PSW system, division 2, discharge header drain valves 2P41-FD051 and 2P41-FD053 are safety-related components. The addition of the 1-in. caps located downstream of each valve does not challenge nor adversely affect the PSW system or any safety-related systems or components. This change does not reduce the margin of safety as defined in the bases for any Technical Specification.



**UNIT 1/COMMON DESIGN CHANGE REQUESTS****91-097, Rev. 0**

This change replaces the nonsafety-related, obsolete GE INMAC radiation monitors with GE NUMAC microprocessor based controlled monitor to monitor main stack high radiation levels. This change does not modify the function of this system.

Main stack radiation monitors 1D11-K600A&B are not safety related. These new monitors will perform identically to the existing monitors and notify the operators if high radiation levels occur. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**95-032, Rev. 0**

This change replaces overcurrent trip devices of seven MCCs in the 1R24 system to enhance coordination with upstream overcurrent trip devices. This change does not modify the function or operation of this system.

These seven MCCs are safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**96-008, Rev. 0**

This change replaces the Unit 1 turbine building Carrier CFC-based refrigerant (R12) chillers with York HFC-based refrigerant (R134a) chillers to eliminate chiller operational problem. This change does not modify the function of this system for the system continues to supply chilled water to the various coolers in the Unit 1 turbine building. The operation of the system is modified by the changing out the condenser water source from the PSW system to the new cooling tower which was added for this system.

The Unit 1 turbine building chilled water system is not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**96-020, Rev. 0**

This change replaces the obsolete Autodata Nine temperature monitoring system for the Unit 1 main generator with the new Bently Nevada 3500 continuous monitoring system. This design modification is a Digital Upgrade and was evaluated for radiated and conducted emissions.

The 1N40 main generator temperature monitoring system is not safety related. This change has no adverse effect on the intended function of the Unit 1 main generator. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**96-051, Rev. 0**

This change modifies the main turbine-generator PLU and BOST test logic and replaces hardware associated with the PLU and BOST circuitry to eliminate the possibility of the plant trip incidents resulting in reactor scrams or forced outages. This change does not modify the existing PLU control or BOST function of the N32 system; however, the normal operation mode will be locked out from the test mode for both PLU and BOST to prevent the test-created PLU/BOST signal from transmitting to the plant control before the test circuit has reset.

**UNIT 1/COMMON DESIGN CHANGE REQUESTS**

The PLU and BOST test logic of the N32 system is not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**97-001, Rev. 0**

This change replaces the Unit 1 MSR tube bundles and chevrons to achieve optimum performance at power levels associated with extended power uprate. This change does not modify the function of this system. In order to facilitate the change, additional platforms are being added in the condenser bay. The change also requires temporary removal of piping, structural and electrical interferences. Permanent changes made during restoration of interferences are reflected in the design change package.

The MSRs/1N38 system is not safety related. This change has no adverse effect on the 1N38 system or any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**97-003, Rev. 0**

This change replaces the existing keypads at the turnstiles in the PESB with biometric hand geometry readers to control access to the PA. This change modifies the access control function of this system by eliminating the need for access code. The biometric hand geometry readers provide verification of each individual entering the PA. A scope addition to this DCR adds electric lock capability to the PESB exit turnstiles to prevent personnel leaving the protected area without being properly logged out in the computer.

The security system is not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**97-004, Rev. 0**

This change modifies the 1N62 offgas system to eliminate potential condensation on the flow measurement elements and to match the Unit 2 physical installation. This change does not modify the operation of this system.

The offgas flow measurement elements are not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**97-025, Rev. 0**

This change adds an underfrequency detection relay scheme on the main turbine-generator electrical system to allow precise detection of a system underfrequency condition for alarming and tripping at the appropriate values as recommended by the SES Coordinated Automatic Off-Frequency Protection Study, July 1978. This change modifies the turbine-generator circuitry to alarm and trip when the Southern Electric System frequency drops sufficiently low.

The main turbine-generator underfrequency relay protection is not safety related. This change has no adverse effect on the power system or any safety-related system or component's ability to function as designed in the event of an accident. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**UNIT 1/COMMON DESIGN CHANGE REQUESTS****97-039, Rev. 0**

This change modifies the following MOVs 1E11-F007A&B, 1E11-F009, 1E11-F015A&B, 1E11-F028A&B, 1E21-F031A, 1E41-F003, 1E51-F008, 1E51-F524, 1G31-F001 and 1G31-F004 for the requirements of NRC GL 89-10. There will be no overall change in any equipment function or system operation with the modifications.

The above MOVs are safety related. This modification will not change any overall equipment function or have an adverse effect on any safety related system. GL 89-10 modifications will not reduce any margin of safety as defined in the Technical Specifications.

**97-052, Rev. 0**

This change modifies the condenser waterbox vent system to eliminate air entrapments during normal operation. This change does not modify the function or operation of this system. The existing venting configuration may continue to function as designed for startup operations with the proposed modification eliminating air during operation.

The circulating water system along with the condenser vents is not safety related. It does not challenge nor has no adverse effect on the system nor any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-017, Rev. 0**

This design change will relocate manual isolation valve 1P33-F584, change its position to normally open, remove check valve 1P33-F582 and add an O<sub>2</sub> analyzer sample panel (1P33-P006) automatic isolation solenoid valve 1P33-F605 to comply with RG 1.97. The new solenoid valve will close on a Group 10 PCIS due to its safety function of maintaining the ASME Section III Class 2 boundary between the safety-related post accident H<sub>2</sub>/O<sub>2</sub> analyzer system and nonsafety-related commercial-grade O<sub>2</sub> analyzer piping. An automatic isolation sample valve eliminates the need for an operator to be stationed at the valve when opened for taking O<sub>2</sub> samples during normal operation. Also, in the nonsafety-related piping this design adds a sample chiller and associated equipment to remove moisture from the O<sub>2</sub> sample line.

The solenoid valve 1P33-F605 being added is a boundary valve between safety-related and nonsafety-related piping. The downstream commercial grade oxygen analyzer panel 1P33-P006 is not safety-related. This change has no adverse affect on the post accident H<sub>2</sub>/O<sub>2</sub> analyzer system or its components. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-021, Rev. 0**

This change adds a 2-in. Enertech nozzle check valve to the first stage leakoff line of the turbine bypass valve to prevent the high-pressure turbine exhaust steam from coming from the cross around piping back up through the bypass valve first stage leakoff line. This causes erosion of the turbine bypass valve stem and also of the leakoff header. This also contributes to an excessive heat rate. This change does not modify the function or operation of the main steam system, as the bypass valve will operate as before.

The main steam system and turbine bypass valve are safety related. The valve installation has no adverse effect on the main steam system, turbine bypass valve, or any safety-related

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system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-023, Rev. 0**

This change will add two new circulating water flume transmitters (1N71-N604A and N604B) and two new loop powered indicators (1N71-N605A and N605B) to monitor water level at the circulating water pump intake basin. The indicators are to be located on 1H11-P650, adjacent to existing flume level indicator 1N71-N602. The difference between the new water level signals and the existing upstream water level signal will provide operations with an indication of screen fouling. Low level on the pumpside of the screen can result in pump cavitation. This cavitation causes air to be pumped to the condenser waterboxes. Accumulation of air in the waterboxes causes blockage of water flow through the upper condenser tubes. This reduces heat rejection, can result in a loss of condenser vacuum, and ultimately can cause a reactor scram.

The circulating water system (1N71) is not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification. The circulating water system is described in the Unit 1 FSAR section 11.6 and is depicted on Figure 11.6-1.

**98-024, Rev. 0**

Phase I changes add the ISFSI pads to allow for the storage of Holtec spent fuel casks in the future. Phase II changes include demolition, excavation, soil compaction, pouring of reinforced concrete (up-ender pad), final grading and drainage and the addition of security measures. These changes are new construction and a new system to the plant. There is no modification to the function of the new system.

