



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

February 12, 1988

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MEMORANDUM FOR: Ross A. Scarano, Director
Division of Radiation Safety and Safeguards
Region V

FROM: David B. Matthews, Chief
Emergency Preparedness Branch
Division of Radiation Protection
and Emergency Preparedness
Office of Nuclear Reactor Regulation

SUBJECT: FEMA REPORT ON THE AUGUST 12, 1987
SAN ONOFRE EXERCISE

The enclosed memorandum from Richard W. Krimm, dated January 29, 1988 transmits the FEMA Region IX report of the August 12, 1987 full participation exercise at Diablo Canyon. We request that you forward the enclosed memorandum and attached report to the licensee.

DB Matthews

David B. Matthews, Chief
Emergency Preparedness Branch
Division of Radiation Protection
and Emergency Preparedness
Office of Nuclear Reactor Regulation

Enclosure:
FEMA Memo dtd. 1/29/88

Contact: E.M. Podolak
492-3167

8802180408XA

*Gene,
This Matthews' memo
is not part of the enclosures
to be sent to Southern
California Edison Co. This
Matthews' memo should
be sent to our (Region V)
docket file for filing.
Ray*

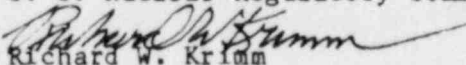


Federal Emergency Management Agency

Washington, D.C. 20472

JAN 29 1988

MEMORANDUM FOR: Frank J. Congel
Director
Division of Radiation Protection
and Emergency Preparedness
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission

FROM: 
Richard W. Krimm
Assistant Associate Director
Office of Natural and Technological
Hazards Programs

SUBJECT: Exercise Report for the August 12, 1987, Exercise of
Offsite Radiological Emergency Preparedness (REP) Plans
for the San Onofre Nuclear Generating Station

Attached is a copy of the Exercise Report for the August 12, 1987, full participation joint exercise of the offsite REP plans for the San Onofre Nuclear Generating Station. The State of California and Orange and San Diego Counties, all located in the 10-mile plume emergency planning zone (EPZ), participated in the exercise.

The exercise report was prepared by the Region IX staff of the Federal Emergency Management Agency (FEMA). There were no deficiencies identified during this exercise. A schedule of corrective actions is included in the exercise report which addresses the areas requiring corrective actions. The Region will assure completion by the State of the necessary corrective actions.

Based upon the results of this exercise, there continues to be reasonable assurance that appropriate protective measures can be implemented by the offsite jurisdictions around the San Onofre Nuclear Generating Station to protect the health and safety of the public in the event of a radiological emergency.

If you should have any questions, please contact me at 646-2871.

Attachment
As Stated

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REPORT

**EXERCISE EVALUATION
OF THE
OFFSITE EMERGENCY PLANS AND PREPAREDNESS
AT THE
SAN ONOFRE NUCLEAR GENERATING STATION
ON
AUGUST 12, 1987**

Federal Emergency Management Agency, Region IX
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San Francisco, CA 94129
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63 pp.

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

EXERCISE PARTICIPATION IDENTIFICATION

| | |
|-------------------------|--|
| Facility | : San Onofre Nuclear Generating Station |
| Licensee | : Southern California Edison Company |
| Location | : Camp Pendleton Marine Corps Base (Nearest City: San Clemente) : San Diego County : State of California |
| Date of Exercise Report | : October 9, 1987 |
| Date of Exercise | : August 12, 1987 |
| Participants | : Southern California Edison Company : State of California : Orange County : San Diego County : City of San Clemente : City of San Juan Capistrano : Camp Pendleton Marine Corps : California Highway Patrol : California Parks and Recreation : Amateur Radio Emergency Services : American Red Cross |
| Non-Participants | : None |

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

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EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

EXERCISE SUMMARY

Representatives of the Federal Emergency Management Agency (FEMA) and Regional Assistance Committee, (RAC), Region IX, evaluated the offsite jurisdiction participation in the radiological emergency plans and preparedness exercise conducted at the San Onofre Nuclear Generating Station on August 12, 1987.

The onsite participation in the exercise was observed by the United States Nuclear Regulatory Commission, Region V, (NRC-RV) representatives. The onsite evaluation findings will be reported separately by the NRC-RV.

The objectives established by the offsite jurisdictions were demonstrated and/or simulated. All but three of the objectives were successfully demonstrated. The list of objectives are a part of this report (see Attachment B). Objectives 3, 5 and 6 were not satisfactorily demonstrated by all of the offsite jurisdictions.

The evaluators observed, as a whole, that the offsite jurisdiction emergency response operations reflected that definite attention and individual effort was being given to radiological emergency preparedness measures. However, the primary purpose for conducting an exercise is to identify areas of weakness for continuous upgrade to the total system. Exercise evaluators determined areas requiring corrective action to be: 1) completion of plan updates; 2) improved procedures for alert and notification public information/instruction via the Emergency Broadcast System; and 3) protection for emergency workers implementing radiological emergency response operations. Details of the evaluator observations are more specific in the Exercise Detail and Exercise Findings Matrix of the report.

The areas recommended for corrective action, outstanding from the 1985 exercise (i.e., Emergency News Center and Public Information Officer news releases; planning updates; and Emergency Broadcast System (EBS) radio station timely dissemination of public information/instruction), were observed and evaluated. All areas were reported as being greatly improved and/or corrected. The plan update recommendation will remain as a corrective action finding pending final completion. The potential for public confusion as a result of conflicting onsite and offsite jurisdiction protective action recommendations via news release or media briefings has been eliminated. The Emergency Broadcast System radio station KEZY demonstrated both awareness of its responsibility and capability to receive and release public information/instruction. Details related to these areas of emergency response are presented later in this report.

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

EXERCISE DETAIL

An outline of the historical radiological emergency plans and preparedness activities accomplished by the offsite jurisdictions in and around the San Onofre Nuclear Generating Station is provided in this report at Attachment G.

The offsite jurisdictions within the plume exposure pathway emergency planning zone; i.e., City of San Clemente, City of San Juan Capistrano, County of Orange, County of San Diego, Camp Pendleton Marine Corps Base, and California Department of Parks and Recreation entered into an Interjurisdictional Agreement with the utility (Southern California Edison Company) during 1982. The Interjurisdictional Planning Committee meets on a monthly basis to determine common objectives and decide issues related to an effective and coordinated emergency response capability and preparedness measures needed for effecting such a response to a radiological emergency at the San Onofre Nuclear Generating Station. All of the offsite jurisdictions participated in the exercise.

The State of California Office of Emergency Services (CA-OES) Operations Center and Dose Assessment Center participation in the exercise but their participation was not evaluated. A full-scale exercise at another nuclear power plant site within California will be conducted soon and the CA-OES will be evaluated at that time. The site-specific State participation, (Department of Parks and Recreation and certain liaison activities at various emergency response operations facilities, etc.) was evaluated.

Within the State of California, by State Law, local jurisdictions have the primary responsibility for emergency response to any disaster within their incorporated boundaries. There is a statewide Master Mutual Aid Agreement. The State supports local government efforts, when requested, and coordinates a requirement for further assistance from the Federal Government. The State has primary responsibility for the ingestion pathway zone emergency response activities at all nuclear power plant sites within the State.

The exercise scenario was developed by staff of the Southern California Edison Company. The exercise objectives and scenario were submitted well within the required milestones established. They were reviewed and approved by the Federal Emergency Management Agency Region IX, (FEMA-RIX) and the U.S. Nuclear Regulatory Commission, Region V (NRC-RV). The exercise objectives are reflected in Attachment B to this report. The scenario summary is Attachment C to this report.

EXERCISE DETAIL (continued)

A time-line chart of declared events and receipt of notification at the various response operations facilities is shown at Attachment D.

The list of exercise evaluator assignments is located at Attachment A.

The evaluator assignments, location of evaluation sites, background materials, objectives of the exercise, scenario summary, and other pertinent information was provided to all assigned evaluators by mail on July 28, 1987. The exercise evaluation criteria and process was presented to and coordinated with all offsite exercise participants to provide an understanding of the process and responsibility. On August 11, 1987 the evaluators were briefed by the RIX Project Officer for the Radiological Emergency Preparedness program and then provided with an orientation by offsite jurisdiction representatives on their plans and operations. Many evaluators accompanied offsite jurisdiction representatives to their emergency operations centers for familiarization with the facility and the players (e.g., decision-makers, direction and control group, communications systems, etc.).

The exercise was evaluated on the basis of a jurisdictional capability to implement current radiological emergency response plans and in accord with: 1) 44 Code of Federal Regulations, Part 350, Review and Approval of State and Local Radiological Emergency Plans and Preparedness; Final Rule, September 28, 1983; 2) NUREG-0654, FEMA-REP-1, Rev. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, November 1980; 3) the Federal Emergency Management Agency/Nuclear Regulatory Commission Memorandum of Understanding, April 1985; and 4) established Federal Emergency Management Agency policy, criteria, and guidance.

The Federal Emergency Management Agency/Nuclear Regulatory Commission Memorandum of Understanding establishes categories of exercise findings as: 1) deficiencies; 2) areas requiring corrective actions; and 3) areas recommended for improvement. Deficiencies are generally addressed in accord with Guidance Memorandum EX-1, Remedial Exercises, dated July 15, 1985. Areas requiring corrective actions are cited in the Exercise Findings Matrix of this report. Areas recommended for improvement are noted in the jurisdictional text that follows (by individual jurisdiction, agency or facility title).

The 1985 biennial exercise areas requiring corrective action, pending at the time of this exercise, were observed and evaluated. A copy of the Exercise Finding Matrix from the 1985 biennial exercise report is included in this document at Attachment E. Evaluation findings from observations during this exercise are noted directly on the matrix form.

EXERCISE DETAIL (continued)

Guidance Memorandum PR-1, Policy on NUREG-0654/FEMA-REP-1 and 44 CFR 350 Periodic Requirements, establishes a six-year period for accomplishment of major Radiological Emergency Preparedness (REP) program elements by state and local offsite jurisdictions. The first joint exercise at this site was conducted on May 31, 1981. Thus, the six-year cycle for this site ended on May 31, 1987. Attachment F sets forth the status of the offsite jurisdiction compliance with these requirements.

The following comments, by individually assigned evaluators, offer areas recommended for improvement and/or noted as being of very high quality.

