



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

June 3, 1980

Docket No. 50-266
50-301

MEMORANDUM FOR: Frank Pagano, Chief, Emergency Preparedness
Licensing Branch

FROM: W. L. Axelson, Team Leader, Emergency Preparedness
Licensing Branch

SUBJECT: TRIP REPORT REGARDING SITE REVIEW AT THE POINT BEACH
NUCLEAR PLANTS, UNITS ONE AND TWO, FOR IMPROVING EMERGENCY
PREPAREDNESS

On May 21-22, 1980, Review Team No. 6 conducted a review of the (draft) Point Beach Emergency Plan (May 5, 1980). A site tour was conducted on the first day with the following Manitowoc County representatives: the County Board Chairman; the County Sheriff, and the County Civil Defense Director. State representatives on the tour included the Wisconsin Division of Emergency Government (DEG). Mr. Ray Kellogg from the Federal Emergency Management Agency (FEMA), Region V also attended. Mr. Kellogg's contributions for this site review and the previous site review at the Kewaunee Nuclear Plant were extremely valuable. FEMA, Region V has been cooperating very well with the NRR/NRC Review Team. The site tour included observations of all items included in Enclosure 4 of the November 23, 1979, "Guidance on Team Reviews."

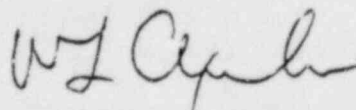
On the second day, a technical review session was conducted with representatives from Wisconsin Electric Power Company (WEPCo). State representatives from Wisconsin's Division of Emergency Government were present at this meeting. The draft emergency plan was reviewed against the acceptance criteria addressed in NUREG-0654. Enclosed is a summary of findings regarding this review. As a result of this meeting, WEPCo was instructed to correct the deficiencies identified in their plan and submit to the Office of Nuclear Reactor Regulation a revised plan within five to eight weeks. The licensee agreed to do so. During this team visit, no technical review of State or local plans was conducted. Instead, I attended a Regional Advisory Committee (RAC) meeting with FEMA on May 17, 1980, in Madison, Wisconsin. During this meeting, FEMA discussed with State officials the deficiencies identified in the State and local plans. The State officials agreed to revise the State Emergency Plan in accordance with NUREG-0654. Currently, Wisconsin's Emergency Plan is being finalized to incorporate NUREG-0610 and most of the elements in NUREG-0654. Wisconsin's schedule is to begin implementing this plan by July 1980.

844848453

F

June 3, 1980

During the evening of the second day, a two hour public comment session was conducted. Approximately five members of the public were present. Other members included WEPCo and news media personnel. In general, this meeting went smoothly. Questions from the public centered around the usual concerns such as: public education, early warning of the public, and evacuation planning.



W. L. Axelson, Team Leader
Emergency Preparedness Licensing
Branch

Enclosure: as stated

cc w/enclosures:

R. Kellogg, FEMA, RV
J. Martin, Battelle NW
C. Trammell, NRR

SUMMARY OF FINDINGS

POINT BEACH SITE EMERGENCY PLAN

1. The licensee has established a Technical Support Center (TSC) and Operational Support Group Center (SGC), which meet the short-term Lessons Learned requirements 1.A, 1.C, and 1.D. Other short-term requirements for the TSC were not examined during this review. The descriptions of the TSC and SGC are provided in the emergency plan. Adequate communication from the TSC to the control room, near site Emergency Support Center, and the NFC exist. Accident assessment data are available to the TSC via communications only. Procedures to provide portable monitoring for both direct radiation and airborne radioactive contaminants are developed.

The licensee's long range plan for the TSC are currently being examined. The licensee is proposing to build a permanent habitable building within their security area which will meet the long-term Lessons Learned criteria. The licensee indicated that the permanent TSC should be completed during 1981.

