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LRN-00-0495

PSEG Nuclear LLC

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Gentlemen:

SIMULATION FACILITY CERTIFICATION REPORT
SALEM AND HOPE CREEK GENERATING STATIONS
DOCKET NOS. 50-272, 50-311, AND 50-354

This letter forwards the attached four-year Simulator Certification Report, as specified by 10CFR55.45 (b) (5) (ii), for the Salem and Hope Creek Generating Stations.

In accordance with 10CFR55.45 (b) (5) (ii), PSEG Nuclear LLC hereby certifies to the Commission that the PSEG Simulation Facility, consisting of plant-referenced simulators, as defined in 10CFR55.4, for Salem and Hope Creek Generating Stations, meets the Commission's regulations.

PSEG Nuclear LLC requests that its simulator certification period be changed to a calendar year basis with the four-year certification period to begin on January 1, 2001.

If you have any questions regarding this transmittal, please contact Brooke Knieriem, Licensing, at (856) 339-1782.

Sincerely,

J. F. McMahon
Director – QA/Nuclear Training/
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Enclosure

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Four-Year Simulation Facility Certification Report
Salem and Hope Creek Generating Stations
December 10, 2000

Introduction

This four-year certification report for Salem and Hope Creek Generating Stations is being submitted pursuant to the requirements of 10CFR55.45(b)(ii). The Salem and Hope Creek Simulators were certified in accordance with 10CFR55.45 in December 1996.

Uncorrected Performance Test Failures

There were no uncorrected performance test failures as of the date of this report.

Description of Performance Testing Completed

All testing for the Salem and Hope Creek Simulators was completed as described in the Simulation Certification Report for Salem and Hope Creek Generating Stations (ref: PSEG Letter LRN-96-0358, dated December 10, 1996). Operability testing was performed in accordance with PSEG Nuclear LLC's Systematic Approach to Training (SAT) based training programs.

Description of Tests to be Completed During the Subsequent Four-year Period and Schedule for the Conduct of Approximately 25% of the Performance Tests Per Year For the Subsequent Four Year Period

The performance test plan for the four-year period 2001-2005 will be as described in the Simulation Certification Report for Salem and Hope Creek Generating Stations (referenced above) including the conduct of 25% of the performance tests per year for the period 2001-2005. Please note that since PSEG Nuclear's test program is based upon our SAT based program, malfunction tests are performed multiple times in a given period. The performance test schedules for Salem and Hope Creek for the four-year period 2001-2005 are provided below:

Performance Test Schedules – Salem

Operability Tests

Every Certification Year

OP Operability Tests

Steady State Tests

Three distinct power levels for which heat balance data is available.

Transient Tests

The following set of tests shall be run from 100% power, steady-state poisons and decay heat unless otherwise noted in the test description. When the benchmark contains known "follow-up" operator actions, the test shall use the same actions.

- Manual reactor trip
- Simultaneous trip of all feedwater pumps
- Simultaneous closure of all main steam isolation valves
- Simultaneous trip of all reactor coolant pumps
- Trip of any single reactor coolant pump from maximum power which does not result in immediate reactor trip
- Main Turbine trip from maximum power which does not result in immediate reactor trip
- Runback
- Maximum size reactor coolant system rupture
- Maximum size reactor coolant system rupture combined with loss of all off-site power
- Maximum size unisolable main steam line rupture
- Slow primary system depressurization to saturated condition
- Slow primary system depressurization to saturated condition using pressurizer relief or safety valve stuck open (inhibit activation of high pressure Emergency Core Cooling System)
- Load rejection
- Steam Generator Tube Rupture
- ATWT
- ATWT with simultaneous loss of all feedwater

Functional Tests

Years 1 & 3

CC	CCW
SW	SSW
CV	CVCS
RD	Control Rods
RP	Protective System Setpoints/Logic
EL	Electrical Distribution
TU	Main Turbine
GE	Main Generator
NI	Nuclear Instrumentation
RC	RCS
PR	Pressurizer
MS	Main Steam
RM	Radiation Monitoring
PC	Plant Computer Systems

Years 2 & 4

CW	Circulating Water
CN	Condensate
HD	Heater Drains
CA	Instrument Air / Service Air
TA	Turbine Auxiliaries
SG	Steam Generators
VC	Containment Systems
DG	Diesel Generators
AF	Auxiliary Feedwater
FP	Fire Protection
BF	Main Feedwater
PI	Protection/Instrument Power
RH	Residual Heat Removal

Performance Test Schedules – Hope Creek

Operability Tests

Every Certification Year

OP Operability Tests

Steady State Tests

Three distinct power levels for which heat balance data is available.

Transient Tests

The following set of tests shall be run from 100% power, steady-state poisons and decay heat unless otherwise noted in the test description. When the benchmark contains known "follow-up" operator actions, the test shall use the same actions.

- Manual reactor scram
- Simultaneous trip of all feedwater pumps
- Simultaneous closure of all main steam isolation valves
- Simultaneous trip of all recirculation pumps
- Single recirculation pump trip
- Main Turbine trip from maximum power which does not result in immediate reactor scram
- Runback
- Maximum size reactor coolant system rupture
- Maximum size reactor coolant system rupture combined with loss of all off-site power
- Maximum size unisolable main steam line rupture
- Simultaneous closure of all main steam isolation valves combined with single stuck open safety or relief valve (inhibit activation of high pressure Emergency Core Cooling Systems)
- ATWS

Functional Tests

Year 1 & 3

AD	Auto Depressurization
CC	Computer System
CR	Reactor Core
CU	Reactor Water Cleanup (RWCU)
CX	Condensate Storage/Transfer
EC	Emergency Core Cooling Systems (ECCS)
EG	Main Generator
FW	Condensate and Feedwater
HR	Hydrogen Recombiner
IA	Instrument Air
MS	Main Steam
OG	Off Gas
RC	Reactor Core Isolation Cooling (RCIC)
RM	Radiation Monitoring
RR	Reactor Recirculation
RW	Radwaste
SL	Standby Liquid Control (SBLC)
TU	Main turbine

Years 2 & 4

AN	Annunciators
CD	Control Rod Drive Hydraulic (CRD)
CS	Core Spray System
CW	Cooling Water Systems
DG	Diesel Generators
ED/ER	Electrical Distribution
EP	Emergency Operating Procedures
HP	High Pressure Coolant Injection (HPCI)
HV	Heating & Ventilation
MC	Main Condenser
NM	Neutron Monitoring
PC	Primary Containment
RH	Residual Heat Removal (RHR)
RP	Reactor Protection System
RS	Rod Sequence & Control (Including RWM)
RZ	Redundant Reactivity Control System (RSCS)
TC	Turbine Control