Amateur Radio Emergency Services. The activities of this group were not evaluated, but evaluators did observe the volunteer participation in the exercise. It was apparent that the system was activated and would be an invaluable asset for radiological emergency response operations. The volunteers of the Amateur Radio Emergency Services are commended for their dedicated work.

American Red Cross. Clearly demonstrated a capability to implement procedures for providing mass care, health services, family services, communications and respond to disaster welfare inquiries. Roles and responsibilities were well understood by the staff. Decision-making was timely and coordinated. The liaison assignments were effectively utilized and individuals assigned were efficient. Overall commendations for a job well done.

California Highway Patrol. Limited participation due to the scope of the exercise (e.g., no actual demonstration of traffic control, etc.). Liaison activities were effective and efficient. Simulated response activities indicated a high-level of awareness with regard to assigned areas of responsibility. Overall performance was commendable.

Camp Pendleton Marine Corps Base. Emergency response operations at this location are in accord with military plans. Because of the proximity of the nuclear power plant site to the Base, evacuation is generally effected during the Alert emergency level. Evaluation at this site is confined to those emergency operations that interface with state and local offsite jurisdictions. The Base communications with offsite jurisdictions is via the "yellow" telephone net. Liaisons are assigned to the Emergency Operations Facility and Emergency News Center. Teams are assigned to activities of Radiological Field Monitoring. See below at Radiological Field Monitoring Teams for more information. The evaluator observed that exercise participation concentrated on training newly assigned individuals

EXERCISE DETAIL (continued)

who had not previously been involved with this type of activity. The plan was dated 1979. Various emergency response operations effected were not in accord with the plan (e.g.; designated communications, emergency operations center floor plan designations, etc.). During the 1985 biennial exercise, a major finding related to the need for regular updating of radiological emergency response plans. See Attachment E. It is suggested that the existing plan be updated to be in consonance with offsite jurisdiction emergency response plans and training be provided to key emergency workers for effective implementation of the plan. The evaluator noted the performance at this location to be very active and valuable in terms of training and useful for refinement of procedures.

City of San Clemente. City Officials who are assigned decision-making responsibility for emergency response operations were not able to participate in the exercise due to a priority hearing on official city business. The next in command, the City's Fire Chief, was required to act as both the City Manager and the City Council. His performance was competent, reflected familiarity with the areas of assigned responsibility, and effective in decision-making activities.

The Emergency Operations Center facility has undergone modification since the last official exercise and is now considered to be much more effective. The activation and staffing of this facility was well demonstrated. Excellent conferencing and decision-making was observed, including an awareness of the 15-minute time limit between a final decision for a public protective action and notification of the public. Good team work was demonstrated by most emergency operations center personnel, with staff showing good knowledge of their specific duties and making contributions toward decisions for actions required for various upgrades in plant status and for protective actions.

Communications systems available at the Emergency Operations Center are excellent and functioned well during the exercise. The "yellow" telephone net speaker phone capability allowed key Emergency Operations Center staff to know what was going on and to contribute to the decision-making process, as required. The siren system, route alerting, school notification procedures, etc., are all well established to alert the public and schools in a timely and orderly manner.

The Emergency Operations Facility Liaison for San Clemente was effective in informing the Emergency Operations Center of activities and as an effective backup check on information being reported via the "yellow" telephone net.

San Clemente is well equipped to handle evacuation and access control. Plans and agreements have been established to obtain assistance from the California Highway Patrol, State Parks, etc., as required. The Emergency

EXERCISE DETAIL (continued)

Operations Center is well equipped and plans are well established to handle evacuation of special evacuees, as well. (Note: Another exercise evaluator assigned to observe field operations reported that inquiry of private schools within the emergency planning zone resulted in a lack of knowledge with regard to evacuation procedures and that they had not received copies of the public information brochure. This will be clarified in the final report.)

Two radiological field monitoring teams were dispatched that reported directly to the Offsite Dose Assessment Center. See the Offsite Dose Assessment Center and Radiological Field Monitoring Team comments reported below.

Some confusion existed relative to the distribution of dosimeters wherein the City was of the opinion that personal film badges were sufficient. The Exercise Findings Matrix portion of this report contains an area requiring corrective action that further explains this area.

During the 1985 biennial exercise, a major finding related to the need for regular updating of radiological emergency response plans. See Attachment E. The City of San Clemente was reported to have had significant difficulty in recalling emergency response personnel due to inaccurate telephone numbers. The current plan is dated 1983 with no known update or changes. Evaluators were informed that the City had updated the plan during 1987, but no copies of the changes were provided or submitted to FEMA. It is recommended that the City of San Clemente develop a system for regular updates to the plan in accord with NUREG-0654. It is further recommended that the standard operating procedures and interjurisdictional procedures be reviewed and updated to reflect the required coordination among the jurisdictions.

The overall finding of the evaluator observing Emergency Operations Center activities for the City of San Clemente reported it as being "exemplary performance."

City of San Juan Capistrano. The City of San Juan Capistrano just completed revision of their radiological emergency response plan. The City contracts with the County of Orange for police, fire, transportation, etc. Therefore, the major emergency response operations for this location include decision-making, directing County resources, liaison activities within the Emergency Operations Facility and Emergency News Center, communications, etc. These duties were observed as being carried out in an orderly manner and staff were very familiar with their roles and the plan.

Even though the City just completed a plan revision, the

EXERCISE DETAIL (continued)

interjurisdictional procedures need to be reviewed and updated to reflect the coordination among the jurisdictions. During the 1985 biennial exercise, a major finding related to the need for regular updating of radiological emergency response plans. See Attachment E. The City of San Juan Capistrano should consider development of a regular system for annual update of the plan, as well as the update of standard operating procedures and/or interjurisdictional procedures.

Emergency News Center. The Emergency News Center, its staff and the operations within that facility received the highest number of commendations submitted by any assigned evaluator. The commendations related to organization, procedures, personnel attitude, security, media accreditation, sound system, timeliness of briefings, role playing of simulator staff, communications, drill identification, etc. The Emergency News Center was recently transferred from the El Toro District Office of the Southern California Edison Company to the newly constructed Saddleback District Service Center at Irvine.

This was the first exercise of the joint information system emergency response operations within that facility. The procedures were also revised and incorporated several new processes. For example, instead of merely posting a copy of the news releases and emergency broadcast station messages, copies were provided to each media representative by a media liaison person. The posting of plant conditions was excellent in both the media center and the public information officer work area. All of the objectives established for the Emergency News Center were met. No deficiencies or corrective action findings were submitted.

The credibility of the Emergency News Center (media briefings and information flow) was enhanced by the appearance of a Southern California Edison Company Vice-President, Kenneth P. Baskin. Mr. Baskin is the Emergency Coordinator for the Emergency Operations Facility and flew to the Emergency News Center from the Emergency Operations Facility via helicopter to support this facility.

For future consideration, the evaluator offered the following suggestions to enhance information being provided to the media:

1. While the new system for distribution of news releases and emergency broadcast system messages is sufficient, it is recommended that they be posted within the facility for easy reference by all using the facility and that a status board be maintained for easy reference.
2. Explanation of a classification change should be

EXERCISE DETAIL (continued)

provided to the media in a more expedient manner (the General Emergency was posted at 10:45 A.M., but the explanation was not provided until 10:54 A.M.).

3. More detailed information as to the sounding of the sirens to advise the public to tune to the emergency broadcast station, information to disabled persons, and general information relative to the protective actions being implemented should be provided for the emergency news center/media.
4. The media packets could include general information about the local area (motels, restaurants, maps, etc.).
5. The graphics and the name identification signs at the speaker table could be enhanced by enlarging (in the event the facility becomes over-crowded).
6. Typewriters for use by media and public information officers would be useful.

Emergency Operations Facility. Evaluation of the offsite related activities in this facility revealed no significant problem areas requiring corrective actions. As demonstrated in previous exercises, the offsite representatives in the Emergency Operations Facility were knowledgeable about their assigned duties and carried out their responsibilities efficiently and effectively. Appropriate coordination was maintained by the liaisons between the Southern California Edison Company management group, their respective emergency operations centers, and other Emergency Operations Facility activities, such as the Offsite Dose Assessment Center.

Observed actions taken by the Emergency Operations Facility Liaison group contributed to the successful accomplishment of the Onsite Objective No. 6 and Joint Objective No. 1.

Offsite Dose Assessment Center. The objectives established for demonstration by the Offsite Dose Assessment Center (ODAC) included Offsite Objectives 1, 3, 4, 6 and 8 and Joint Objectives 1 and 2. All the objectives were satisfactorily demonstrated at the ODAC.

The physical space actually available for ODAC activities within the Emergency Operations Facility is extremely cramped. It is believed that the limited space would be detrimental to prolonged occupancy and increase the stress level during an actual emergency. In the case of this

EXERCISE DETAIL (continued)

particular exercise, the confined space provided the primary ODAC players with a awareness of the developing situation. The Emergency Operations Facility (EOF) Public Address System provided a further awareness of the overall situation and activities, even when they could not physically be present for the briefings. The use and maintenance of emergency status signs and status boards was excellent.

The technical interfaces observed as areas involved with the ODAC included: 1) access; 2) EOF briefing function; 3) accident assessment and utility plant status liaison; 4) dose assessment and state quality control; 5) radiation monitoring control; 6) protective action recommendations; and 7) ingestion pathway and recovery considerations.

The overall ODAC operation, management and accomplishment of assigned or necessary functions was very good. Constant communications between the ODAC and different areas of influence were ascertained as: 1) plant status representatives at the Technical Support Center (TSC); 2) Offsite decision-makers; 3) State Operations Center/Dose Assessment Center (telephone contact only); and 4) Offsite Radiological Field Monitoring Teams (RFMT) (except for that of Camp Pendleton).

The ODAC management recognized and obtained radiological information for the EOF ambient environment. They are to be commended for this action. The EOF is an onsite facility located very close to the nuclear power plant site.

During the alert and notification arrival period at the EOF (8:15 A.M. to 8:45 A.M.), radiation was present because of a scenario release. This information (170mR/hr at 8:15 A.M. to 85mR/hr at 9:00 A.M.) was available from a fixed monitor (a PIC) located at the EOF. Thus, this information should have been available at the TSC. The evaluators believe notification should have been provided through the main gate for persons arriving and other actions should also have been considered. In addition, personnel entered the EOF after traversing a possible contaminated area and no personnel monitoring was performed. Consideration to the need for determining the extent of exposure in that area prior to sending liaisons to the EOF should be addressed in the alert and notification plans of the offsite jurisdictions.