The addition of the pads and miscellaneous construction does not challenge nor do they have an adverse effect on any safety-related system or component. The changes do not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-045, Rev. 0**

This change replaces two multipoint recorders in the control room with new digital multipoint recorders. Replacement parts for the existing recorders are obsolete and no longer available. The new Yokogawa recorders will provide the same functionality of indicating, trending, and alarm outputs to the annunciators as the existing recorders with new updated digital equipment. The new recorders will be mounted in the same locations in the panels as the equipment being removed. Each new recorder will have the same inputs as did the recorder it is replacing.

Recorders 1T47-R611, and 1T47-R612 are safety related. These recorders will be replaced with safety-related equipment, providing the same functionality as the existing equipment. This change will not reduce the margin of safety as defined in the basis for any Technical Specifications.

**98-048, Rev. 0**

This change replaces obsolete the system 1N21, 1N61, and 1P11 hotwell fill and spill controls. This change does not modify the function or operation of this system.

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The hotwell fill and spill controls are not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-005, Rev. 0**

This change adds a ground detection protective relaying scheme on the main generator isophase bus to provide additional personnel safety during refueling mode backfeed of the Unit 1 main power transformer. This change modifies the generator protective relaying circuitry to trip the generator differential lockout relay 87G1-X upon detection of a ground on one phase of the isophase bus.

The generator isophase ground detection relaying is not safety related, nor does it interact with safety-related systems. This change has no adverse effect on the power system's ability to supply safety-related loads or any safety-related component's ability to function as designed in the event of an accident. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-010, Rev. 0**

This change adds the new railroad spur line to the existing rail line to allow for the transport of dry cask storage canisters from the reactor building to the ISFSI pads. This change modifies the operation of the existing railroad track by adding approximately 700 feet of new spur line. The spur is over 600 feet from the southern most plant security fence.

The railroad spur is not safety related and not important to safety. This change has no adverse effect on the existing railroad or plant system or any safety-related system or component}. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-014T, Rev. 0**

This temporary change removes unit auxiliary transformer 1B (UAT 1B) from service to allow for maintenance and repair. This change modifies the operation of the S11 system by transferring the loads normally fed from UAT 1B to startup auxiliary transformer 1C (SAT 1C). The transfer of these loads to SAT 1C is an analyzed operating condition in the FSAR and has no time limit. Startup transformer 1C can supply the loads of emergency busses 1E, 1F, and 1G in the event of a failure of startup transformer 1D. Under this condition, the UAT 1B loads will be tripped off SAT 1C to prevent SAT 1C overloading, resulting in a loss of power to 4-kV busses 1A and 1B.

The system is not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-022, Rev. 0**

Valves 1E11-F053A/B were originally designed for process control of the steam condensing mode of the RHR system. A previous DCP removed the steam condensing mode capability. The process controls for 1E11-F053A/B were left to allow operations to use the valves to flush the RHR lines prior to going into the shutdown-cooling mode. The existing controllers for the valves are obsolete, and no equivalent controllers are currently being manufactured. This modification will replace the valve control loop with a digital controller programmed to operate

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only in manual. This modification will remove the following components that were used to support the steam condensing mode; 1E11-R609, 1E11-R609-1, 1E11-R625, 1E11-R627A and B, 1E11-K610, 1E11-K612A and B, 1E11-K605A and B, 1E11-K604, 1E11-N008A and B, 1E11-N028, 1E11-R604A-1 and B-1. Valve positioners 1E11-K001A /B will also be replaced with a valve positioner currently being manufactured. This change does not modify the function or operation of the RHR system.

The RHR system flush function is not safety related. The flush function, used prior to going into the shutdown cooling mode, has no adverse effect on either the ability of the RHR system to perform its safety function or on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-034, Rev. 0**

This change adds a crosstie between the CRD pump discharge lines and a control valve in parallel to the CRD minimum flow orifices to allow elimination of excess CRD water and decrease system pressure to within original design limits and setpoints. This is in response to the removal of the CRD return to RWC from normal service due to concerns with IGSCC of the thermal mixing tee. This change does not modify the function of this system by the addition of the min flow bypass line. This bypass will be self regulated based on CRD system pressure and will not alter the method of system operation. All modes of the CRD system will remain unchanged. The elimination of the excess water will improve system reliability and eliminate spurious high-pressure alarms in the MCR. The affected portion of the CRD system is not safety-related.

The CRD minimum flow bypass line and valve is not safety related. This change has no adverse effect on the rest of the CRD system. The bypass will reduce system pressure to within original design limits. The only safety-related portion of the CRD is the scram function and associated piping from the HCUs and scram header. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-045, Rev. 0**

This change adds penetrations and piping spools through the walls between Unit 1 radwaste and Unit 1 turbine building, and Unit 1 turbine building and the control building to allow operations personnel to install and operate temporary radwaste crosstie without blocking open fire doors. Additionally, an existing spare penetration between the Unit 2 radwaste and Unit 2 turbine building will be modified to install piping spools for operations use. These penetrations and piping spools will be utilized in a future permanent radwaste crosstie system. This change does not modify the structural or fire barrier function of the walls by adding new penetrations.

The new penetrations, piping spools and existing walls are not safety-related. They have no adverse effect on the radwaste, turbine or control building walls nor affect any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**00-042, Rev. 0**

This change removes the internals of condensate polishing demineralizers isolation valves 1N21-F253 and F255 to eliminate the possibility of disc failure. These are 24-in. butterfly valves. If the disk cannot be removed, the entire valve will be cut out and a piping spool piece

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will be welded into its place in the piping. This change does not modify the function of this system, but does eliminate the ability to isolate all the demineralizers at one point. There are individual isolation valves for each of the seven demineralizer tanks.

The system is not safety related. This change has no adverse effect on the demineralizers or condensate system, or any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**UNIT 2 DESIGN CHANGE REQUESTS****95-016, Rev. 0**

This change replaces the present conductivity instruments at panel 2P33-P102 with two L&N 7082 analyzers and two 4973 L&N conductivity elements equipped with flow chambers. Also a uRs1000 Yokogawa recorder will be added which will provide an alarm contact that will be used in parallel with the existing sample cooler hi temp alarm. This change modifies the operation of this system by providing an indication of high conductivity to the control room.

The equipment is not safety related. This change has no adverse effect on the fuel pool cooling system or any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**95-054, Rev 0**

This change modifies the feedwater control system to incorporate fault tolerant and redundant features This change does not modify the function or operation of this system.

The feedwater control system is not safety related. It does not challenge and has no adverse affect on the any safety-related system or component. This design will decrease the number of challenges to safety-related systems. The overall system reliability will be enhanced. This change does not reduce the margin of safety as defined in the basis for any Technical Specification."

**96-019, Rev. 0**

This design change replaces the existing nonsafety-related Autodata Nine main generator temperature monitoring equipment because it is obsolete. This change does not modify the original function of the main generator system.

The replacement nonsafety-related Bently Nevada 3500 system (2N40) was evaluated for EMI/RFI radiated and conducted emissions. This design modification has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**97-024, Rev. 0**

The 4-in. valves 2T48-F209, 2T48-F210, 2T48-F211, 2T48-F212 will be replaced with 4-in., 150 lb. ASME Section III Class 2 valves. These are PCIVs for the drywell-to-torus differential pressure system. Valve performance will be improved by changing the valve from a pneumatically actuated gate valve to a pneumatically actuated ball valve. The new ball valves will be lighter than the existing gate valves. The existing valve solenoids and limit switches will be reused if possible. All of the impacted equipment is safety-related, therefore Seismic Category I design requirements are imposed.

The 2T48 drywell-to-torus differential pressure system is safety related. Replacing the four PCIVs with valves requiring less maintenance has no adverse effect on the system. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.