2. The licensee has established a permanent near-site Emergency Operating Facility. For the Point Beach Plant, this area will be called the near-site Emergency Support Center (ESC). The ESC will be located in the Point Beach visitor's center. Currently, the ESC has communications to the plant and various offsite agencies. However, a dedicated primary and reliable backup communication system does not exist today. The licensee recognizes that communication systems from the onsite centers to the offsite centers needs improvement.
3. The licensee has established an offsite health physics and environmental monitoring center. This area is called the Site Boundary Control Center (SBCC). This center is used by WEPCo and Wisconsin's Department of Public Health to coordinate environmental monitoring during an emergency. The licensee indicated that the SBCC will be expanded or remodeled to provide means for coordination of environmental monitoring with the State representatives.
4. The licensee's method for determining airborne radioiodine concentrations during an accident are adequate based on short-term Lessons Learned criteria. The licensee has purchase silver zeolite filters for these measurements. However, the licensee's current method of obtaining field radioiodine measurements is weak. No single channel analyzers are located in the offsite SBCC to promptly analyze for airborne radioiodine levels.

5. The licensee has developed post-accident procedures for sampling and analyzing: (1) primary coolant, (2) containment atmosphere; (3) final stack effluents, and (4) in-plant radioiodine concentrations. Also, short-term plant modifications to obtain and analyze these samples has been accomplished. The team examined these sampling stations. The licensee indicated that these sampling stations were tested and found to be adequate.
6. The licensee containment radiation monitor currently reads up to 10 R/hr. The licensee's long range plan is to upgrade these monitors to meet Lessons Learned criteria. When these monitors are installed, the licensee will develop plots showing radiation level vs. extent of core damage for various source terms (NUREG-0654 Item - I.3.a.).
7. The licensee's effluent monitors (upper limit) for monitoring noble gases after an accident are as follows:
 - (1) Drumming area vent monitor - 10 R/hr.
 - (2) Gas stripping vent monitor - 100 R/hr.
 - (3) Unit 1 and 2 containment purge monitor - 1000 R/hr.
 - (4) Auxiliary Building vent monitor - 100 R/hr.
 - (5) Combined Air Ejector Exhaust - 10 R/hr.

The licensee has developed procedures to convert these dose rate readings into stack concentrations. EALS will be established based on these readings and incorporated into the Emergency Plan.

8. The licensee has installed new TLDs as per the current guidance of the NRC Branch Technical Position for Regulatory Guide 4.8. However, the emergency plan does not provide a map indicating where the fixed monitoring stations are located.
9. The licensee currently has not obtained potassium iodide (KI) thyroid blocking agents for onsite emergency workers. A company policy is currently being examined regarding this item.
10. A detailed review of the licensee's Emergency Plan was conducted during the site visit. As a result, the licensee agreed to correct the following deficiencies:

Page 4-9

Table 4-1 (Summary of Emergency Action Levels) need improvement. Several initiating conditions were missing and some initiating conditions were incorrectly classified. The

following were missing:

- . Abnormal fuel temperature using incore temperature monitors for an Unusual Event and degraded core - loss of coolable geometry for a General Emergency using saturation meters, coolant radioiodine levels, and other indicators.
- . Core Fuel Damage for an Alert causing very high coolant activity or failed fuel monitor reading equivalent to 1% fuel failure.
- . Core Fuel Damage for a General Emergency indicating loss of two of three fission product barriers with a potential loss of the third barrier e.g., (high containment radiation levels with high containment temperature, pressure, or hydrogen level or loss of containment spray or containment cooling systems.
- . Control Room evacuation without control of shutdown capability at remote shutdown panels for greater than 15 minutes. This should be a Site Emergency.
- . Fires potentially affecting safety system. This should be an Alert.
- . Loss of function needed for a cold shutdown. This should be an Alert.
- . Major fuel handling accidents e.g., (loss of cooling water below the fuel). This should be a Site Emergency.
- . Aircraft crash affecting vital plant structures. This should be a Site Emergency.
- . Missiles from whatever source causing damage to safe shutdown equipment. This should be a Site Emergency.
- . High radiation levels or high airborne contamination indicating a severe degradation in the control of radioactive materials. This should be an Alert.
- . Other plant conditions exist that warrant (1) increased awareness on the part of state and local officials, (2) precautionary activation of TSC and near site Emergency Operations Facility, and (3) activation of a precautionary public notification. Item 1, 2, and 3 should be classified as an Alert, Site and General Emergency respectively.