ODAC control of radiological field monitoring teams is provided by radio from the EOF. The communicators are from the San Clemente Fire Department. Team control was judged to be excellent.

ODAC Managers need to consider using field teams in a traversing pattern, monitoring en route at various points, to define the plume boundaries. Use of fixed monitoring points only may not provide the desired information. Also, there is a constant need to remember to pass information back to the field teams relative to events and conditions at their locations.

EXERCISE DETAIL (continued)

Orange County. The County had several key emergency management staff changes recently so this exercise was extremely important to the County as a training event.

The staff was mobilized promptly and the Emergency Operations Center was declared operational within thirty minutes of the Alert notification, with all of the agencies listed in the plan represented.

The utility representative in the Emergency Operations Facility recommended a protective action to the offsite jurisdictions at the General Emergency level. The Offsite Dose Assessment Center (ODAC) concurred in the recommendation which was based on plant status and the potential for a major release. The offsite jurisdiction decision-makers, and the Emergency Operations Facility representative, discussed the protective actions and arrived at a coordinated decision on the protective action.

The Direction and Control group continually reviewed the radiological data being provided to them by the Offsite Dose Assessment Center (ODAC) to evaluate the need for directing emergency personnel to ingest potassium iodide (KI). Arrangements were made with the Sheriff to transport the KI from stockpiles to the key workers in the field, if it was needed. The scenario did not drive or require KI be used by the key emergency workers, but the decision-making process was demonstrated.

Frequent, comprehensive briefings were conducted in accord with an announced schedule. Status boards were posted in a timely manner. A paper trail was promptly developed and distributed. Excellent team discipline in executing assignments and maintaining a low level of noise for maximum verbal communications during the briefings, etc. was observed.

The Red Cross representatives put their staffs on alert prior to their need and were able to activate reception and care actions promptly when needed.

Orange County has frequently demonstrated more than adequate equipment and staffing in the area of communications. The "yellow" telephone net was observed as being highly improved operationally. There appeared to be a need for more training in communications systems at the emergency operations center. The Chief of GSA Communications was on vacation during this important event.

While the previous findings concerning the Emergency Broadcast System station (KEZY) have been corrected, there is still a need for more work in this area. See the Exercise Findings Matrix of this report for more information. On the positive side, it should be noted that this is the first exercise in which KEZY has agreed to participate and it was at a time when the majority of the radio station staff were absent.

EXERCISE DETAIL (continued)

When the County decided that a State Emergency Declaration was needed to assure that the evacuated population could be properly handled, one of the EOC staff began to draft a proposed declaration. This drafting process required a considerable amount of time. There are several options open to the County for improving this system. There can be "stock messages" made a part of the plan, or that responsibility could be directed to the State Liaison person assigned to the EOC from the State Regional Office, or a consistently planned activity that merely included the request be made of the state and the state would be responsible for preparation of the declaration.

During the 1985 biennial exercise, a major finding related to the need for regular updating of radiological emergency response plans. See Attachment E. While Orange County did provide exercise evaluators with an updated plan the day before the exercise, there appears to be a need to review the interjurisdictional procedures to refine the coordination aspects among the jurisdictions. It is also recommended that the plan incorporate a regular system for annual update and tracking of annual updates.

The exercise participants at the Orange County Emergency Operations Center met the Offsite Exercise Objectives 1, 2, 7 and 8. Objectives 4, 6 and Joint Objectives 2 and 3 were not applicable at this location. Objectives 3 and 5 were not satisfactorily met and are addressed in the Exercise Findings Matrix of this report. Participation at the Offsite Dose Assessment Center is noted above and Radiological Field Monitoring Team activities are reported below.

Radiological Field Monitoring Teams. There were Radiological Field Monitoring Teams (RFMT) from four jurisdictions participating in the exercise: San Clemente, Orange County, San Diego County, and Camp Pendleton (USMC). In general, all of the teams provided a good demonstration; but there was an evident need for continued training to further the understanding of radiation and the use of instruments and dosimeters.

The San Clemente RFMT alert and notification and reporting was timely and effective. Both teams provided a good demonstration of their ability to make measurements and understand the procedures.

The Orange County team "turn back" and other "caution" measurements need to be reviewed. The evaluators do not believe that the present system for training (one-day a year) is workable. ODAC is going to be depending on field team information and the field teams will be exiting the area. In addition, the use of only 200mR pocket dosimeters and low range radiation detection instruments does not satisfy the intent of NUREG-0654.

EXERCISE DETAIL (continued)

San Diego County's notification call was made to the Training Center. The Training Center then notified the dispatcher at Station No. 3. During off hours, the Training Center effects a recorded message. This needs to be checked and changed, if necessary.

San Diego County and ODAC Managers need to determine how to use their RFMT, both during an exercise and actual emergency. The plan location of this team is at Pulgas Road (the lower Camp Pendleton Gate). However, for exercise play they have usually moved up to the U.S. Customs Inspection Station. Since a radio "dead" spot has been discovered at the inspection station, the team moves up closer to the plant itself, along the shoulder of I-5. Parking along the shoulder of I-5 is not considered in the best interest of emergency worker safety. It is suggested that one possible alternative would be to place the team at Basilone Road and have them go in the direction of Camp Pendleton for assessing their capability to monitor. Planning for actual response operations may need to direct the team to hold back to the Pulgas Road location until it can be determined what the traffic situation is on I-5. If I-5 is blocked or closed, the team could then move with a police escort.

San Diego County. This County, like Orange County, has undergone some relatively new personnel changes at the emergency services management level. In addition, due to bomb threats at the County Administrative Building, both County Officials (decision-making group) and law enforcement staff were required to be at that location. The County Director of Office of Disaster Preparedness was required to act on behalf of the County decision-making group and assign personnel to act on behalf of law enforcement personnel. These individuals did demonstrate a capability to carry out the assigned responsibilities in accord with the plan.

The County Emergency Operations Center activities were essentially effective and it appeared likely they would be efficient during a real circumstance of this type. The Emergency Operations Center was announced as fully activated at 9:45 A.M. Periodic briefings were held. Appropriate actions were coordinated to support the total offsite jurisdiction emergency response activities. The facility does have sufficient space, telephones, lighting and equipment. The physical arrangement of the Emergency Operations Center establishes a glassed-in area designated for Direction and Control, but it was not being effectively utilized. This had a significant impact on the other activities taking place in the general response operations arena. It is recommended that space allocations within the Emergency Operations Center be established as planned to permit closer coordination of the entire emergency response personnel.

The communications at this facility are excellent. Hardware problems with the "yellow" telephone net observed during a previous exercise were completely corrected and the system functioned well.

There was good interface between the Situation Intelligence Officer and the Radiological Officer with Emergency Operations Facility liaisons.

EXERCISE DETAIL (continued)

There was a coordinated effort displayed in the dissemination of emergency broadcast system radio station messages. However, there was a problem area identified. More detail can be found in the Exercise Findings Matrix.

During the 1985 biennial exercise, a major finding related to the need for regular updating of radiological emergency response plans. See Attachment E. The County presented update pages of their 1986 revised plan to evaluators during this exercise. It is recommended that the County establish a regular system for plan update and tracking the updates provided. It is further recommended that the County participate in the refinement of interjurisdictional procedures to reflect more information relative to the coordination among the jurisdictions.

Participation at the Offsite Dose Assessment Center is noted above and Radiological Monitoring Team activities are addressed below.

State Parks and Recreation. Evacuation of parks, beaches, campsites, etc. is effected at the Alert classification level. During this exercise, this activity was simulated to minimize disruption to the public and staff performing day-to-day duties. Personnel who had not previously participated in radiological emergency plans and preparedness exercises were assigned for training purposes. All personnel carried out their assigned responsibility professionally. Each of the exercise participants took their roles seriously and fully implemented procedures. Notifications were received in a timely manner. Internal communications systems have been modified for improved coordination of evacuation activities. There were no unusual problems identified. The agency carried out their assigned mission in a most effective manner.

During the 1985 biennial exercise, a major finding related to the need for regular updating of radiological emergency response plans for all members of the Interjurisdictional Planning Committee. The official plan for the Department of Parks and Recreation, Camp Pendleton Coast Area, on file at the FEMA Region IX is dated December, 1980. However, the State Parks has developed simplified procedures that are updated annually and the Region IX RAC approved this action. A copy of the most recent update should be provided officially to FEMA Region IX for review and approval of the Region IX RAC. See Attachment E.

EXERCISE EVALUATOR GENERAL OBSERVATIONS

In addition to the areas recommended for improvement above, exercise evaluators offered the following observations for consideration by the offsite jurisdictions.

EXERCISE DETAIL (continued)

There was evidence of scenario and controller difficulties noted by the offsite exercise evaluators. At the ODAC, information was requested on several occasions by ODAC personnel but the ODAC Controller was not present. This forced the evaluators into a position of either having to provide the information or to search for the Controller. Similar difficulties were experienced by evaluators observing the Radiological Field Monitoring Teams. Controllers are extremely important to a successful demonstration of scenario established objectives. They should be carefully selected and trained. Some of the objectives established for offsite demonstration were simulated. In future development of objectives, those areas intended to be simulated should be stated as such (e.g., simulated demonstration of traffic control, etc.). Offsite jurisdictions should consider more in depth involvement during scenario development to create their own messages in order to task a broader range of emergency response operations staff.

Exercise evaluators addressed the current evacuation procedures of the offsite jurisdictions and questioned the advisability of evacuation by jurisdictional boundaries. Discussions with offsite jurisdiction staff disclosed that the subject was under study and there had been past difficulties with coordinating the timely and orderly evacuation of San Clemente and San Juan Capistrano. It is suggested that future discussions and studies include consideration to a "phased" evacuation based on exposure (e.g., areas closest to the site with a time delay for the next section of the area to be evacuated based on plume travel and projected exposure, etc.). Evacuating entire cities at the same time will create major traffic control problems that could result in greater exposure.

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

EXERCISE FINDINGS MATRIX

As mentioned earlier in this report, the exercise findings and processing of the exercise evaluation report will be in accord with Guidance Memorandum EX-1, Remedial Exercise, and the Federal Emergency Management Agency/United States Nuclear Regulatory Commission Memorandum of Understanding. The Exercise Findings Matrix will cite findings determined as areas requiring corrective actions.