**UNIT 2 DESIGN CHANGE REQUESTS****97-026, Rev. 0**

This change adds an underfrequency detection relay scheme on the main turbine-generator electrical system to allow precise detection of a system underfrequency condition for alarming and tripping at the appropriate values as recommended by the SES Coordinated Automatic Off-Frequency Protection Study, July 1978. This change modifies the turbine-generator circuitry to alarm and trip when the Southern Electric System frequency drops sufficiently low.

The main turbine-generator underfrequency relay protection is not safety related. This change has no adverse effect on the power system or any safety-related system or component's ability to function as designed in the event of an accident. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**97-058, Rev. 0**

This change adds struts and deletes snubbers in the RHR system discharge through heat exchanger and core spray system side A & B pump suction from torus and condensate storage tank. These changes do not modify the function or operation of the system.

The RHR heat exchanger and core spray pump suction are safety related. Deleting snubbers and replacing some with rigid struts was reviewed for applicable codes and standards and found acceptable. This does not reduce the margin of safety as defined in the basis for any Technical Specification.

**97-061, Rev. 0**

This change adds struts and deletes snubbers to the Unit 2 main steam piping in the turbine building (2N21), core spray loop A and B piping (2E21), and high-pressure steam piping to the reactor feed pump turbine and to the steam jet air ejectors (2N11). These changes do not modify the function or operation of these systems.

These systems are safety related. Deleting snubbers and replacing some with rigid struts has been reviewed for applicable codes and standards and found acceptable. This does not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-003, Rev. 0**

This change will add two new circulating water flume transmitters (2N71-N604A and N604B) and two new loop powered indicators (2N71-N605A and N605B) to monitor water level at the circulating water pump intake on the suction side of the circulating water screens. The indicators are to be located on 2H11-P650, adjacent to existing flume level indicator 2N71-N602. The difference between the new water level signals and the existing upstream water level signal will provide operations with an indication of screen fouling. This change will help prevent a low water level at the circulating water pump suction. Low water at this point causes air to be picked up by the circulating water pump and introduced into the main condenser. Air in the main condenser results in a loss of condenser efficiency and ultimately causes a main turbine trip. This modification does not modify the function or operation of the 2N71 system.

The circulating water system (2N71) is not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**UNIT 2 DESIGN CHANGE REQUESTS****98-006, Rev. 0**

This change adds a flange on penetrations X15, X28, X44, X61A, X64, X81, X217A/B, X221A/B/C, X222B, X230, X231, and X235A/B to eliminate the use of temporary test plugs. This change also adds a plate support if required to better support the piping. This change does not modify the function or operation of any system.

The flanges are safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-008, Rev. 0**

This change replaces 600: 208/120-V-ac transformers 2R11-S004, and 2R11-S006 to eliminate an undervoltage condition without causing an unacceptable overvoltage condition. This change does not modify the function of this system.

The 600: 208/120-V-ac transformers 2R11-S004, and 2R11-S006 are safety related. The replacement transformers have no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-013, Rev. 0**

This change replaces valves 2N11-F020A/B to eliminate valve seat leakage. This change does not modify the operation of this system.

Valves 2N11-F020A/B are not safety-related. This change has no adverse effect on the main steam system (N11) or any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-020, Rev. 0**

This change replaces the generator stator cooling water conductivity monitoring equipment (2N43-N312, N313, N314, N315) due to the existing equipment being obsolete. This change makes a minor modification to the operation of this system by adding an equipment failure input to the high conductivity annunciator.

The generator stator cooling water system is not safety related. This change has no adverse effect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-026, Rev. 0**

This change adds to the F16 system a spent fuel rack in the contaminated equipment storage pit to allow more spent fuel storage capability in the Unit 2 spent fuel pool. This change does not modify the function or operation of this system.

This change does not challenge any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**UNIT 2 DESIGN CHANGE REQUESTS****98-033, Rev. 0**

This change replaces two 2R43 diesel generator system 3-way valves on the air coolant system of the A and C diesels to eliminate an infrequently occurring low temperature alarm in the jacket water coolant system. The alarm condition occurs during the colder days of the year. The air coolant 3-way valves are currently controlled by a pneumatic temperature controller and transmitter which will be replaced by a thermostatic valve manufactured by Amot. This change will also remove two keep warm system piping to the air coolant system. These lines are being removed to eliminate a air coolant cross flow. This change does not modify the function or operation of the diesel generator system by replacing a pneumatically operated temperature control valve with a mechanical thermostatic control valve.

The 2R43 diesel generator system and the 3-way valves being replaced are safety related. Replacing these valves does not challenge the operation or safety function of the 2R43 system or any other safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**98-044, Rev. 0**

This change replaces multipoint recorders in the control room with new digital multipoint recorders. The existing recorders have become obsolete and replacement parts for the recorders are no longer available. The new Yokogawa recorders will provide the same functionality of indicating, trending, and alarm outputs to the annunciators as the existing recorders with new updated digital equipment. The new recorders will be mounted in the same locations in the panels as the equipment being removed. Each new recorder will have the same inputs as did the recorder it is replacing.

Recorders 2T47-R626 and 2T47-R627 are safety related. These recorders will be replaced with safety-related equipment, providing the same functionality as the existing equipment. This change will not reduce the margin of safety as defined in the basis for any Technical Specification.

**99-023, Rev. 1**

Valves 2E11-F053A/B were originally designed for process control of the steam condensing mode of the RHR system. DCP-94-032 removed the steam condensing mode capability. The process controls for 2E11-F053A/B were left to allow operations to use the valves to flush the RHR lines prior to going into the shutdown cooling mode. The existing controllers for the valves are obsolete and no equivalent controllers are currently being manufactured. This modification will replace the valve control loop with a digital controller programmed to operate only in manual. This modification will remove the following components that were used to support the steam condensing mode: 2E11-R609, 2E11-R609-1, 2E11-R625, 2E11-R627A and B, 2E11-K610, 2E11-K612A/B, 2E11-K605A/B, 2E11-K604, 2E11-R607, 2E11-N008A/B, 2E11-N013, 2E11-N028, and 2E11-R604A-1/B-1. Valve positioners 2E11-K001A/B will also be replaced with a valve positioner currently being manufactured. This change does not modify the function or operation of the RHR system.

The RHR system flush function is not safety related. The flush function, used prior to going into the shutdown cooling mode, has no adverse effect on either the ability of the RHR system to perform its safety function or on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**UNIT 2 DESIGN CHANGE REQUESTS****00-006, Rev. 0**

This change modifies the 2E11 system to eliminate 2E11-FV003. This change does not modify the function or operation of this system. Elimination of the high point vent valve in favor of a threaded cap does not appreciably impact the maintenance and operation of the system.

The 2E11 RHRSW system is safety related. Elimination of the high point vent valve does not challenge or have any adverse effect on the system, or any safety-related component within the system. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**LICENSING DOCUMENT CHANGE REQUESTS****LDCR 99-094**

This change to the HNP-2 FSAR removes the safety-related classification for the fuel grapple and main hoist cable from the FSAR and resolves the differences between the SED and the FSAR.

This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**LDCR 99-121**

This change revises Unit 2 FSAR table 7.6-13 to reflect the following design change. The design change modifies the setpoint of the two pressure switches, one switch per division, that monitor PSW header pressure and start the standby pump on low header pressure. The change does not modify the function of PSW. The changed pressure switch setpoint is optimized to ensure that the setpoint: 1) is high enough that the back pressure from the other operating division cannot prevent the standby PSW pump from starting, 2) is low enough to prevent a spurious actuation of the standby PSW pump, and 3) provides adequate NPSH during all operating scenarios.

The PSW header pressure switches are safety related. This setpoint change has no adverse effect on any safety related SSC and does not reduce the margin of safety as defined in the basis for any Technical Specification.

**LDCR 99-139**

This change revises Unit 2 FSAR Chapter 8 to delete excessive detail and correct some FSAR information that was inconsistent with the correct design basis information contained in other design documents. These changes do not affect the design, function, or method of performing the function of an SSC described in the FSAR.

