

ENCLOSURE 1

EXAMINATION REPORT - 50-261/OL-88-01

Facility Licensee: Carolina Power and Light Company
P. O. Box 1551
Raleigh, NC 27602

Facility Name: H. B. Robinson Steam Electric Plant

Facility Docket No.: 50-261

A makeup simulator examination was administered at H. B. Robinson Steam Electric Plant near Hartsville, SC.

Chief Examiner: *D. C. Payne* 6/20/88
D. C. Payne Date Signed

Approved by: *Kenneth E. Brockman* 6-21-88
Kenneth E. Brockman, Section Chief Date Signed
Operator Licensing Section 2

Summary:

Examination on May 23, 1988.

A makeup simulator examination was administered to one candidate who passed.

Based on the result described above, one of one SRO's passed.

REPORT DETAILS

1. Facility Employees Contacted:

*Steve Allen, Nuclear Training Supervisor
*Dave Neal

*Attended Exit Meeting

2. Examiners:

*D. C. Payne
M. J. Morgan

*Chief Examiner

3. Exit Meeting

At the conclusion of the site visit the examiners met with representatives of the plant staff to discuss the results of the examination.

There was one generic operator weakness noted during the conduct of the simulator examination. Both the candidate and the licensed operators supporting the examination process demonstrated a marked disregard for pulling out and consulting various plant procedures during the course of the 17 simulator events evaluated during this examination. Not one Annunciator Panel Procedure (APP), Operating Procedure (OP) or General Procedure was reviewed during the entire exam which included a range of normal, abnormal and emergency situations. It should be noted that usually an appropriate Abnormal Operating Procedure (AOP) was consulted when applicable and always the emergency flow charts were used (without apparent difficulty) when called upon.

OMM-1, "Conduct of Operations" specifically requires the operator to have a procedure in hand when performing plant operations except in emergency situations. It is understood that certain immediate operator actions may be taken in off-normal/abnormal situations without a procedure in hand; however, in this case no effort was made to confirm completion of all required immediate actions nor to perform any subsequent follow-up actions. For normal evolutions, there is no reason for not having the procedure in hand while manipulating the controls. While no significant oversights were noted, there is concern that substantive precautions, limitations and mitigating measures included in the plant's procedures may be overlooked if the operators rely upon memory alone to operate the plant.

The facility is counseled to investigate this apparent lack of procedure use among its operating staff as well as review the training program to ensure that proper procedure usage is taught and reinforced during qualification and requalification training.

The cooperation given to the examiners was noted and appreciated.

The licensee did not identify as proprietary any of the material provided to or reviewed by the examiners.

ENCLOSURE 2

SIMULATION FACILITY FIDELITY REPORT

Facility Licensee: Carolina Power and Light Company
Facility Licensee Docket No.: 50-261
Facility Licensee No.: DPR-23
Operating Tests administered at: H. B. Robinson Steam Electric Plant
Operating Tests Given On: May 23, 1988

During the conduct of the simulator portion of the operating tests identified above, the following apparent performance and/or human factors discrepancies were observed:

1. In general, the method for failing major equipment is complicated and tedious. For example, to fail a main turbine circ water pump, the simulator operator may need to override the pump from starting automatically and manually, override the pump discharge valve indication closed, as well as override one or more annunciators off. To fail a Diesel Generator is even more complicated since various indications like voltage and RPM must also be overridden. The instructor must be very experienced with the simulator in order to remember all the overrides needed to properly simulate the many different equipment failures possible in the plant. Despite about 12 different overrides in place, the instructor was unable to prevent indication to the candidate that the diesel had auto started when in fact the scenario called for it to fail to start. The facility should develop the capability to fail all major components (including appropriate indications and alarms) with a single command.
2. The simulator model for surveillance testing the Diesel Generators does not reflect how the test is done by procedure. The model simulates an operator taking local control and pre-lubing the diesel prior to manually starting (old method); where as, the procedure now requires remote starting from the Main Control Board. The computer modeling should be updated to coincide with current plant testing procedures.
3. The steam generator blowdown radiation monitoring (RM) instrumentation does not mimic the instruments installed in the plant. The simulator currently has a common RM for measuring activity from all three steam generators (R-19) where as the plant has individual RM's installed on each steam generator blowdown line (R-19A,B&C). As a result, during a simulator exam, the operator must ask the instructor which steam generator the R-19 alarm is on. The instrumentation should be upgraded to reflect current plant designs.