Within 30 days of the exercise, the report is provided to the exercise participants and considered to be a "draft" report. The responsible jurisdictions are requested to respond within 30 days, completing the corrective action portion of the Exercise Findings Matrix. The final Exercise Evaluation Report is required to be transmitted to the United States Nuclear Regulatory Commission within 90 days of the exercise. Within 15 days of receipt of the report, the United States Nuclear Regulatory Commission will notify the Federal Emergency Management Agency in writing of action taken with the licensee relative to the initiatives with State and local governments to correct inadequacies identified in the exercise.

The Federal Emergency Management Agency, Region IX, with the support and assistance of the Regional Assistance Committee, will continue to provide technical assistance to the State and local offsite jurisdictions and will monitor progress toward optimum preparedness for protection of public health and safety in and around the San Onofre Nuclear Generating Station.

OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

EXERCISE FINDINGS MATRIX

| FINDING | PROPOSED CORRECTIVE ACTION/DATE FOR COMPLETION |
|--|--|
| <p>1. <u>Public Information.</u> The offsite jurisdictions in and around the San Onofre Nuclear Generating Station have participated in four full-scale exercises and one limited exercise since 1981. Each exercise resulted in a significant finding of weakness related to the Public Information System and/or Emergency News Center activities. Corrective action recommendations were implemented by the offsite jurisdictions subsequent to each exercise that appeared to successfully correct the problem area identified. Still, the public information aspects of the alert and notification system (i.e., Emergency Broadcast System) continue to encounter problem areas organizationally, in plan development and implementation, and training for its effective use. For example, the evaluators assigned to observe activities related to alert and notification/public information reported the following:</p> <p>While the previous finding concerning Emergency Broadcast System (EBS) radio station KEZY has been corrected, more training of the Orange County communications personnel should be done. The communications operator at the Orange County Emergency Operations Center (EOC) appeared slightly confused at times on how to funnel EBS messages to the radio station. However, the messages did reach the station and the alert system was activated on time. The EOC needs to confirm the contents of the EBS message back from the radio station prior to broadcasting. KEZY was very cooperative and enthusiastic about the program. Orange County EOC communications placed the EBS station on standby at 9:20 a.m.</p> <p>The Orange County plan calls for the EBS message to be transmitted from the radio station just prior to the sirens being activated. This procedure is in reverse of standard guidance and criteria. The operator at Control One (Orange County Communications) was well trained in siren activation procedures and demonstrated these procedures satisfactorily.</p> <p>The Communications Operator assigned the task of transmitting the EBS message to the radio station was not aware that the time entered on the message form ("request message release time") was intended as the time that the radio station was to broadcast the EBS message. Instead, this individual held the first EBS message until the designated time before beginning the transmission to the EBS station. This action would have unnecessarily delayed the subsequent broadcast of the EBS message to the public.</p> | <p>The offsite jurisdictions demonstrated the ability to quickly and efficiently process Emergency Broadcast System (EBS) messages during a corrective action drill conducted on September 16, 1987. The jurisdictions agreed to hold the drill immediately following the SONGS August 12, 1987 biennial exercise in response to a finding categorized by the EOC as an "Area Requiring Corrective Action."</p> <p>A mini scenario was developed to drive the drill. At approximately 10:27 A.M., the licensee contacted the offsite jurisdictions notifying them via the yellow telephone system of an emergency. The plant classified the condition at 10:30 A.M. as a Site Area Emergency, cited an atmospheric radiologic release to the site boundary only and a potential for additional release and restrictive protective actions to plant evacuation and precautionary beach evacuation. A hardcopy facsimile of the data was received in the Orange County EOC and the San Diego County EOC at approximately 10:37 A.M.</p> <p>At 10:45 A.M., the licensee described the prevailing plant conditions and declared a General Emergency via the yellow telephone system. It recommended the evacuation of the Emergency Planning Zone. The EOC stated that it was making a conservative recommendation on the basis of their projection that a potential significant release was not expected for some 6 to 8 hours. Hardcopy of the information was received by Orange and San Diego Counties at approximately 10:47 A.M.</p> |

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

EXERCISE FINDINGS MATRIX

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|---|--|
| <p>The first Orange County EBS message for simulated release by the EBS radio station to the public contained internally inconsistent information which would have caused confusion in the public perception. The coordinated decision made by the offsite jurisdiction decision-makers was for announcement of the Site Area emergency with no protective actions required. In fact the message released contained both an instruction to the public to take shelter and that no protective actions were necessary. There was no system demonstrated to assure that the Orange County decision-maker (Operational Area Coordinator) was aware of, or approved, the context of the message released. The offsite jurisdictions (Orange County, San Diego County, San Juan Capistrano, San Clemente, State Parks and Camp Pendleton) all concurred on the pen and ink changes to the pre-scripted EBS message and none of these individuals caught the inconsistency. Also, the message was distributed to several desks within the Orange County EOC and none of these exercise participants, some of whom were part of the decision-making process, caught the inconsistency.</p> <p>At San Diego County there was a coordinated effort displayed in the dissemination of EBS messages. However, there was a problem area identified. The first EBS message at the Site Area emergency level issued by San Diego County was not in concert with the Orange County EBS message. The Site Area emergency EBS pre-scripted message agreed upon by the offsite jurisdictions was to have read: "There is a potential health hazard to the public if the release continues, but there is no need for protective action at this time." As noted, this was the conflict in the released message including a protective action of "sheltering" above in the Orange County message. The San Diego County message did not include the phrase "...but there is no need for protective actions at this time." Therefore, the sheltering aspect was consistent, but not as coordinated with Orange County. Thus, Orange and San Diego were releasing conflicting information to the public.</p> <p>In addition, the Site Area emergency message Two for San Diego County was noted as being written at 10:00 a.m. with a requested message release time of 10:00 a.m. Their General emergency message Two was noted as being taken at 10:19 a.m. when the declaration of General Emergency occurred at 10:29 a.m. (The Site Area emergency message Two for Orange County was time-marked at 9:54 a.m. and the</p> | <p>The offsite jurisdictions "decision-makers" promptly discussed the data in a coordinated forum via the yellow telephone system. Discussions included a query regarding the ODAC recommendation.</p> <p>A protective action decision was made at 10:57 A.M. to evacuate specific areas. The simultaneous broadcast and sounding of the sirens was set for 11:10 A.M. with instruction to repeat the message four (4) times at 15 minute increments. The drill included the simulated dispatch to the EBS station which had been placed on alert. The simulation at 11:00 A.M., included the reading of the message and instructions.</p> <p>The process also included complete coordination of the message content between the Orange and San Diego County PIOs and the concurrence signature of the message by the Orange County decision-maker prior to its release.</p> <p>Following the drill, which terminated at 11:13 A.M., the messages were compared for consistency. The same form was found to be used and the information was consistent. Copies of the message forms and rosters of the drill participants are attached.</p> <p>In conclusion, the objectives of the corrective action were fully met.</p> <p>Attachments</p> |

OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

EXERCISE FINDINGS MATRIX

| FINDING | PROPOSED CORRECTIVE ACTION/DATE FOR COMPLETION |
|---|--|
| <p>General Emergency message Two was time-marked at 10:36 a.m.). While the message was being coordinated by Orange County with other jurisdictions, the San Diego County Administrative Officer was taking the information down in longhand on a notepad rather than making entries directly to the EBS pre-scripted message form. These EBS pre-scripted message forms are a part of the plan. The procedures are intended to enhance the dissemination of correct and consistent information to the public from both counties. Thus, the EBS message forms should be readily available to whomever is responsible for participating in the coordination activities related to public information EBS messages.</p> <p>Both EBS messages contained the instruction directed to the population who reside within "10-Miles" of the plant site. The statement is contrary to the planning concept adopted by the State and Local offsite jurisdictions for this site. The statement "10-Miles" has no significant meaning to the public. The EBS messages should use the same designations used in the public information brochure.</p> <p>Based in part on the foregoing the exercise evaluator assigned to the Orange County EOC reported to the Regional Assistance Committee (RAC) Chairman that in his opinion the way Orange County officials handled the EBS message constituted a "deficiency." The RAC Chairman referred the matter to the RAC. The RAC unanimously decided that the finding should be categorized as an "Area Requiring Corrective Action" and was applicable to San Diego County as well as Orange County. The RAC requested that the exercise Project Officer obtain agreement from the offsite jurisdictions to take immediate corrective action and to be prepared to demonstrate the ability to quickly and efficiently process EBS messages at the next annual full activation of the siren system on September 16, 1987. This was done and the demonstration will take place on September 16, 1987. The results will be included in the final edition of this report.</p> <p>In accord with the classification as an area requiring corrective action, the offsite jurisdictions will be required to correct this area prior to the next regularly scheduled biennial exercise during which corrective actions will address the following areas of concern:</p> <ol style="list-style-type: none"> Interjurisdictional procedure #5 (Alert and Warning) requires update and modification to specifically identify jurisdictional coordination and responsibility (Interjurisdictional Procedure #6 | |

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

EXERCISE FINDINGS MATRIX

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|---|--|
| <p>can serve as an excellent example for accomplishment of this requirement).</p> <p>(1) The Emergency Broadcast System (EBS) radio station will be alerted prior to siren activation and timed to follow the siren sounding by at least two minutes to permit the public to tune to EBS radio stations consistent with data provided in the public information brochure;</p> <p>(2) The EBS pre-scripted messages will be redesigned to permit more expedient coordination and processing (e.g., extensive editing requirements or deletion of paragraphs intended at another level of protective action will be omitted);</p> <p>(3) The new pre-scripted messages will include a system for decision-maker authorization prior to release; and</p> <p>(4) Protective actions decided upon (e.g., shelter and/or evacuation) will be stated in terms of boundaries identified in the public information brochure distributed to the public (all references to the 5- or 10-Mile emergency planning zone should be deleted).</p> <p>b. A hard-copy transmittal capability is required to coordinate both EBS messages and news releases at all emergency response facilities involved with public information releases.</p> <p>c. Training workshops for all assigned to areas of responsibility for effective public information activities related to alert and notification will be accomplished after completion of the above listed activities, but prior to the next full-scale biennial exercise.</p> <p>Since this exercise closed the period for accomplishment of objectives established by FEMA, in accord with <u>Guidance Memorandum, PR-1, Policy on NUREG-0654/FEMA-REP-1 and 44 CFR 350 Periodic Requirements</u>, this exercise finding will remain an open item until the next regularly scheduled biennial exercise during 1989.</p> <p>NUREG REFERENCE: E.5 and 7.</p> | |

OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
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EXERCISE FINDINGS MATRIX