This change has no adverse effect on any safety related SSC and does not reduce the margin of safety as defined in the basis for any Technical Specification.

**LDCR 99-140**

This change revises Unit 1 FSAR Chapter 8 to delete excessive detail and correct some FSAR information that was inconsistent with the correct design basis information contained in other design documents. These changes do not affect the design, function, or method of performing the function of an SSC described in the FSAR.

This change has no adverse effect on any safety related SSC and does not reduce the margin of safety as defined in the basis for any Technical Specification.

**LDCR 99-141**

This change revises Unit 1 FSAR section 10.20 and Unit 2 FSAR section 9.1, specifically the safe load path outline figure is modified to reflect the change in weight of the spent-fuel storage cask from 90 to 125 tons, include additional cask storage locations, and clarify load paths over the refueling floor. The cask placement locations on the refueling floor and in the cask pit have been evaluated for the 125 ton cask and found to be acceptable. Existing load drop

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calculations envelop the heavy load changes to the figure. This change does not modify the function or operation of any SSC.

This change has no adverse effect on any safety related SSC and does not reduce the margin of safety as defined in the basis for any Technical Specification.

**LDCR 99-166**

This LDCR is to change the FSARs and TRMs to reflect that valves 1 /2 P33-F003, F006, F011, and F014 are normally open. These are isolation valves for the primary containment atmosphere H<sub>2</sub>/O<sub>2</sub> analyzer system. These valves have two functions: one for containment isolation and one for post accident sampling.

There are no Technical Specifications limits associated with this revision. The position of the valves during normal operation does not affect the containment isolation or post accident sampling functions of the valves. Therefore, no Technical Specification margins of safety are reduced.

**LDCR 99-181**

This LDCR removes the requirement in the FHA for the halon fire suppression system for the Unit 2 remote shutdown panel. The SSAR assumes all cables and equipment located in the area of the remote shutdown panel are affected by the fire as required by Appendix R.

The removal of the halon system in the remote shutdown panel does not increase the effects of the failures assumed in the analysis or reduce any failure points used to determine the margin of safety.

**LDCR 99-190**

This LDCR revises the Unit 2 FSAR to incorporate organization and responsibility changes initiated by the corporate target organization plan.

This change is administrative. The method of operation of the corporate organization has no bearing on the margin of safety defined in the basis of the Technical Specifications.

**LDCR 99-194**

This change revises FHA Appendix E, the safe shutdown system methodology. Specifically, several equipment references are changed to reflect implementation of DCRs 95-053, 95-054 and 97-028. In addition, the required actions for diesel generator loading for an Appendix R fire event, based on the safe shutdown analysis report, are added to the summary of required actions list. These changes do not affect the design, function, or method of performing the function of an SSC described in the FSAR.

This change has no adverse effect on any safety related SSC and does not reduce the margin of safety as defined in the basis for any Technical Specification.

**LICENSING DOCUMENT CHANGE REQUESTS****LDCR 2000-006**

This LDCR changes the Unit 1 and Unit 2 Emergency Plan to replace distinct emergency classification signals with a generalized description of how personnel notification will occur in emergency conditions.

The proposed changes to the Emergency Plan are administrative in nature and do not reduce the margin of safety as defined in the basis of any Technical Specifications.

**LDCR 2000-007**

This LDCR revises Unit 2 FSAR section 9.5 to replace distinct emergency classification signals with a generalized description of how personnel notification will occur in emergency conditions.

The proposed changes are administrative in nature and do not reduce the margin of safety as defined in the basis of any Technical Specifications.

**LDCR 2000-009**

This LDCR revises the Emergency Plan to eliminate and/or revise some of the current EALs based on NUMARC/NESP-007. These changes will be submitted to the NRC for approval.

The EALs in section D of the Emergency Plan, along with applicable EIPs are used to determine the appropriate emergency classification and mitigation actions to be taken once an event has occurred. The Emergency Plan serves to outline methods and actions necessary in response to declared emergency conditions. Therefore, the proposed revision of the Emergency Plan does not reduce the margin of safety as defined in the basis of any Technical Specification.

**LDCR 2000-010**

This LDCR revises the Emergency Plan to incorporate information from NRC AL 94-16, revise organization charts, incorporate latest Letters of Agreement, update EPZ population, and other editorial changes.

The proposed revision of the Hatch Emergency Plan is administrative in nature and does not reduce the margin of safety as defined in the basis of any Technical Specifications.

**LDCR 2000-013**

This LDCR changes the Unit 1 and Unit 2 Technical Specifications Bases. The change in the Bases wording for the overlap test will tie an individual SRM to its associated IRMs with respect to their proximity and provide for overlap being demonstrated when the downscale clears on the IRMs before their associated SRM reaches its upscale rod block. This tie ensures the local core power increase is indicated by both the SRMs and IRMs in that vicinity.

This method (clearing of the downscale IRM rod block) has been shown through the years of Plant Hatch operation to provide an adequate verification of SRM/IRM overlap. For these reasons, the margin of safety is not reduced by this Bases change.

**LICENSING DOCUMENT CHANGE REQUESTS****LDCRs 2000-022, 2000-023, 2000-064**

These changes to Unit 1 TRM tables T7.0-1 and T7.0-2, and Unit 2 TRM table T7.0-1 consist of a consolidation of primary containment penetration information, previously contained in overlapping, but not identical, tables in both the FSARs and the TRMs. As such, in a separate LDCR, pointers to these TRM tables replaced the FSAR containment penetration information. In addition, information that was inconsistent with the correct design basis information contained in other design documents was corrected. Finally, information was updated to reflect the conservative implementation of 10 CFR 50 Appendix J testing requirements. These changes do not affect the design, function, or method of performing the function of an SSC described in the FSAR.

This change has no adverse effect on any safety-related SSC and does not reduce the margin of safety as defined in the basis for any Technical Specification.

**LDCR 2000-026**

This LDCR changes the Unit 1 and Unit 2 TRM Tables T8.2-1. The change is to exempt closure and gagging of 2T48-F081 when B1/B2 Secondary Containment is expanded to include the Unit 2 drywell. This change expands the boundary of secondary containment to include a portion of the 2T48 seismic piping system. This portion of piping meets the same quality classification requirements as that part of the 2T48 piping that is already part of secondary containment.

There is no change to limiting conditions of operation, limiting safety system settings, or surveillance requirements; therefore, the margin of safety is not reduced.

**LDCR 2000-033**

This LDCR changes Unit 2 TRM Table T3.3.2-1. A footnote is being added to permit the required Detector Not Full In Function to be inoperable if the required SRM (or IRM) Detectors are verified to be fully inserted and their drive motors deactivated.

No Technical Specifications actions are being affected by this change. By requiring the SRM and or IRM detector to be verified by compensatory measures to be fully inserted and the drive motors deactivated, assurance is provided that the SRM and IRM Technical Specifications functions are met without the Detector Not Full In Function instrumentation logic being maintained operable. For these reasons, this change will not reduce the margin of safety.

**LDCR 2000-035**

This change revises Unit 2 FSAR section 9.1 to reflect the modified lift yoke for the HI-STAR 100 spent-fuel cask, associated with the ISFSI. The change does not modify the function of the lift yoke. The possibility of a cask drop event in the reactor building is precluded by the modified lift yoke being designed, fabricated, and tested in compliance with the applicable requirements of ANSI N14.6, including being load-tested to 300% of rated load and subjected to post-test nondestructive examination prior to use.

This change has no adverse effect on any safety related SSC and does not reduce the margin of safety as defined in the basis for any Technical Specification.



**LICENSING DOCUMENT CHANGE REQUESTS****LDCR 2000-040**

The Unit 2 Cycle 16 COLR contains cycle-specific power distribution limits. Power distribution limits for all modes of operation have been calculated using NRC-approved codes and methods in accordance with the generic fuel licensing topical report.

