U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-346/OL-89-02

Docket Nos. 50-346 License No. NPF-3

Licensee: Davis Besse
Toledo, Ohio

Facility Name: Davis Besse

Examination Administered At: Davis Besse

Examination Conducted: Replacement examinations for two reactor operators and ten senior reactor operators.

Examiner: TD Reidinger for
Steve Carrick-PNL — Date: 1/18/90

RIII Examiner(s): DShepard
Douglas Shepard — Date: 1/18/90

Chief Examiner: TD Reidinger
T. D. Reidinger — Date: 1/18/90

Approved By: TBurdick
T. Burdick — Date: 1/18/90

Examination Summary

Examination administered on December 18-22, 1989 (Report No. 50-346/OL-89-02)). Consisted of written and operating replacement examinations administered to two reactor operators and ten senior reactor operators.
Results: All reactor operators and senior reactor operators passed the examination.

REPORT DETAILS

1. Examiners

*Timothy Reidinger, NRC
Douglas Shepard, NRC
Steve Carrick, PNL

*Chief examiner

2. Exit Meeting

a. On December 22, 1989, an exit meeting was held. The following personnel were present at this meeting:

Ted Myers	Director Technical Services
George Bradley	Nuclear Licensing
Richard Simpkins	OPS - Nuclear Training Manager
Paul Byron	Senior Resident
Thomas Simonetti	OPS Training Supervisor
Richard Brandt	Operations Manager
Mark Bezilla	OPS Superintendent
Jim Suyrowski	Training Superintendent

b. (1) One weakness was noted. The reactor operators need a higher emphasis on Davis-Besse External Radiation Administrative Guides and Limits. The reactor operators had a 34% pass rate on RO question 36 on category 6 "Plant Systems and Generic Responsibilities". The question dealt with the Davis-Besse quarterly and annual radiation exposure limits to the whole body.

(2) The following generic strengths were noted:

(A) Operators were very proficient and knowledgeable in administrative areas such as conduct of operations/surveillance testing, logging/tagging clearance, key control and standing orders.

(B) Operators were very strong in understanding and implementing the requirement of the RWPs and the ALARA program.

(C) Operators demonstrated a good proficiency in the understanding of control room systems, applying technical specifications and administrative requirements for those selected systems.

(D) Operators demonstrated good understanding in the implementation of the abnormal procedures, normal and emergency procedures.

(3) NRC Observation

NRC recognizes and acknowledges the progress that Davis-Besse training staff has made in the draft development of abnormal procedures relating to Nuclear Instrument Failures for the Source Range, Intermediate and Power Range Instruments.

NRC RESOLUTIONS - SRO EXAMINATION

Question: 5.30 (1.00)

The following plant conditions exist:

Reactor power	68% steady
RCS pressure	2100 psig decreasing slowly
ALL PRZR heaters	On
480 MCC E11D	DE-ENERGIZED FOR MAINTENANCE
PRZR Spray Valve RC 2	Indicates OPEN, in manual, and held closed for 45 seconds
PRZR PORV outlet temp.	108°F and steady
RCS water inventory	0.15 gpm
RC PRZR PRESS RLF out temp	108°F and steady

Which ONE of the following will most quickly decrease the pressure loss without an RPS actuation?

a. Close RC-10 (spray line isolation) at Control Room Switch HIS-RC-!).

b. Close RC-10 (spray line isolation) locally.

c. Stop RCP 2-2 after reducing reactor power to less than 50%.

d. Stop RCP 2-2 immediately.

ANSWER: 5.30 (1.00)

d.

RESPONSE: 5.30

The stated 480VAC MCC (E11D) is the incorrect power supply for the initiating plant condictions. The correct MCC is E11A. E11D was incorrectly identified by the Davis-Besse review team as the proper MCC to have RC-10 (spray line isolation)De-engerized.

As the question is currently worded, the E11D outage is merely a distractor and the correct response should be "a". (Close RC-10 [spray line isolation] at Control Room Switch HIS-RC-10.)

Recommend accepting "a" as the correct answer instead of "d".

NRC RESOLUTION: Question deleted.

QUESTION: 38 (1.00)

The following conditions exist:

General Emergency declared
Sunny and 40°F
Wind 0.25 mph from 120 degrees
Release has just started, duration is unknown
Whole Body Dose Rate 3.9 Rem/hr at 1 mile.

Which ONE of the following would be the recommended protective actions per HS-EP-02245, "Protective Action Guidelines" attachment 4 for the range 0 - 2 miles?

(Assume today's date and time.)

a. No action.

b. Shelter as a minimum. Consider Evacuation. Evacuate unless constraints make it impractical.

c. Evacuate if possible, otherwise Shelter.

d. Shelter.

NRC Resolution: Question deleted. The answer was inadvertently included with the reference material supplied to the candidates.

NRC RESOLUTION - RO EXAMINATION

Question 2.10 (1.5)

STATE THREE (3) specific methods (equipment/component lineups) available to the operator for core cooling if an inadequate core cooling condition exists

ANSWER: 2.10 (1.5)

1. HPI/LPI
2. Steam the S/G using MFW
3. Steam the S/G using AFW
4. LPI flow out the PORV

Any three for [+0.5] each

RESPONSE: 2.10

Recommend accepting additional correct responses.

1. Core flood tanks emptying
2. Natural circulation
3. Feed and bleed

The original review copy was marked up for revision during the pre-examination review, but the markup was missed during word processing.

NRC Resolution: Comment accepted.