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|--|--|
| <p>2. <u>Radiological Exposure Control.</u> The City of San Clemente failed to issue any emergency personnel with dosimetry. The Director for Emergency Services at the City Emergency Operations Center (EOC) was of the opinion that personal film badges were sufficient to fulfill this requirement. A number of EOC staff need to be issued self-reading recording devices to ensure that personnel are not receiving excess exposures. Provisions should also be put into the plan for any EOC personnel who may temporarily leave the EOC to first be issued dosimeters (unless the dosimeters are pre-positioned in vehicles being used). Also, a number of non-emergency EOC personnel occupy the building within which the EOC is located (e.g., police and fire personnel). Thus, the plan should be modified to include dosimetry use by these people.</p> <p>NUREG REFERENCE: K.3.a. and b.2.</p> | |

"GENERAL EMERGENCY MESSAGE TWO"
Evacuation Required

EBS Release No. 1 Date 9-16-87 Time (TBA) 10:53
Name San Diego County (Chris) Title CAC
Request Message Release Time (TBA) 11:10 11:10 11:10 (a.m./p.m.)
Additional Information to be provided at as available (a.m./p.m.)
Repeat message every (in what time increments) 15 minutes
and (how many times should it be repeated) 4 times
Message Contents to be released:

1. Your attention, please. This is an Emergency Broadcast Message from the (jurisdiction(s)) CC, SDC, SSC, & SC
2. This is ~~NOT a test~~ a drill. I repeat, this is ~~NOT a test~~ a drill.
3. Stand by for information of importance.
4. On (date) 9-16-87, at (time) TBA 10:45 (a.m./p.m.), a GENERAL EMERGENCY was declared by the management of the San Onofre Nuclear Generating Station, located four miles south of the City of San Clemente, in the County of San Diego.
5. This GENERAL EMERGENCY involves (an actual/a threatened) release of radioactive materials to the environment which (is causing/could cause) a public health hazard. Actual measurement of radiation at 1.5 miles (Additional information).
is currently very small, represents no hazard to public health.
6. Utility personnel are working to return the generating station to a safe condition as soon as possible.
7. Emergency sirens around the generating station have been sounded to alert the public to turn on their radios or televisions for information.
8. Residents of Camp Pendleton should follow emergency instructions issued by Marine Corps officials.
9. The following state beaches and parks have been closed San Onofre & San Clemente.
Visitors to the beaches and parks are asked to follow instructions from park rangers and lifeguards.

General Emergency Message Two
continued

10. Public safety officials are requesting that persons in the following areas leave and report to their designated Reception and Care Center as listed in their emergency information pamphlet. (This same information may also be found in the front of the Orange County - South public telephone directory.)

~~Example: (The residents of the City of San Clemente should evacuate. Only the residents of the City of San Clemente should leave the area and report to their designated Reception and Care Center.)~~

~~Example:~~ (If you are in the Cities of San Clemente, San Juan Capistrano, and Dana Point, please leave the area. Report to the designated Reception and Care Center identified in your emergency information pamphlet.)

Capistrano Beach

Follow the evacuation routes indicated in the emergency information pamphlet map. All exit routes will be clearly marked and controlled by emergency personnel.

11. Evacuate even if your spouse is at work or your children are at school. DO NOT wait or attempt to relocate with them. Students in school will be evacuated to Reception and Care Centers designated for their schools. They will be reunited with their families at a later time.
12. If you have a recreational vehicle or car, please use it to drive to the Reception and Care Center.
13. If you can provide transportation for a neighbor, please do so.
14. If you have no transportation, walk to the nearest Assembly Point indicated in the emergency information pamphlet. You will then be transported to your Reception and Care Center.
15. If you are a resident of San Clemente, San Juan Capistrano, Capistrano Beach, or Dana Point, go directly to the Reception and Care Center designated for your home.
16. Employers, employees, and customers who are not residents of the areas announced, should go to the Reception and Care Center designated in the emergency information pamphlet that was provided to the business.

General Emergency Message Two
continued

17. Before leaving, please DO the following:
 - a. Ensure that all members of the household are adequately dressed for outdoor activity appropriate to the season.
 - b. Close all windows and drapes.
 - c. Turn off all air conditioners, exhaust fans and clothes dryers.
 - d. Turn off all lights and electrical appliances.
 - e. Turn off the main water valve to the house.
 - f. Shelter pets and leave a three-day supply of food and water.
 - g. Bring bedding for each member of the family, such as sleeping bags or blankets and pillows.
 - h. Bring a three-day supply of toilet articles and underclothing.
 - i. Bring prescribed medicines and baby formula for, as needed.
 - j. Bring a small amount of cash and your checkbook.
 - k. Close and lock all exterior doors; security for the evacuated area will be provided.
18. At the Reception and Care Center, you will be kept informed of the emergency status and when to return home.
19. No actions need to be taken by citizens in other areas of Orange County or San Diego County.
20. This is ~~NOT a test~~ or a drill. I repeat, this is ~~NOT a test~~ or a drill.
21. To repeat ... (repeat items 4 through 19).
22. Stay tuned to this station for further official information.

IP #5
ATTACHMENT 7.2

"GENERAL EMERGENCY MESSAGE TWO"
Evacuation Required

EBS Release No. 1 Date 9/16/87 Time 10:15 ⁵³
Name Dan Elberle Title Director, ODP
Request Message Release Time 11:10 _{a.m./p.m.}
Additional Information to be provided at as available _{a.m./p.m.}
Repeat message every (in what time increments) 15 minutes
and (how many times should it be repeated) 4 times

Message Contents to be released:

1. Your attention, please. This is an Emergency Broadcast Message from the (jurisdiction(s)) Orange County and San Diego County, San Clemente and San Juan Capistrano
2. This is ~~NOT~~ a test or a drill. I repeat, this is ~~NOT~~ a test or a drill.
3. Stand by for information of importance.
4. On (date) 9/16/87, at (time) 10:45 _{a.m./p.m.} a GENERAL EMERGENCY was declared by the management of the San Onofre Nuclear Generating Station, located four miles south of the City of San Clemente, in the County of San Diego.
5. This GENERAL EMERGENCY involves (an actual threat of) release of radioactive materials to the environment which (is causing) could cause a public health hazard actual measurements at 1 and 5 miles is currently very small and represents no hazard to public health. (Additional information).
6. Utility personnel are working to return the generating station to a safe condition as soon as possible.
7. Emergency sirens around the generating station have been sounded to alert the public to turn on their radios or televisions for information.
8. Residents of Camp Pendleton should follow emergency instructions issued by Marine Corps officials.
9. The following state beaches and parks have been closed San Onofre and San Clemente beaches. Visitors to the beaches and parks are asked to follow instructions from park rangers and lifeguards.

General Emergency Message Two
continued

10. Public safety officials are requesting that persons in the following areas leave and report to their designated Reception and Care Center as listed in their emergency information pamphlet. (This same information may also be found in the front of the Orange County - South public telephone directory.)

~~Example: (The residents of the City of San Clemente should evacuate. Only the residents of the City of San Clemente should leave the area and report to their designated Reception and Care Center.)~~

~~Example:~~ (If you are in the Cities of San Clemente, San Juan Capistrano, and Dana Point, please leave the area. Report to the designated Reception and Care Center identified in your emergency information pamphlet.)

Capistrano Beach

Follow the evacuation routes indicated in the emergency information pamphlet map. All exit routes will be clearly marked and controlled by emergency personnel.

11. Evacuate even if your spouse is at work or your children are at school. DO NOT wait or attempt to relocate with them. Students in school will be evacuated to Reception and Care Centers designated for their schools. They will be reunited with their families at a later time.
12. If you have a recreational vehicle or car, please use it to drive to the Reception and Care Center.
13. If you can provide transportation for a neighbor, please do so.
14. If you have no transportation, walk to the nearest Assembly Point indicated in the emergency information pamphlet. You will then be transported to your Reception and Care Center.
15. If you are a resident of San Clemente, San Juan Capistrano, Capistrano Beach, or Dana Point, go directly to the Reception and Care Center designated for your home.
16. Employers, employees, and customers who are not residents of the areas announced, should go to the Reception and Care Center designated in the emergency information pamphlet that was provided to the business.

General Emergency Message Two
continued

17. Before leaving, please DO the following:
 - a. Ensure that all members of the household are adequately dressed for outdoor activity appropriate to the season.
 - b. Close all windows and drapes.
 - c. Turn off all air conditioners, exhaust fans and clothes dryers.
 - d. Turn off all lights and electrical appliances.
 - e. Turn off the main water valve to the house.
 - f. Shelter pets and leave a three-day supply of food and water.
 - g. Bring bedding for each member of the family, such as sleeping bags or blankets and pillows.
 - h. Bring a three-day supply of toilet articles and underclothing.
 - i. Bring prescribed medicines and baby formula food, as needed.
 - j. Bring a small amount of cash and your checkbook.
 - k. Close and lock all exterior doors; security for the evacuated area will be provided.
18. At the Reception and Care Center, you will be kept informed of the emergency status and when to return home.
19. No actions need to be taken by citizens in other areas of Orange County or San Diego County.
20. This is ~~NOT a test or~~ a drill. I repeat, this is ~~NOT a test or~~ a drill.
21. To repeat ... (repeat items 4 through 19).
22. Stay tuned to this station for further official information.