Power distribution limits for operation with feedwater heaters out of service are independent of the limits which apply when either the EOC-RPT system or the turbine bypass valves are out of service. Therefore, this change does not reduce the margin of safety as defined in the bases of any Technical Specification.

**LDCR 2000-041**

This LDCR changes Table 5.2-14 of the Unit 2 FSAR. A footnote is being added to state that the removal of the RPV material capsule for surveillance is being deferred for one cycle or later, depending on the results of the integrated surveillance program review by the NRC. The Unit 2 FSAR (Table 5.2-14) states that the RPV material capsule is to be removed and surveyed at 15 EFY. However, the initial Hatch Unit 2 Technical Specifications stated that the surveillance interval should be 10 and 30 calendar years. This original Technical Specifications surveillance interval was the result of a specific exemption from the Appendix H requirement received from the NRC prior to the licensing of Unit 2. Following removal of one of the Unit 2 material capsules in 1991, the schedule was removed from the Technical Specifications per the allowances of GL 91-01 and Plant Hatch Unit 2 specific Technical Specifications Amendment 118. The schedule was then relocated into the FSAR.

GE performed the markup of the FSAR for the capsule surveillance and when placing the removal schedule in the FSAR, they inadvertently used the old Appendix H schedule, unaware that Unit 2 had been granted an exemption from that schedule. This proposed change does not represent a change from the original Technical Specifications.

**LDCR 2000-082**

This change revises Unit 2 FSAR section 2.3, applicable to both Units 1 and 2, to reflect that instrumentation for wind speed and direction on the backup meteorological tower can perform its function, to provide adequate data to characterize the meteorological conditions for diffusion estimates of potential radiological releases at different levels, at either the 23 or 45 meter level. The change does not modify the function of the backup meteorological tower. Examination of relevant data indicates that adequate readings of wind speed and direction can be obtained from either the 23 or 45 meter level.

This change has no adverse effect on any safety related SSC and does not reduce the margin of safety as defined in the basis for any Technical Specification.

**LDCR 2000-085**

Revision 1 of the Hatch-2 Cycle 16 COLR removed a self-imposed requirement to operate with high-pressure feedwater heaters in service when either the EOC-RPT system or turbine bypass valve system is out of service.

Power distribution limits for all modes of operation (with and without EOC-RPT in service, with and without turbine bypass valve system in operation, with and without high-pressure feedwater

**LICENSING DOCUMENT CHANGE REQUESTS**

heaters in service) have been calculated using NRC-approved codes and methods in accordance with the generic fuel licensing topical report GESTAR-II-P-A-13 and the US Supplement. Deleting the unnecessary restriction on plant operation when high-pressure feedwater heaters are out of service does not change the requirements stated in the COLR to apply the appropriate power distribution limits during each of these operating modes. Power distribution limits for operation with feedwater heaters out of service are independent of the limits which apply when either the EOC-RPT system or the turbine bypass valves are out of service. Therefore, this change does not reduce the margin of safety as defined in the bases of any Technical Specification.

**LDCR 2000-091**

This LDCR revises the Unit 1 and 2 TRMs TLCO 3.7.2, Required Actions C.1 and C.2, for HPCI and RCIC cooler operability requirements to exclude applicability of Technical Specifications 3.0.4, if 1 of 4 coolers for HPCI or RCIC room coolers is out of service (1/2T41-B004A or B for RCIC, or 1/2T41-B005A or B for HPCI). No two (of the four) coolers in HPCI and RCIC will be allowed to be out of service at the same time for the 3.0.4 exclusion to apply. HPCI and RCIC room coolers are support systems to ensure the operability of the HPCI and RCIC systems. As such, their operability is not required without the associated function of HPCI and RCIC.

The TRM change will only exclude the TS LCO provisions of 3.0.4 from the TRM cooler operability requirements. The other provisions of TRM TLCO 3.7.2 will still apply, in that an inoperable cooler must still be returned to operable status within 30 days. HPCI and RCIC are not single failure proof systems, and thus only one cooler is required to support operability of either system. Backup for depressurization and inventory control is provided by the ADS and low pressure ECCS subsystems as stated in the Bases for HPCI (B.3.5.1 for ECCS – Operating). Note that operability of neither HPCI nor RCIC is required during plant shutdown, or when reactor pressure is less than 150 psig, and the ECCS – Shutdown bases (B.3.5.2) do not apply. The bases for TS LCO 3.5.1, Required Actions C.1 and C.2 require that RCIC be confirmed to be operable if HPCI is not operable. Given that only one of the four HPCI or RCIC room coolers are allowed to be out of service for the exclusion of LCO 3.0.4, there is no single failure that would prevent operability of both coolers in the unaffected system. Provided that one cooler is available for RCIC operability and RCIC is operable otherwise, RCIC is available as a backup system for HPCI, and the bases for the HPCI LCO is satisfied. It follows that the credited margin of safety in the Technical Specifications is not decreased by this change.

**LDCR 2000-095**

This LDCR clarifies the description of the diesel generator building HVAC System in Unit 2 FSAR paragraphs 9.4.5.2.1, 9.4.5.2.2, and 9.4.5.2.4 concerning the function of firestats and room ventilators. The diesel generator building HVAC system is not addressed or credited in the Technical Specifications.

Thus, the proposed activity will not reduce the margin of safety defined in the basis for any Technical Specification.

**LDCR 2000-096**

This activity changes the FHA to describe actions to be taken when removing the waste separation and temporary storage facility sprinkler system from service for surveillance or

**LICENSING DOCUMENT CHANGE REQUESTS**

maintenance or if found to be out of service for another reason. The activity is guidance for removal from service of the waste separation and temporary storage facility sprinkler system.

The area contains no Unit 1 or Unit 2 safe shutdown equipment and does not present a fire hazard to any other plant areas. Thus, this activity has no affect on any margin of safety.

**LDCR 2000-114**

This change to FHA section 9.2 Appendix B reinstates the operating and surveillance requirements for the yard fire hydrants and associated hydrant hose, located near the Intake Structure and the Diesel Building. These requirements were inadvertently removed in a separate LDCR. No plant modifications are associated with this change. Also, since plant procedures continue to retain the steps necessary to implement the yard fire hydrant and associated hydrant hose operating/surveillance requirements, no procedure revisions are necessary.

This change has no adverse effect on any safety related SSC and does not reduce the margin of safety as defined in the basis for any Technical Specification.

**LDCR 2000-115**

This LDCR proposes a change to Unit 2 FSAR sections 13.1 and 17.2 to reflect the revised reporting relationship and increased span of control for the SAER Manager.

The responsibilities and reporting relationship of the SAER Manager are administrative in nature and have no adverse impact on the performance of any fission product barrier and its associated safety limits as defined in the Technical Specifications. Therefore, the margin of safety as defined in the basis for any Technical Specifications is not reduced due to this proposed change.

**LDCR 2000-127**

The Unit 1 Cycle 20 COLR contains cycle-specific power distribution limits. The COLR also contains a brief description of the application of the power distribution limits, the OPRM period-based detection algorithm amplitude setpoint, and a list of references. Power distribution limits and the OPRM period-based detection algorithm setpoint in the COLR have been calculated using NRC approved codes and methods in accordance with the generic fuel licensing topical report GESTAR II-P-A-14 and the US Supplement. The applicable Technical Specifications Bases were reviewed and it was determined that the Cycle 20 limits will not reduce the margin of safety defined in the Bases.

Updating Table 15.1-1 of the Unit 2 FSAR to incorporate the cycle-specific Supplemental Reload Licensing Report by reference does not physically change any system, structure or component in the plant nor does it allow any equipment to operate in a manner which is outside of its design basis.

**MINOR DESIGN CHANGES****MDC 98-5014, Rev. 0**

This change removes PSW system 6-in. check valves 1P41F552A & C to eliminate high maintenance and replacement experienced in the past. These valves will be replaced with piping spools. This change to the diesel service water does not modify the operation of the diesels or the function of the cooling water to the diesel heat exchangers. The pressure drop across the heat exchangers will prevent a back flow of the cooling water.

