UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

ENCLOSURE 1

EXAMINATION REPORT NO. 50-413/92-301

Facility Licensee: Duke Power Company

Facility Name: Catawba Nuclear Station

Facility Docket Nos.: 50-413 and 50-414

An examination was administered at the Catawba Nuclear Station near Clover, South Carolina.

Chief Examiner: Edwin Lea for — 7/21/92
Garry A. Harris — Date signed

Approved By: S. J. Hopper for — 7/21/92
Charles A. Casto, Chief — Date signed
Operator Licensing Section 2
Operations Branch
Division of Reactor Safety

SUMMARY

Scope: An operating test was administered to one Reactor Operator (RO) applicant during the week of June 1, 1992.

Results: The RO candidate passed this examination.

Strengths: Strengths were identified in the areas of GFES results, and plant housekeeping.

Weaknesses: Weaknesses were identified in the areas of operator performance (paragraph 3c), and procedure content (paragraph 3d).

REPORT DETAILS

1. Facility Personnel Attending Exit

   W. Barron, Director, Operations Training
   S. Bradshaw, Shift Operations Manager
   S. Frye, Manager, Operations Support
   M. Geddie, Superintendent, Operations

2. Examiner

   G. Harris, Chief Examiner, NRC, Region II

3. Discussion

   a. Examination Results

      (1) On June 2, 1992, an operating test was administered to one Reactor Operator (RO) candidate. The RO candidate passed.

      (2) The most recent Generic Fundamentals Examination was administered in February 1992. Eight of eight candidates passed these examinations.

   b. Reference material

      The reference material sent to develop the examination was adequate.

      Facility Job Performance Measures (JPMs) were adequate. Six of the ten JPMs administered were newly developed or modified to contain alternate success paths, sequence and/or time critical steps. Three of the JPMs were developed using the station's risk based inspection guide.

   c. Candidate Performance

      Overall candidate performance was adequate. However, weaknesses were observed in the candidate's observation of control board indications, and attention to detail while performing important calculations. For example, JPM No. 1, Isolation of a Ruptured/Faulted Steam Generator, step 11, required the candidate to isolate the affected generator by closing a stuck open power operated relief valve (PORV) or the associated isolation valve. The candidate failed to recognize that the PORV had stuck open, and subsequently, did not attempt to close the PORV or its associated isolation valve

JPM NO. 7, Perform a Shutdown Margin calculation, required the candidate to calculate the shutdown margin for cold shutdown conditions. The candidate failed to correctly calculate the required boron concentration due to improper use of the boration tables.

d. Procedural Problems

(1) OP-26, Startup of a Reactor Coolant Pump, step 2.7, stated that the operator should locally verify indications for proper component cooling water flow. The step did not state which flow element should be monitored or what flow rates were acceptable.

(2) Facility developed JPM No. 7, Establish an Adequate Shutdown Margin, did not include several steps that were contained in Enclosure 4 of OP/O/A/6100/06, Reactivity Balance Calculation. In addition, the plant operations and training personnel had difficulty utilizing the current version of this procedure. Accurate calculation of shutdown margin is essential to minimizing shutdown risk. The licensee intends to revise this procedure. This item will be tracked under IFI-413/92-301-01.

e. Material Condition of the Plant

The areas of the plant observed during the performance of the JPMs were generally clean and well organized. The equipment appeared to be properly maintained, and in most instances, adequately identified. One exception to this was noticed during the performance of a JPM. JPM No. 3, Locally Operate Steam Generator Power Operated Relief Valves, required the candidate to locate and manually open one of four S/G PORVs. The candidate's performance of the task was jeopardized because the PORVs were inadequately labelled.

4. Exit Meeting

At the conclusion of the site visit, the examiner met with representatives of the plant staff, to discuss the results of the examination. The licensee did not identify as proprietary any material provided to or reviewed by the examiners.

Item Number	Description
50-413/92-301-01	Revise shutdown margin calculation procedure

ENCLOSURE 2

SIMULATOR FIDELITY REPORT

Facility Licensee: Duke Power Company

Facility Docket No.: 50-413

Operating Test Administered On: June 2, 1992

This form is used only to report observations. These observations due not constitute, in and of themselves, audit or inspection findings and are not. without further verification and review, indicative of noncompliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulator facility other than to provided information which may be used in future evaluations. No licensee action is required solely in response to these observations.

During the conduct of the simulator portion of the operating tests, the following items were observed:

Item	Description
None	

ENCLOSURE 2

SIMULATOR FIDELITY REPORT

Facility Licensee: Duke Power Company

Facility Docket No.: 50-413

Operating Test Administered On: June 2, 1992

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None	