- . Turbine failure causing penetration of the turbine casing. This should be an Alert.
- . Imminent loss of physical control of the facility and actual loss of physical control of the facility. This should be a Site and General Emergency, respectively.
- . Loss of coolant accident with failure of ECCS system leading to a core melt situation (PWR sequence for a General Emergency).

The following initiating conditions were incorrectly classified:

- . Major electrical failures causing loss of offsite power and loss of onsite AC power for more than 15 minutes. This should be a Site Emergency.
- . Fire affecting safety systems should be a Site Emergency.
- . Winds in excess of design levels should be a Site Emergency.

Page 5-3

The plan does not clearly indicate what emergency organization will be available to augment the minimum shift staff. Further, the plan does not indicate what functions will be provided in the augmented response.

Page 5-8

The plan does not indicate under what conditions the WEPCo General Office Emergency Organization will be activated (e.g., Site of General Emergency).

Page 5-27,
28 and 29

The Emergency Organization charts for Alert, Site, and General Emergency are confusing. Specifically, it is not clear when these emergency functions would be implemented.

Page 5-33

This figure (PBNF Emergency Organization) is not referenced in the plan. It is not clear what emergency organization is going to be implemented, how long it will take to implement, or under what conditions the emergency organization will be implemented.

Page 6-2

Under the paragraph "Assessment Actions," various licensee Emergency Actions are indicated. However, all the Emergency Actions as stated in NUREG-0654 are not provided.

- Page 6-10, and 6-11 Under Security and Site Access Control, the plan does not indicate under what conditions site access will be controlled e.g., (Alert, Site, or General Emergency). Also, the plan does not indicate when the fishermen evacuation alarm will be sounded.
- Page 6-12 The plan indicates a partial or local site evacuation will be considered if certain alarms are received. (e.g., high radiation alarm, high airborne alarm, etc.) The plan does not provide the alarm level values.
- Page 6-15 Section 4.0 indicates that site evacuation routes are shown in Appendix C. However, no evacuation routes are in Appendix C.
- Page 7-1 The plan does not indicate that adequate ventilation controls for the near site Emergency Support Center exist.
- Page 7-21, 22 These figures, when developed, should indicate the primary and backup means of communication with the various onsite and offsite emergency centers.
- Page 8-6 Training frequency is not specified for the various training programs indicated.
- Page 9-1 The recovery section of the plan is weak. In general, this section does not follow the recommendation of the Atomic Industrial Form format for "Recovery Operations."
- Page D-1 Appendix D (Letters of Agreement) does not indicate agreements reached with Two Creeks Township as a back-up Emergency Support Center. Also, no agreements are provided for the Two Rivers News Center.

11. Other areas of the acceptance criteria not addressed in the plan are listed below:
- a. The minimum shift staffing as per Table B-1 is not provided.
 - b. The initial emergency message to be sent to offsite agencies and the followup message containing specific information is not provided in the plan.
 - c. The plan does not indicate or describe the administrative and physical means, and the time required for promptly notifying the public within the plume exposure pathway as per Appendix 3 of the criteria.

- d. The plan does not indicate or describe the public education program for residents and transients within the plume exposure pathway. Further, the plan does not indicate that annual meetings will be conducted to acquaint the news media with the emergency plans.
- e. The plan does not provide meteorological instrumentation and procedures which satisfy the criteria in Appendix 2.
- f. The plan does not indicate that a method exists for periodically estimating population exposure.
- g. The plan does not indicate that Health Physics drills will be conducted semiannually to analyze inplant liquid samples with actual elevated radiation levels.
- h. The plan does not designate an Emergency Planning Coordinator with responsibility for the development and updating of the plans and procedures.