The limiting conditions for operation and surveillance requirements are not affected by this change. No changes are being made that will affect how or when the PSW system or diesel generators are operated.

**MDC 00-5001, Rev. 0**

This MDC removes air release valves 2P14-F332A-D and associated piping and the installation of blind flanges in their place. The modification has been evaluated and the hydraulic analysis performed in support of the evaluation concluded that the line filling loads will be insignificant and there is no potential for any significant water hammer even if a slug of air is pushed through the system at pump start. Air removal from the system is controlled per plant procedure.

Based upon review of Technical Specification 3.7.2 and Bases section B3.7.2, the proposed modifications to the PSW system do not have any impact on the system functions. The removal of the ARVs from the PSW header was evaluated and determined to be acceptable per REA HT97-630. Hence, the proposed activity will not reduce the margin of safety as defined in the basis for any Technical Specifications.

**MDC 00-5003, Rev. 1**

This MDC removes the Unit 1 PSW ARVs. The ARVs were originally intended to perform the air release function to eliminate the potential for water hammer. However, it has been determined that the ARVs will not perform that function in their present location. It has also been determined that line filling loads will be insignificant and there is no potential for significant water hammer even if a slug of air was pushed through the system at pump start. Based on the review of Technical Specification 3.7.2 and Technical Specifications Bases section B3.7.2, the proposed modifications to PSW do not have any impact on system function.

The removal of the ARVs was evaluated to be acceptable and will not reduce the margin of safety as defined in the basis for any Technical Specifications.

**TEMPORARY MODIFICATIONS****TM 1-00-008**

This TM disables control rod position indication for control rod 06-35 positions 08, 18, 28, 38, and 48. No new modes of operation are introduced by this TM. Operation of the CRD system remains unchanged. Technical Specifications 3.1.3, Control Rod Operability, and SR 3.1.3.1, which determine the position of each control rod, will still be required to be met. TRM Table T3.3.3-1, Function 3, Rod Position Information System, requires the full-core display and the four-rod display to be operable.

This TM will not prevent these Technical Specifications and TRM requirements from being met.

**TM 1-00-017**

This TM provides an acceptable temporary power source for EDG 1B battery charger 1N for sufficient time to depower and perform PM on the normal power source, EDG 1B MCC 1B, without adversely affecting the EDG 1B battery system. Only one of two battery chargers is required for the EDG battery system to maintain operability.

The Technical Specifications LCO requirements will continue to be met. In the unlikely event of a loss of a battery charger while this TM is in place, the original designed power source for both chargers will be restored within the time constraints of the battery capacity and within the allowable time to satisfy LCO actions. Also, this TM will only be performed during scheduled maintenance work on EDG 1B, which will be out of service.

**TM 1-00-019**

This TM provides an alternate PSW supply to the Unit 1 drywell coolers during the Unit 1 Fall 2000 RFO. The TM is route a 3-in. hose from a tap on the stator cooling supply to a tap on the drywell cooling supply. The TM is to assist in personnel safety by helping to cool the drywell while a section of PSW supply is tagged out for maintenance. Plant equipment important to safety will continue to operate as before.

The proposed activity does not affect FSAR identified margins such as peak clad temperature, offsite doses, or any other Technical Specifications margin of safety.

**TM 1-00-022**

This TM ties the Unit 2 service air system to the Unit 1 service air system via temporary hose and hose station valves on the refueling floor. Unit 2 service air will be used to supply pressure to the transfer canal gate seals normally supplied by the Unit 1 service air system. Technical Specifications Bases B 3.7.8 is related to the minimum water level specified for the spent fuel pool, which is established to ensure that a fuel handling accident does not result in radiological doses that exceed regulatory guidelines.

This activity will not be initiated or continued during fuel movement, which assures the Technical Specifications margin of safety is maintained.

**TM 1-00-024**

This TM caps a pipe and open links in the CO<sub>2</sub> system for diesel generator room 1C. The effect is that CO<sub>2</sub> will not be available to extinguish a fire in diesel generator room 1C and the roll down fire door and dampers will not close in the event of a fire. Testing of the low pressure CO<sub>2</sub> system is required per Appendix B of the FHA.

**TEMPORARY MODIFICATIONS**

Written procedures were established for this activity as required by Technical Specifications; the margin of safety is maintained by the posting of a compensatory fire watch.

**TM 1-00-025**

This TM disables the rod drift input from control rod 46-15 and allows the alarm to be reset. This will continued monitoring of a rod drift condition for all other control rods which are not also disabled. Implementation of this TM will not affect the operability of any control rod. Rod drift detection for rod 46-15 is accomplished through other established methods. The TM will be implemented by installing a jumper on the probe-buffer card for rod 46-15.

The rod drift alarm function is not required by any Technical Specifications. Consequently, no margin of safety is reduced and no unreviewed safety question is introduced.

**TM 2-00-010**

This TM opens links to prevent isolation of valves 2E11-F015A/B on A Group J isolation signal. Group J isolation is not required in reactor Mode 4 or 5. Preventing isolation of valves 2E11-F015A/B increases the safety of the plant by eliminating the possibility of a spurious Group J isolation signal, which in the past has resulted in the loss of a loop of shutdown cooling. The Unit 2 Technical Specifications do not require the Group J isolation signal to be operable in Mode 4 or 5.

Therefore, this TM complies with Technical Specifications requirements and does not reduce the margin of safety.

**TM 2-00-013**

This TM installs jumpers to bypass the scram test toggle switch for control rod 30-15 on MCR panel 2H11-P610. This action is being taken to preclude the possibility of the individual rod scrambling on line without operator action, as it did in a scram time test. This modification does not affect the ability of the affected rod to respond to an actuation of the RPS.

No margin of safety is affected by this modification.

**TM 2-00-022**

This TM allows valves 2E11-F103A, 2E11-F104A, and 2E21-F020A to be throttled open as necessary to provide a continuous vent path for the "A" loops of the RHR and CS systems.

Because the existing requirements as contained in the applicable Technical Specifications Limiting Conditions for Operations, Bases, and CFR will continue to be met with this TM in effect, it cannot reduce the margin of safety as defined the basis of any Technical Specification.

**TM 2-00-025**

This TM closes the RFP suction pressure instrumentation isolation/root valve which will disable the recirculation runback speedlimiter due to low RFP suction pressure. This activity allows instrumentation currently in a degraded state to meet the original intended function of measuring RFP suction pressure. The equipment being modified is nonsafety-related and failures are covered by the safety analysis (Unit 2 FSAR chapter 15).

No margin of safety is impacted by the implementation of this TM.

**PLANT PROCEDURES****17SP-021400-PK-1-2S, Rev. 0**

(See the summary for DCR 98-011.) This DCR functional test will confirm proper operation of only one portion of the DCR modification which applies to the interposing relay that was installed in the close coil circuitry of the safety-related 4160-V breakers associated with emergency buses 2E, 2F, and 2G. The performance of the functional test will not affect any component that is electrically fed by the 4160-V frame being tested since the 4160-V breaker will not be racked in.

Since the safety-related 4160-V breaker and its load will not be in service, the margin of safety as defined in the basis for any Technical Specifications will not be reduced.

**17SP-121299-00-1-2S, Rev. 0**

This procedure addresses the operations required to achieve the plant configuration necessary to perform the Noble Chem application. This procedure involves removing pipe/tubing caps, opening valves, and isolating sample lines as described in the safety evaluation "Description."

During noble chem application, plant operations will not be significantly affected and compliance with the Technical Specifications will be maintained. Thus, safety equipment availability will not be affected.