Exercise Participants

State of California

Dennis Smith

Orange County

Christine Boyd
Peter Lawrence
Denise Reed
Helen Lotus

San Diego County

Tom Amabile
Richard Hamilton
Willard Lewis
Steve Danon

San Juan Capistrano

Cynthia Ferguson

San Clemente

Jack Stubbs

SONGS

Jack Wallace
Phil Dooley

Exercise Evaluators

Orange County EOC
San Diego County EOC
SONGS EOF

Joseph D. Dominguez
Harold Aldrich
Terry Knight

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

EXERCISE EVALUATOR ASSIGNMENTS

Nicholas B. Nikas, Chief
Natural & Technological Hazards Division

| Facility/Function | Evaluator(s) |
|---|---|
| Emergency Operations Centers: | |
| Camp Pendleton | Ken Miles, RAC (FDA) |
| Orange County | Joseph H. Keller, INEL — Joseph D. Dominguez, FEMA |
| San Clemente | William Vinikour, Argonne |
| San Diego County | — John Robinson, FEMA — Suzanne Mooney, FEMA |
| San Juan Capistrano | Lester Conley, Argonne |
| State Parks | — Jim Begansky, FEMA |
| Emergency News Center | — Verne Paule, FEMA |
| Communications/Emergency Broadcast System | Terry Knight, FEMA — Darrell Eakle, FEMA |
| Reception and Care | — Jim Begansky, FEMA |
| Transportation/Evacuation | Ed Henry, DOT (FEMA) |
| Emergency Operations Facility | Dean Kunihiro, RAC (NRC) Susan Elkins, FEMA |
| Offsite Dose Assessment Center | Dave Duncan, RAC (EPA) Dale Stevenson, RAC (FDA) |
| Radiological Monitoring Teams | — Manley Wu, FEMA Phil Hill, RAC (DOE) Brad Salmonson, INEL Bob Lyon, EPA, Las Vegas Bob Nicol, FDA |

SAN ONOFRE NUCLEAR GENERATING STATION
1987 ANNUAL EMERGENCY PLAN EXERCISE

OBJECTIVES

A. ONSITE OBJECTIVES

1. Demonstrate the ability of on-shift and recalled personnel to recognize accident conditions, and to declare the appropriate emergency classification within 15 minutes of recognition.
2. Demonstrate the ability to recall required SCE Emergency Response Personnel in accordance with Emergency Plan Implementing Procedures (EPIPs) and the Corporate Emergency Support Organization (ESO) Procedures.
3. Demonstrate notification procedures and communication capabilities to provide accurate event and follow-up notifications to offsite agencies within specified time limits.
4. Demonstrate the ability of on-shift and recalled Emergency Response Personnel to conduct adequate turnovers and transfer of responsibilities in accordance with EPIPs and ESO Procedures.
5. Demonstrate the ability to staff and operate required onsite (TSC, OSC, EOF) and offsite (ENC, HSC) emergency response facilities with the required personnel within the time limits specified by EPIPs and ESO Procedures.
6. Demonstrate the ability to transmit information between Emergency Response Facilities as it relates to the process of recommending protective actions for the general public in accordance with EPIPs and ESO Procedures.
7. Demonstrate the ability to transmit information between Emergency Response Facilities as it relates to the process of emergency classification in accordance with EPIPs and ESO Procedures.
8. Demonstrate the ability to provide accurate reports of medical team status to Emergency Response Facilities as soon as practical following secondary survey of patient(s), consistent with attending to patient(s) and other required duties.

A. ONSITE OBJECTIVES (continued)

9. Demonstrate the adequacy of SCE radiation monitoring team deployment to provide continuous radiological assessment by accurate communication of field monitoring data and the incorporation of the monitoring data into protective action decision-making.
10. Demonstrate the ability to sample and analyze in-plant liquids, in accordance with station post-accident sampling procedures.
11. Demonstrate the ability to determine and implement appropriate measures for controlled recovery and reentry in accordance with the SONGS Emergency Plan.

B. OFFSITE OBJECTIVES

1. Demonstrate the adequacy of notification procedures and communication capabilities to notify and mobilize emergency response personnel in accordance with the offsite jurisdictions' emergency response plans.
2. Demonstrate the capability to fully activate and staff the Emergency Operations Centers (EOCs) to meet exercise objectives.
3. Demonstrate the ability to assess recommendations and disseminate information to the appropriate organizations, including recommendations concerning public protective action.
4. Demonstrate the ability to deploy field radiation monitoring teams, take measurements, and communicate with the Offsite Dose Assessment Center (ODAC).
5. Demonstrate the ability to develop and issue Emergency Broadcast System (EBS) messages and coordinate release of EBS messages with the activation of the Alert and Notification System.
6. Demonstrate the ability to coordinate the dispatch of emergency workers including exposure control.
7. Demonstrate the ability to activate Reception and Care Centers in a timely manner, as needed.
8. Demonstrate the decision-making process with respect to supplying emergency workers with potassium iodide (KI).

C. JOINT OBJECTIVES

1. Demonstrate the adequacy of the decision making process between the IIOF and offsite EOCs in coordinating protective actions towards the general public.
2. Demonstrate the ability to perform offsite dose assessment projections necessary to provide advance warning to local, state, and federal agencies, and to the general public.
3. Demonstrate the ability to activate and operate the Emergency News Center (ENC) and coordinate the dissemination of timely and accurate information to the news media by means of press releases and news briefings.

SAN ONOFRE NUCLEAR GENERATING STATION
1987 ANNUAL EMERGENCY PLAN EXERCISE

SUMMARY

INITIAL CONDITIONS

The exercise begins with Unit 1 operating at 93% power, immediately following a refueling outage. Plant conditions are normal, except for a 72-hour LCOAR on the south charging pump, which is out of service for replacement of the inboard pump seal. The pump has been out for 24 hours, and is expected back in service within the next 24 hours.

Spent fuel is being shuffled to prepare for fuel inspection. Fuel from the last cycle (removed from the core about five weeks earlier) is being moved to the inspection area by maintenance personnel, with an operator and HP technician in attendance.

Personnel are pre-staged on the turbine deck for the spent fuel shuffling, and at the south charging pump. They are given cue cards describing the simulated conditions, just prior to the start of the exercise.

Control Room personnel are briefed and allowed to use the Control Room data display computer, to become familiar with its use, just prior to the start of the exercise.

The ambulance and duty fire truck are also pre-staged inside the Protected Area. This shortens the response time of Emergency Service Officers (ESOs) to about the response time for an actual emergency, when Security processing would be suspended for ESOs. A Security Officer is stationed with the ambulance, so the vehicle can be released as soon as the ESOs arrive.

Unit 2 is operating at 92% power, continuing a power coastdown until the end of the current cycle. Unit 3 is operating at full power.

SPENT FUEL HANDLING ACCIDENT AND CONTAMINATED INJURY

At 08:01, a spent fuel assembly is damaged when the spent fuel bridge crane is moved laterally before the assembly has been lifted clear of the storage rack. Damage is apparent to the pins along one side of the assembly.

Gaseous radioisotopes released from the damaged assembly, primarily Kr-85 and Xe-133, rise through the spent fuel pool and are exhausted to the atmosphere via the plant vent stack. In addition to the gas release, particulate contamination is released into the spent fuel pool. The indication on vent stack monitor R-1254 and the local ARMS channel, R-1236, increase to their alarm setpoints within a few minutes of the accident.

SUMMARY (continued)

When the accident occurs, personnel in the Spent Fuel Building note the gases escaping from the damaged assembly, and the HP technician observes increased radiation with a hand-held detector. To limit personnel exposure, the HP technician should direct personnel to evacuate the building. The operator observing the fuel shuffle should inform the control room of the accident via radio.

When personnel start to evacuate the Spent Fuel Building, the crane operator falls and strikes his head on the crane structure. He is dazed and bleeding from a head wound. Personnel leaving the building should assist the injured worker in evacuating, and call for emergency medical assistance.

When ESOs are ready to transport the injured worker, the head wound is found to be contaminated. The worker should be transported, and the Mesa Medical Facility should be notified to handle the contaminated injury.

The injured worker is decontaminated and treated at the Mesa Medical Facility.

The total amount of activity released from the damaged fuel assembly is about $3.3\text{E}3$ Curies of Xe-133, and $4.0\text{E}2$ Curies of Kr-85. The resulting offsite dose is quite small, but the accident meets the criteria of Alert event code A2-5 (spent fuel handling accident with subsequent radiation monitor alarm), and requires declaration of an Alert.

When the control room becomes aware of the accident, the Shift Superintendent should declare the emergency and initiate emergency notifications. Declaration of an Alert requires recall of station and corporate emergency response personnel. Onsite sirens are activated to alert personnel in high-noise areas. Because the Alert involves a release of radioactivity, evacuation of the state beach must be recommended during notification of local authorities.

Upon activation of station emergency response facilities, an inspection team should be sent to the Spent Fuel Building, to identify containment and cleanup requirements. If a team is not sent by 08:45, a contingency cue card directs that a team be dispatched to inspect the damaged spent fuel assembly.

When a team is able to inspect the damaged fuel assembly, they find that damage is limited to about 20 pins, and the release of fission gases is decreasing.

RCS LEAK

At 09:15, an RCS leak occurs, at about 75 gpm. The leak is

SUMMARY (continued)

evidenced by increased charging flow, momentarily decreased pressurizer level, increasing sphere radiation and sump level, and increased makeup to the VCT. To avoid automatic transfer of charging pump suction from the VCT to the RWST, it is necessary to increase the primary water makeup rate to the VCT from 60 gpm to about 100 gpm.

When the leak rate is determined, it should be identified as an Alert, per event code B2-1. Emergency notifications to offsite agencies should indicate the changed plant conditions.

Reactor shutdown is initiated at 09:20, at about 2-1/2% per minute. Letdown is isolated to help maintain pressurizer level while shutting down. Other plant parameters indicate as expected, given the RCS leak and rapid plant shutdown.

FEEDWATER PUMP FAILURE

At 09:45, when reactor power is about 30%, the east main feedwater pump lube oil low pressure alarm is received in the control room, and lube oil and bearing temperatures are seen to be increasing rapidly. The pump is manually tripped. Subsequent inspection of the pump will reveal that an oil line has ruptured. Pump bearings are damaged and the pump is inoperable.

Plant shutdown is continued at the same rate, and steam generator levels are maintained by the remaining feedwater pump.

LOSS OF COOLANT ACCIDENT AND FAILURE OF SAFETY INJECTION

As the unit is taken off line at 10:00, the RCS leak increases to about 700 gpm. This causes rapid RCS pressure and level reduction, and automatic initiation of safety injection. Containment pressure, temperature, humidity, sump level and radiation begin increasing. The rupture is located on the charging line connection to the loop A cold leg.

The west feedwater pump safety injection discharge valve HV-851B fails to open due to an actuator malfunction. Because the east feedwater pump is out of service, there is a loss of safety injection. In addition, the north charging pump fails to restart after the Safety Injection Signal, due to a breaker malfunction. This results in a total loss of makeup to the RCS.

The LOCA meets the criteria for Site Area Emergency, by event code B3-1. Upon declaration, the protected area is evacuated of non-emergency response personnel (simulated). Personnel in the N-Trailers, outside of the Protected Area, assemble in accordance with announcements, to demonstrate assembly of station personnel. When notified of reclassification to Site Area Emergency, Camp Pendleton San Onofre housing is also evacuated (simulated).

