SC EXPR Ex # 102
50-322-OL-5
6/11/87
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EXERCISE EVALUATION CRITIQUE FORM FEMA Panel Ex. #30 Page A-- of --

EXERCISE: Shoreham DATE: February 13, 1986

Location: Local Emergency Operations Center

Evaluator's Name: P. Giardina

EXERCISE OBJECTIVE AND POINTS OF REVIEW	EVALUATOR(S)	LOCATION/ ASSIGNMENT	COMMENTS AND RECOMMENDATIONS
OBJECTIVE: EvO 12 Demonstrate the ability to receive and interpret radiation dosage projection information, and to determine appropriate protective measures, based on PAGs and information received from the Brookhaven Area Office (BHO). POINTS OF REVIEW: • Implementation of: - OPIP 3.1.1, Attachment 3 (Health Services Coordinator). - OPIP 3.5.2. • Ability to make protective action decisions promptly. • Consistency of decisions with EPA PAGs and plan guidance. • Consideration of relevant factors such as evacuation time estimates, shelter availability, meteorological forecasts, duration of release, availability of bus resources, road conditions, etc.	P. Giardina	LERO EOC/ Accident Assessment	COMMENTS (Good Performance or Deficiency -- factually describe your observation) This objective was essentially met completely with the exception of a list of several improvements (See page B-37 of 214). Radiation dose projections were made by the accident assessment staff. These were made before release based on projected releases and actual releases. Protective action recommendations were made by the radiation health services person based on projected dose, meteorological forecasts, duration of release, plant status, and plant projections. Decisions were made consistently with EPA PAGs for thyroid dose which was appropriate and the controlling dose pathway. The most serious problems involved: lack of use and/or analysis of maps for evacuation, and possible inadequacy of the Nassau Veterans Coliseum for decontaminating of people. Dose projection examples are attached as are Hayward Blocking Authorization Form.

EVALUATION SCHEME

EVALUATOR MUST IDENTIFY DEFICIENCY(IES) OR CORRECTIVE ACTION(S) WITH RECOMMENDATION(S) ON FOLLOWING PAGE (S)

NUCLEAR REGULATORY COMMISSION

Docket No. 50-322-OL-5 Official Exh. No. 102

In the matter of Shoreham Nuclear Power Station, Unit #1

Staff ____ IDENTIFIED ✓

Applicant ____ RECEIVED ✓

Intervenor ✓ REJECTED ____

Cont'g Off'r ____

Contractor ____ DATE 6-11-87

Other ____ Witness ____

Reporter Sue Walsh

EXERCISE EVALUATION CRITIQUE FORM

EXERCISE: Shoreham DATE: February 13, 1986

Objective Number: EOC 12

Location: LERO EOC Accident Assessment

Evaluator's Name: P. Giardino

Team: Local Emergency Operations Center

EVALUATOR MUST IDENTIFY DEFICIENCY(IES) OR CORRECTIVE ACTION(S) IF OBJECTIVE IS NOT MET OR PARTLY MET. THERE MAY BE MORE THAN ONE (1) DEFICIENCY OR CORRECTIVE ACTION FOR THIS OBJECTIVE. A SEPARATE RECOMMENDATION MUST BE PROVIDED FOR EACH DEFICIENCY OR CORRECTIVE ACTION THAT IS IDENTIFIED.