**34SO-E11-010-2S, Rev. 28**

This procedure revision provides operations personnel with the option of establishing a continuous vent path for controlling RHR pressure. The revision will allow valves to be opened and left open to provide a continuous vent path for the "A" and "B" loops of the RHR system. All required safety functions, including primary containment isolation, low pressure emergency core cooling system injection, and containment cooling, can be performed as designed and analyzed with the valves open.

Because the existing requirements of the Technical Specifications LCOs and Technical Specifications Bases will be met by the procedure revision, these changes do not reduce the margin of safety as defined in the basis for any Technical Specifications.

**34SP-011100-BA-1-2S, Rev. 0**

This safety evaluation applies to TER 99-003, Rev. 1, under which Unit 2 will increase power to 2735 CMWT (99% rated thermal power) and 2763 CMWT (100% rated thermal power). RPV pressure also will be increased to approximately 1045 psig while in these test conditions. The power and pressure increases, data collection and testing will be controlled by this procedure. Neither safety limits, limiting safety system settings, nor limiting conditions for operation are changed by or for the proposed testing. Protective action setpoints, for example, for a scram on high reactor pressure or Group 1 isolation on low reactor pressure, are not changed by or for this testing.

The various margins of safety represented by those limits, requirements, and actuation setpoints are not reduced by this TER.

**34SP-050200-BC-1-2S, Rev. 0**

This safety evaluation also applies to TER 00-02. The procedure and TER provide instructions to isolate jockey pump system flow into the "A" loop of the Unit 2 CS system. The system will

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be isolated in order to determine which CS and/or RHR system valves are leaking and causing the "A" loops of these systems to be pressurized above normal jockey pump system pressure. Should indication that the "A" loop of CS not full be received during this activity, the test will be terminated and the subsystem filled and vented. These actions, required by the special purpose procedure, can be completed in one to two hours. Furthermore, only one of the four subsystems can be rendered inoperable.

Hence, the margin of safety as defined in the basis for any Technical Specification; that is, three of four subsystems operable and one of four subsystems inoperable for less than 7 days, can and will be maintained by this activity.

**42SP-051100-PR-1-1S, Rev. 0**

The purpose of this new procedure is to test more frequently the HPCI system trip logic that failed to operate properly during the water level transient that occurred as a result of a reactor scram on 1/26/2000. The test, in effect, will be a logic system functional test for the reactor water high level trip logic system, to be performed monthly instead of once every 18 months as required by the Unit 1 Technical Specifications. The new testing will not make the system inoperable for longer than allowed by Technical Specifications.

Because the requirements of Technical Specifications will be met, it follows that the existing margin of safety will be preserved by the new test procedure.

**42SP-082100-OR-1-2S, Rev. 0**

This special purpose procedure is to isolate valve 1E11-F015A, in order to determine if the amount of leakage through the valve is sufficient to be the cause of the RHR system pressurization due to inleakage from the RCS. Performance of this procedure will not impact any margin of safety associated with the LPCI system. Primary containment integrity will be assured per the procedural prerequisites in that the LPCI injection valve will be closed and deactivated prior to carrying out any action which will affect the integrity of the outboard primary containment isolation boundary.

**42SP-110700-OR-1-2S, Rev. 0**

This procedure is to operate the Unit 2 B RHRSW pump and the Unit 2 A RHRSW pump while the traveling water screen is being repaired. This activity involves operating RHRSW pumps by their normal operating procedures. It also involves operating a TWS continuously while the other traveling water screen is being replaced.

The basis for TS 3.7.1 mentions a limit on containment temperatures and pressure of 340°F and 62 psig, respectively. With two RHRSW pumps in one loop in operation in a post accident environment, each at 4000 gpm, the worst-case temperatures and pressures would be 210°F and 37 psig, respectively. Since this activity will require two pumps to be in operation per normal system operating procedures, this will ensure that the required number of pumps is in operation during the course of the test. This is conservative with respect to the margin of safety.

**42SV-E41-002-1S, Rev. 11**

The procedure is being altered to allow the logic test to be performed while a high torus water level condition exists. This change will allow the opening of a link to defeat the HPCI



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CST-to-torus suction swap signal. This logic change occurs while HPCI is unavailable and isolated.

This change does not cause the unavailability required by Technical Specifications and will be restored prior to the unit condition in which HPCI could be made available. Therefore, it does not reduce the safety margin of any Technical Specification.

**52GM-F15-001-0S, Rev. 0**

This new procedure is to disable interlock switches LS1 and LS2 on both Refueling Platforms 1F15-E003 and 2F15-E003. The purpose is to allow the Refueling Platform to be used as a work platform during prescribed non-core alteration activities. As addressed in Technical Specifications Bases B3.9.1, refueling interlocks prevent an inadvertent criticality by preventing loading of fuel into the core with any control rod withdrawn.

Administrative controls will prevent an inadvertent criticality due to control rod withdrawal; therefore, margin of safety will be maintained.

**52GM-MNT-021-0S, Rev. 0**

This new procedure is for raising and temporary support of the center roof plugs over the RHRSW pumps to provide a means of providing additional cooling of this area of the intake structure during times of high ambient temperature and their return when needed. All safety-related equipment will continue to operate as designed and in accordance with current plant procedures.

Adding additional cooling to the intake structure interior will actually increase the reliability of the RHRSW system, thus the margin of safety is not reduced.

**52PM-C71-001-0S, Rev. 7**

This procedure revision will permit maintenance activities to be performed without interrupting the comfortable working environment by maintaining normal reactor building and refueling floor ventilation while the RPS is temporarily shut down. The affected unit will be restricted such that fuel damage cannot occur, and the non-affected unit will continue to be served by fully operable secondary containment and SBGT systems.

Since systems will continue to operate as designed or else the unit will be restricted to conditions where affected systems are not needed to control radiological releases, there can be no decrease in the margin of safety.

**TEST OR EXPERIMENT REQUESTS**

**TER 99-003, Rev. 1**

See the summary for procedure 34SP-011100-BA-1-2S, Rev. 0.

**TER 00-001, Rev. 0**

See the summary for procedure 17SP-021400-PK-1-2S, Rev. 0.

**UNIT 1 AND UNIT 2 RELOAD EVALUATIONS****Unit 2 Cycle 16 Reload Evaluation**

In conjunction with the cycle-specific COLR, FSAR Tables 1.6-1, 4.3-1, and 15.1-1 are updated every reload to add the cycle-specific reference for the Supplemental Reload Licensing Report. The results of the Hatch-2 Cycle 16 RLA show that the conclusions about the health and safety of the public as reported in the FSAR are unaffected by the fuel mix and core configuration.

**Unit 1 Cycle 20 Reload Safety Evaluation**

A RLA is performed prior to the startup of each operating cycle. The Unit 1 Cycle 20 RLA was based on the assumed core loading pattern, called the reference loading pattern (RLP). The results of the RLA determine the power distribution limits to be incorporated in the Unit 1 Cycle 20 COLR. Plant operation in accordance with those limits ensures that the plant can operate safely and not pose any undue risk to the health and safety of the public and that the conclusions regarding the radiological consequences of an accident previously evaluated in the FSAR remain valid for Cycle 20 operation. The Cycle 20 RLA, which was performed with NRC-approved methods, shows that there will be no violation of any safety limit or specified acceptable fuel design limit during normal or abnormal operating conditions. The Cycle 20 RLP assumed in the RLA were compared to the actual values for these parameters and it was determined that they meet all criteria for the accepted deviation from the reference core design.

Therefore, it is concluded that neither the Cycle 20 reload fuel nor the Cycle 20 final core loading pattern will reduce the margin of safety as defined in the bases of any Technical Specification.

**MISCELLANEOUS****Clearance 1-99-534**

The activity to which this evaluation applies is the maintaining of Clearance 1-99-543 active for greater than 12 months. This clearance is on valve 1E41-F022, turbine exhaust drain line stop check valve, keeping it in the CLOSED position to satisfy RAS 1-99-206. Maintaining 1E41-F022 in the CLOSED position maintains primary containment in the condition required by Technical Specifications in order to maintain the required safety margin. Maintaining 1E41-F022 in the CLOSED position does not impact HPCI system capabilities and operability.