SUMMARY (continued)

When the safety injection failure is noticed, personnel should be dispatched to the west feedwater pump to open the valve. When the charging pump failure is observed, a team should also be dispatched to repair the breaker. Cue cards are provided to teams upon arrival at the valve and breaker locations describing the conditions.

Because of the loss of coolant and make-up capability, voiding occurs in the core, and about 1% of the fuel is damaged. As fuel damage occurs, fission products are discharged into containment with the spilled coolant. Containment pressure and radiation continue to increase, and pressure reaches about 5 psig by 10:30.

At 10:35, the repair team succeeds in opening HV-851B, allowing restoration of safety injection flow. Because RCS pressure has decreased to about 760 psig, the feedwater pump delivers about 10,000 gpm safety injection flow, filling the pressurizer in about 2 minutes. The RCS is then repressurized to about 1200 psig, and SI flow is reduced to equal break flow.

At 11:00, the south charging pump repairs are completed and the pump is started. This allows initiation of cold leg injection. However, the leak is greater than the capacity of one charging pump, and safety injection cannot be terminated.

At 11:15, the north charging pump is restarted. Because RCS inventory can be maintained by cold leg injection with both charging pumps running, safety injection is stopped. RCS temperature is then reduced at 75°F/hour, by initiating steam flow, to establish 50°F subcooling required for continued RCS depressurization. Reactor coolant pump restart is avoided, because of inadequate pressure differential between the RCS and the main steam system.

At 11:35, RHR is placed in service. Because reactor decay heat exceeds RHR capacity, steam generator steaming is continued. Pressurizer level is controlled at 70%, and cooldown continues at 75°F/hour. Level then increases as the pressurizer bubble is collapsed.

At 12:48, steam generator steaming is secured, and cooldown is continued with RHR at about 25°F/hour. The operating coolant pump is then secured, allowing RCS depressurization and decreased leak rate.

TANK TRUCK ACCIDENT

At 10:45, a gasoline tank truck overturns in the northbound lanes of Interstate 5, about one mile south of Camino de Estrella, in San Clemente. Because the truck is leaking gasoline, California Highway Patrol (CHP) closes the freeway in both directions.

SUMMARY (continued)

EOF personnel receive word of the highway obstruction from CHP representatives via telephone (simulated by cue card). Blockage of the highway must be evaluated for impact on evacuation plans.

The truck is removed and traffic restored at about 12:15.

LOSS OF CONTAINMENT

At 11:00, when containment pressure reaches about 4 psig, the purge exhaust valve, POV-10, opens. The downstream manual isolation valve, CVS-313, is open, with local indication showing closed. The open valves allow a release of containment activity to atmosphere via the plant vent stack. Plant vent stack monitor alarms are initiated, and containment pressure begins decreasing. Attempts to close POV-10 from the control room are unsuccessful.

The release results in dose rates of about 484 mR/hour at the Exclusion Area Boundary, decreasing to about 47 mR/hour at Babilonia Road.

The loss of containment, in conjunction with a LOCA and fuel damage, meets the criteria for General Emergency, by event code B4-1. Upon declaration, sheltering for downwind areas that cannot be evacuated before plume arrival, and evacuation of the remainder of a 5-mile radius and 10-mile downwind sectors, should be recommended for the general public, in accordance with the Emergency Coordinator's procedure. Subsequent protective action recommendations may be made based upon concerns of offsite agencies. Site evacuation of non-emergency response personnel should be conducted, in the direction away from the plume pathway.

When the opening of POV-10 is recognized, a repair team should be sent to close either valve. Inspection of POV-10 shows that it was opened by a signal from a pressure switch activated by high containment pressure, apparently installed by a saboteur. In addition, the handwheel has been disabled, and the closing side of the piston operator has been damaged to prevent closure by air pressure. The stem of CVS-313 has been disabled, with the valve open and the position indicator showing closed.

Indications of sabotage should be reported to the Emergency Response Facilities, and Security personnel should initiate an investigation. Re-categorization of the emergency may be considered to event code F4-1, a General Emergency based on security problems.

At 12:30, the repair team succeeds in closing one of the valves, terminating the release. Emergency response personnel should consider reclassifying the event, and revise protective action recommendations for the general public.

SUMMARY (continued)

RECOVERY PLANNING

At 12:45, the Emergency Coordinator and Station Emergency Director are given cue cards to initiate recovery planning. Planning should be conducted with team leaders in the TSC and EOF.

PERSONNEL INJURY

At 13:05, a member of the San Clemente Field Monitoring Team falls down a steep slope and breaks his ankle. The worker was walking near Cristianitos Road.

EXERCISE TERMINATION

At 14:00, the exercise may be terminated.

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

TIME LINE SEQUENCE OF EVENTS

| | ALERT | SITE AREA | GENERAL EMERGENCY |
|---------------------|-----------|-----------|-----------------------------|
| EOF DECLARED | 8:06 A.M. | 9:01 A.M. | 10:19 A.M. |
| ENC | 8:19 A.M. | 9:23 A.M. | 10:22 A.M. |
| Camp Pendleton | 8:18 A.M. | 9:10 A.M. | 10:20 A.M. |
| Orange County | 8:23 A.M. | 9:15 A.M. | 10:26 A.M. |
| San Clemente | 8:18 A.M. | 9:12 A.M. | 10:29 A.M. |
| San Diego County | 8:23 A.M. | 9:10 A.M. | 10:29 A.M. |
| San Juan Capistrano | 8:20 A.M. | 9:17 A.M. | 10:36 A.M. |
| State Parks | --- | 9:15 A.M. | (Evacuated at Site Area) |

EBS Station

Standby 9:20 A.M. Activated 10:55 A.M.
Message Released: 10:57 A.M.
(Offsite Protective Action Decision 10:42 A.M.)

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS EXERCISE
SAH ONOFRE NUCLEAR GENERATING STATION

EXERCISE FINDINGS MATRIX

| EVALUATOR FINDING | NUREG REF. | PROPOSED CORRECTIVE ACTION/DATE FOR COMPLETION |
|---|--------------------------------------|--|
| <p>1. The sequence of events during the exercise presented an unusual situation that requires further examination and attention. A plant status news release and media briefing included a statement by the utility spokesperson that they had declared a general emergency and protective action recommendations had been provided to local governments. A unanimous decision was reached by the offsite jurisdictions not to implement protective actions, based on technical advice from the Offsite Dose Assessment Center. The alert and notification system was not activated. Each of the local governments participating in the exercise did recognize the need for providing prompt public information and instruction to clarify the situation. Various forms of public information were initiated from the emergency operations centers of individual offsite jurisdictions. Preparatory activities were undertaken to develop a coordinated offsite emergency public information news release, announcing that protective actions were not deemed as warranted at that time. However, during the preparatory activities, the exercise de-escalated and then terminated. While no deficiency related to regulatory requirement or plans and procedures implementation was observed, any likelihood of actions that would result in public confusion requires correction.</p> <p>The plans and procedures for emergency response operations at the Emergency News Center need to be reviewed and amended, as required, to address the need for a more "joint" approach to public information requirements in the event of an apparent conflict between utility announcements on plant status and off-site jurisdiction public instruction relating to appropriate protective action requirements.</p> | <p>G.3.a. and G.4.a. & b</p> | <p>The Public Information Officer and the Offsite Dose Assessment Center subcommittees will be requested to evaluate and review the plans and procedures and submit their recommendations and findings to the Interjurisdictional Planning Committee. Updated plans are scheduled to be ready for formal submittal in mid-1986. The Interjurisdictional Planning Committee will meet with the Federal Emergency Management Agency staff regarding this item.</p> <p>It should be noted that the annual siren test was successfully completed September 11, 1985.</p> |
| <p>JURISDICTION AND/OR FACILITY: INTERJURISDICTIONAL PLANNING COMMITTEE</p> | | |

CORRECTED

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS EXERCISE
SAN ONOFRE NUCLEAR GENERATING STATION

EXERCISE FINDINGS MATRIX

| EVALUATOR FINDING | NUREG REF. | PROPOSED CORRECTIVE ACTION/DATE FOR COMPLETION |
|---|-----------------------|---|
| <p>2. Pre-exercise activities included the review of offsite plans and procedures represented as being current (most, if not all, were dated 1983). During the evaluator orientation and during the exercise, it was noted that several plans and procedures were updated documents to the plans presented as current. The Federal Emergency Management Agency, Region IX, has no record of receiving any 1984 plan update submissions for any of the jurisdictions in and around the San Onofre Nuclear Generating Station (except from the utility). NUREG-0654 requires annual review and update, if required, of all plans and procedures. Telephone rosters are to be updated on at least a quarterly basis in accord with NUREG-0654. Some resource support telephone numbers were noted by evaluators as being out-of-date. Plan maintenance activities should include a procedure for systematic telephone updates (e.g. standard operating procedures that identify the need for employees and agencies to furnish that information upon change, etc.). If review of such documents result in a determination that no update is necessary, that information should be reported to the Federal Emergency Management Agency, Region IX, through the California Office of Emergency Services, as appropriate.</p> | <p>P.4. P.10.</p> | <p>The offsite jurisdictions' radiological emergency response plans will be updated by April 1986.</p> |
| | | <p>OCTOBER 9, 1987</p> |
| | | <p>THE CURRENT LEVEL OF EFFORT IN THE AREA OF PLANNING BY THE OFFSITE JURISDICTIONS AT THIS SITE APPEARS TO ENSURE THAT THE RECOMMENDATIONS FOR 1) REVIEW AND REVISION, AS APPLICABLE; 2) INTERJURISDICTIONAL PROCEDURES REFLECT THE ENTIRE SPECTRUM OF COORDINATION AMONG THE VARIOUS JURISDICTIONS; AND 3) A SYSTEM FOR ANNUAL UPDATE (OR A LETTER ATTESTING THAT THE PLAN HAS BEEN REVIEWED AND FOUND NOT TO REQUIRE AN UPDATE) AND TRACKING OF CHANGES, WILL BE ACCOMPLISHED PRIOR TO THE NEXT REGULARLY SCHEDULED BIENNIAL EXERCISE.</p> |
| | | <p>SEE THE EXERCISE FINDINGS FOR EACH JURISDICTION TO DETERMINE THE LEVEL OF ACCOMPLISHMENT AND STATUS OF THE CURRENT PLAN.</p> |
| <p>JURISDICTION AND/OR FACILITY: INTERJURISDICTIONAL PLANNING COMMITTEE</p> | | |