CHECK ONE BOX

[ ] DEFICIENCY
[X] AREA FOR CORRECTIVE ACTION

Please state briefly the problem area

The dose assessment status board must accomodate RAP team date and LERO data. There is insufficient room or columns on the board to separate the two sources of data

RECOMMENDATION: The dose assessment status board should be revised to accomodate a split in data reports from RAP & LERO

CHECK ONE BOX

[ ] DEFICIENCY
[X] AREA FOR CORRECTIVE ACTION

Please state briefly the problem area

The radiation health coordinator did not demonstrate that he used the data contained in plans and procedures concerning time estimates for evacuation. I asked what the time estimates were and he knew off the top of his head that it would take 8 hours under the worst weather conditions. He never communicated or showed this evaluator the actual estimate for these conditions. ~~Additionally, the accident/impediments to evacuation were never reported back to the accident assessment staff for analysis for dose implications to those which might be stuck. This was that no people being evacuated through the plume.~~

RECOMMENDATION: The radiation health coordinator should review the time estimates for evacuation and demonstrate this in the next exercise/drill. ~~The rad health coordinator should be consulted when an impediment to evacuation is encountered.~~

EXERCISE EVALUATION CRITIQUE FORM

EXERCISE: Shoreham DATE: February 13, 1986

Objective Number: EOC 12

Location: LERO EOC Accident Assessment

Evaluator's Name: P. Gardina

Team: Local Emergency Operations Center

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CHECK ONE BOX

X	DEFICIENCY / AREA FOR CORRECTIVE ACTION	Please state briefly the problem area

During the reporting of one thyroid dose from a RAP team the downwind distance of the sample was incorrectly reported as 7000 meters instead of 700 meters. This meant that a thyroid dose of 9000 mr/hr was reported 43 miles downwind instead of at about 0.5 miles. This error was found and corrected in 5 minutes.

RECOMMENDATION In general this one error was spotted and corrected quickly. This problem may be eliminated if all discussed distances are reported consistently in either miles or meters.

CHECK ONE BOX

X	DEFICIENCY / AREA FOR CORRECTIVE ACTION	Please state briefly the problem area

During the reporting of initial RAP thyroid doses only one apparent measurement was made in the field 1400 mr/hr @ 2:04 @ 2 miles. This was extrapolated back to get projected doses at other distances. These data were reported as actual measurements instead of projections on the dose assessment status board. It took 2.5 hours to identify and correct this error.

RECOMMENDATION RAP procedures and measurement/modeling protocols and LERO reporting procedures should be reviewed to assure coordination and to assure proper reporting.

-1

EXERCISE EVALUATION CRITIQUE FORM

EXERCISE: Shoreham DATE: February 13, 1986

Objective Number: EOC-12

Location: LERO EOC Accident Assessment

Evaluator's Name: P. Gardina

Team: Local Emergency Operations Center

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CHECK ONE BOX

	DEFICIENCY / AREA FOR CORRECTIVE ACTION	Please state briefly the problem area
X		The health services coordinator who provided accurate briefings at all times, did mis-speak at an 11:10 EOC briefing when he mis-stated the EPA thyroid PAG as being at 5 REM projected evacuation was mandatory. This may have been a slip of the tongue as he correctly stated the PAG to this evaluator later

RECOMMENDATION Review of the EPA PAG guidance is recommended by the health services coordinator

CHECK ONE BOX

	DEFICIENCY / AREA FOR CORRECTIVE ACTION	Please state briefly the problem area
X		The decision to send about 10,000 people to NSSA Veterans Coliseum for monitoring and decontamination appeared appropriate due to the release/exposition. While the NVC is capable of handling 30,000 or so in 12 hours, the expanded use of this facility is dubious

RECOMMENDATION A review of the adequacy of the NVC to handle the 30,000 people is necessary.

EXERCISE EVALUATION CRITIQUE FORM

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Location: LERO EOC Accident Assessment

Evaluator's Name: P Giordina

Team: Local Emergency Operations Center

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OPP 361 Attachment 5 contains a series of pie charts which use a logic flow concerning core failure & containment failure along with projections for times of release. The logic does not account for a containment failure without core failure which was the case for this scenario until about 11AM when the fuel was uncovered. The radiation health coordinator and the nuclear engineer were able to use their judgement to make the correct PAR determination.

RECOMMENDATION

OPP 361 Attachment 5 must be revised to take care of the eventuality listed to the left.

CHECK ONE BOX

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RECOMMENDATION