Therefore, this activity will not reduce the margin of safety as defined in the basis for any Technical Specifications.

**CR C0008935**

During 1RFO19, a lamp/reflector assembly was lost in the annulus region of the reactor vessel. The assembly was not recovered and will remain in the reactor vessel either intact or fragmented. A report prepared by GE concludes that malfunctions of the control rods, control rod drives, recirculation pumps, and RWC pumps and valves, and nuclear instrumentation, and chemical attack on the vessel or vessel internals will not occur due to the presence of the lost parts. Therefore, these components and systems remain capable of performing their specified safety functions as required in the Technical Specifications and Technical Specifications Bases.

**REA HT-97615**

This REA supports the changes implemented by LDCRs 2000-22, 23, & 64. This REA evaluated the design basis and installation of the TIP Nitrogen Purge System on Units 1 and 2 to confirm the piping and isolation valves conform to the design requirements of Regulatory Guide 1.11 for instrument lines. The TIP purge solenoid valves were downgraded to nonsafety-related and deleted from the containment isolation valve lists in the FSAR and TRM, and the TIP purge check valves provide single containment isolation valve capability.

This activity made no physical changes and the function and reliability of the TIP Nitrogen Purge System was not affected. The limitations described in the Technical Specifications are not affected since this activity does not alter the function or availability of any safety related system. No acceptance limits are increased and no failure points are decreased such that any margin of safety is reduced.

**REA HT-96676, Rev. 1**

This REA applies to ABN 98-398. This change allows the replacement of carbon steel small bore piping with stainless steel in the Plant Service Water (PSW) and Residual Heat Removal Service Water (RHRSW) systems to reduce the rate of microbiologically influenced corrosion (MIC). This change does not modify the function or operation of these systems.

The RHRSW and PSW systems are safety related. This change will have no adverse affect on any safety-related system or component. This change does not reduce the margin of safety as defined in the basis for any Technical Specification.

**DATA TABULATIONS AND UNIQUE REPORTING REQUIREMENTS**

**OCCUPATIONAL PERSONNEL RADIATION EXPOSURE FOR 2000**

This information was compiled to satisfy the requirement of Edwin I. Hatch Nuclear Plant Unit 1 and Unit 2 Technical Specification 5.6.1 and assure compliance with the CFR as set forth in applicable sections of Title 10. Special attention was afforded to the methods prescribed by the Commission in RG 1.16 to provide meaningful information as to the degree and circumstances of exposure of personnel at this facility. An indication of the effectiveness of the plant radiation program may be inferred from the large number of individuals having no measurable exposure or minimal dose.

The time period covered by this tabulation extended from January 1, 2000, through December 31, 2000. Individual exposures as indicated by ED, were recorded daily with the use of an ALARA Computer System. These exposures were tabulated on a daily basis. The corresponding ED results as recorded in the electronic dosimetry files were supplanted by thermoluminescent dosimetry results as the data became available from the processing vendor. It should be noted, however, that radiation exposure results presented in this report are based on EDs (e.g., estimated readings).

Each person listed in the electronic dosimetry files was assigned a "usual" job category based on his/her daily activities. The six job categories are identified in the following table. Running totals of dose acquired in each of these categories were maintained for each person in his/her dosimetry file. Each dosimeter reading, in addition to being retained for exposure records, is added to the total, representing the cumulative dose in the appropriate job category.

The assumption involved in this method of accounting for exposure in different tasks is that all exposure acquired in job categories other than the "usual" will be documented by a radiation work permit.

Further delineation regarding the number of persons and amount of exposure of people in different job categories by various personnel categories is indicated using the standard reporting format of RG 1.16. Each personnel dosimetry file contains the required personnel category information. The individual dose totals for each job were used by ALARA Computer to compute the number of man-rem indicated in each group. Backup electronic files were maintained for redundancy in the case of destruction of temporary inaccessibility suffered by the files.

By the use of the ALARA Computer System, dosimetry information was compiled, retained, and tabulated in such a manner as to satisfy the applicable regulations and plant Technical Specifications. The system is organized to provide the information in the format specified by these requirements and the Regulatory Guides.

**REGULATORY GUIDE 1.16 INFORMATION  
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Work and Job Function	Number of personnel > 100 mrem			Total man-rem *		
	Station	Utility	Contractor	Station	Utility	Contractor
<b>ROUTINE PLANT MAINTENANCE</b>						
MAINTENANCE AND CONSTRUCTION	132	4	314	38.055	1.248	108.343
OPERATIONS	9	0	0	3.598	0.002	0.001
HEALTH PHYSICS	31	0	15	8.336	0.012	5.252
SUPERVISORY	13	0	3	4.265	0.125	1.408
ENGINEERING	6	1	5	3.282	1.071	2.784
<b>ROUTINE OPERATIONS AND SURVEILLANCE</b>						
MAINTENANCE AND CONSTRUCTION	0	0	0	0.129	0.000	0.020
OPERATIONS	61	0	0	22.043	0.000	0.000
HEALTH PHYSICS	58	0	37	19.691	0.051	12.666
SUPERVISORY	0	0	0	0.334	0.028	0.008
ENGINEERING	0	0	1	0.001	0.000	0.206
<b>INSERVICE INSPECTION</b>						
MAINTENANCE AND CONSTRUCTION	1	0	6	0.404	0.046	2.464
OPERATIONS	0	0	0	0.000	0.000	0.000
HEALTH PHYSICS	2	0	0	0.796	0.000	0.080
SUPERVISORY	0	0	0	0.030	0.007	0.070
ENGINEERING	0	0	36	0.088	0.195	26.764
<b>SPECIAL PLANT MAINTENANCE</b>						
MAINTENANCE AND CONSTRUCTION	112	3	288	38.680	0.675	108.209
OPERATIONS	8	0	0	3.230	0.000	0.000
HEALTH PHYSICS	23	1	23	6.426	0.184	7.811
SUPERVISORY	7	0	1	1.987	0.094	1.017
ENGINEERING	4	1	8	1.879	0.667	3.135

**REGULATORY GUIDE 1.16 INFORMATION  
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Work and Job Function	Number of personnel > 100 mrem			Total man-rem *		
	Station	Utility	Contractor	Station	Utility	Contractor
<b>WASTE PROCESSING</b>						
MAINTENANCE AND CONSTRUCTION	2	0	4	0.454	0.000	1.348
OPERATIONS	0	0	0	0.002	0.000	0.000
HEALTH PHYSICS	3	0	7	1.179	0.000	3.749
SUPERVISORY	0	0	0	0.014	0.000	0.000
ENGINEERING	0	0	0	0.002	0.000	0.024
<b>REFUELING OPERATION</b>						
MAINTENANCE AND CONSTRUCTION	4	0	67	1.034	0.023	23.642
OPERATIONS	1	0	0	0.587	0.000	0.000
HEALTH PHYSICS	0	0	2	0.109	0.000	0.374
SUPERVISORY	0	0	0	0.454	0.000	0.003
ENGINEERING	0	0	6	0.093	0.065	1.389
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<b>TOTALS</b>						
MAINTENANCE AND CONSTRUCTION	251	7	679	78.756	1.992	244.026
OPERATIONS	79	0	0	29.460	0.002	0.001
HEALTH PHYSICS	117	1	84	36.537	0.247	29.932
SUPERVISORY	20	0	4	7.084	0.254	2.506
ENGINEERING	<u>10</u>	<u>2</u>	<u>56</u>	<u>5.345</u>	<u>1.998</u>	<u>34.302</u>
	477	10	823	157.182	4.493	310.767

**GRAND TOTAL = 472.442 MAN-REM**

\*The total radiation exposure of the above personnel constitutes 100% of the site's exposure for the year.