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS EXERCISE
SAN ONOFRE NUCLEAR GENERATING STATION

EXERCISE FINDINGS MATRIX

| EVALUATOR FINDING | NUREG REF. | PROPOSED CORRECTIVE ACTION/DATE FOR COMPLETION |
|--|------------|---|
| <p>3. The primary station for the Emergency Broadcast System, KEZY, was recently sold and is now under new management. New management has not received orientation or training in effecting public information in the event of a radiological emergency at the San Onofre Nuclear Generating Station. Prior exercises have not included scenario direction for actual transmission of messages to the emergency broadcast system station to demonstrate their ability to disseminate public information. This exercise did not escalate to implementation of protective actions that required full activation of the alert and notification system. The Interjurisdictional Planning Committee should establish orientation and training for the Emergency Broadcast System Station KEZY management and staff and include the testing of that system during the next regularly scheduled exercise. (NOTE: The Federal Emergency Management Agency, Region IX, staff will be working closely with the local jurisdictions in this regard and directly with the Station KEZY relative to orientation and training on the overall aspects of primary Emergency Broadcast Station responsibilities.)</p> | E. 5. | <p>The Interjurisdictional Planning Committee, the Federal Emergency Management Agency, Region IX, and the Orange County will work in concert to orient and train KEZY station management and staff. Anticipated date for completion is September 1986.</p> |
| <p>JURISDICTION AND/OR FACILITY: INTERJURISDICTIONAL PLANNING COMMITTEE</p> | | |

CORRECTED

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

STATUS OF 35 FEMA OBJECTIVES/PR-1

The offsite jurisdictions in and around the San Onofre Nuclear Generating Station have successfully demonstrated each of the 35 FEMA objectives that are applicable.

Attachment G shows the number of exercises and other major program activities the offsite jurisdictions at this site have been involved with.

Objectives 1,2,3,4,5,6,7,8,9,10,13,14,15,17,18,19,20,21,22,24,25,26,27,28, 30,31 have generally been a part of each full-scale exercise.

Clarification of certain sub-elements of these objectives and objectives not listed, is provided as follows:

Objective 2. Each of the offsite jurisdictions at this site has demonstrated the ability to fully staff all facilities. Not all have demonstrated a capability for maintaining staff around the clock during exercise play. However, since each of the jurisdictions have been required to maintain 24-hour staffing in response to an actual natural disaster, the RAC feel that the objective has been successfully demonstrated.

Objectives 11 and 12. Ingestion Pathway objectives will be demonstrated by the State of California during 1987 at another nuclear power plant site within the State.

Objective 16. Region IX RAC does not feel that the offsite jurisdictions within the State of California should have to demonstrate emergency response operations during inclement weather inasmuch as it would have little affect on evacuation at these locations. The offsite jurisdictions at this site have demonstrated the organizational ability and resources required to manage an orderly evacuation with a significant impediment: during one biennial full-scale exercise an actual hazardous materials spill occurred within Orange County and during the limited exercise in 1986 the scenario provided a hazardous materials spill that obstructed the major evacuation route (I-5). On both occasions, the offsite jurisdictions demonstrated a satisfactory ability to implement alternate routes for continuous evacuation of the public.

Objective 23. This objective has not been demonstrated as a separate item. However, evacuation at this location would not present a difficult problem

STATUS OF 35 OBJECTIVES/PR-1

in that the evacuation of onsite personnel is via Highway 1-5 moving in a southerly direction whereas the majority of the population (within the Cities of San Clemente and San Juan Capistrano) would be moving northerly. The San Onofre Nuclear Generating Station is adjacent to 1-5 with easy access. Evacuation of residents at Camp Pendleton Marine Corps Base would be using another roadway in a southerly direction. Therefore, while it has not been addressed as a separate item, it has been considered during the evacuation procedures performed to demonstrate that capability.

Objective 29. The offsite jurisdictions have demonstrated the capability for decontamination of emergency workers. Establishing a physical demonstration of decontamination procedures for equipment and vehicles is considered too costly for exercise purposes. This activity has been simulated to the satisfaction of the RAC.

Objective 32. Within the State of California, local offsite jurisdictions would identify the need for, request, and obtain state support for emergency response operations. It would be a State responsibility to determine the need for federal assistance. This will be demonstrated by the State during an exercise at another nuclear power plant site during 1987.

Objective 33. The County of Orange has demonstrated a capability to relocate to and operate the alternate Emergency Operations Center. The RAC has determined that there is no purpose to be served by having such a demonstration at the other locations of Emergency Operations Centers. The San Diego County Emergency Operations Center is located 60-70 miles from the plant site. Camp Pendleton would evacuate at an early protective action level and are located out of the 10-Mile Emergency Planning Zone. Both the City of San Clemente and San Juan Capistrano would relocate their Emergency Operations Centers to the Orange County facility which is also well out of the 10-mile Emergency Planning Zone. The Emergency Operations Facility is located close to the plant site, but has a NRC approved "hardened" facility even though they have identified an alternate site for the Emergency Operations Facility. State Parks evacuates at the Alert level and does relocate to an alternate site (which they do during each exercise). The RAC feel that this objective has been met.

Objective 34 and 35. Both of these objectives have been discussed during biennial exercises. However, no specific guidance has been provided for establishing demonstration requirements. The RAC feel that total population exposure has been estimated by the offsite jurisdictions satisfactorily. Further, that the State will more appropriately address recovery and reentry during the Ingestion Pathway Zone exercise scheduled for October 1987.

STATUS OF 35 OBJECTIVES/PR-1

The findings resulting from each full-scale and/or limited exercise have generally been corrected prior to the next regularly scheduled exercise.

The State of California has made it a matter of record that they will not provide FEMA with an Annual Letter of Certification as required by Guidance Memorandum PR-1. Based on the above information and the findings contained in this exercise report, the RAC has determined that the offsite jurisdictions at this site have complied with GM PR-1, except for item 6 of Section C (which pertains to the area requiring corrective action in this exercise evaluation report).

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE

PAST PREPAREDNESS MILESTONES

PLANNING

| | |
|------------------------------|-----------|
| Draft Plans submitted | - 1980 |
| Annual updates | - 1981-85 |
| Submitted for 350 processing | - 1985 |
| Updates | - 1986 |

EXERCISES

| | |
|--|------------|
| Full-Scale offsite participation | - 05/31/81 |
| | 04/15/82 |
| | 03/23/83 |
| Off-year exemption - no offsite evaluation | - 02/29/84 |
| Full-Scale offsite participation | - 08/07/85 |
| Off-year - Limited offsite exercise/ENC | - 09/10/86 |

PUBLIC MEETING

| | |
|-----------------------------------|------------|
| Official public meeting conducted | - 05/18/81 |
|-----------------------------------|------------|

ALERT AND NOTIFICATION

| | |
|---|------------|
| Official demonstration and survey evaluated | - 09/28/83 |
| FEMA official approval | - 01/31/84 |

PUBLIC INFORMATION

| | |
|--------------------------------|-----------|
| Initial brochure dissemination | - 1982 |
| Updated and distributed | - 1983-86 |
| Technical assistance meeting | - 1985 |

MEDICAL

| | |
|---------------------------------|-----------|
| Training and drills annually | - 1981-85 |
| Training and drills biannually | - 1985-87 |
| Medical drill evaluation (MS-1) | - 1987 |

TRAINING

Essential training in accord with NUREG-0654,
Standard O, conducted annually and reported.

December 1, 1987

ERRATA TO REPORT - EXERCISE EVALUATION OF THE OFFSITE EMERGENCY PLANS AND PREPAREDNESS AT THE SAN ONOFRE NUCLEAR GENERATING STATION ON AUGUST 12, 1987 -- EXERCISE REPORT DATE: OCTOBER 9, 1987.

Page 8, Paragraph One: "(Note: Another exercise evaluator assigned to observe field operations reported that inquiry of private schools within the emergency planning zone resulted in a lack of knowledge with regard to evacuation procedures and that they had not received copies of the public information brochure. This will be clarified in the final report.)"

The text should be changed to read: "An evaluator assigned to observe the field operations visited the Rainbow Montessori and La Cristiaita schools. The administrative staff of these schools stated that they had not received copies of the public information brochures and were not familiar with offsite jurisdiction plans for evacuating these facilities. In order to clarify this information, we inspected the utility distribution list for the public information brochure. Every user of utility power within the 10-mile emergency planning zone receives a copy of the public information brochure. The schools are on that list. During the siren system annual test (September 16, 1987), approximately 1,000 teacher work packets and 23,000 student work sheets were prepared and distributed to schools throughout the 10-mile emergency planning zone to explain the meaning of the sirens and how it affected the schools and students. The packets also contained questionnaires for evaluation of the siren system effectiveness. Region IX satisfied that the schools are receiving public information that is available."

Page 17, Exercise Findings Matrix:

A letter from the Interjurisdictional Planning Committee (IPC) dated October 19, 1987 and forwarded to Region IX by the State (letter dated November 5, 1987), addressed certain exercise findings of the report. The letter requested the offsite jurisdiction comments be made a part of the evaluation report. That correspondence, as well as the Region IX response, is attached to this errata and made a part of the report.



Federal Emergency Management Agency

Region IX Building 105
Presidio of San Francisco, California 94129

Mr. William M. Mediqovich, Director
Governor's Office of Emergency Services
State of California
2800 Meadowview Road
Sacramento, California 95832-1499

Dear Mr. Mediqovich:

This responds to your letter of November 5, 1987 forwarding for our review, the comments prepared by the Interjurisdictional Planning Committee (IPC) on the Exercise Evaluation Report of the San Onofre Nuclear Generating Station exercise conducted on August 12, 1987. We sincerely appreciate the time and effort expended by the IPC in its careful review of the report and welcome the opportunity to address the concerns expressed by the IPC in its October 12, 1987 letter.

First let me explain that the reporting format is prescribed by guidance developed jointly by FEMA and the NRC. The narrative text of the report is intended to include comment on items other than those identified as needing corrective actions. Our experience is that a broader discussion of evaluator observations and impressions helps officials at FEMA and NRC Headquarters to better assess exercise results and reach fair and impartial findings.

To help achieve accurate, fair and impartial reporting, Region IX is careful to assign evaluators who are well qualified in the technical aspects of emergency response operations. In addition, each individual's findings are reviewed and discussed by other qualified evaluators and members of the Regional Assistance Committee (RAC). This helps ensure that our conclusions and recommendations are technically correct, and any cross references to State or local plans are appropriate.

Evaluators are instructed before every exercise not to make assumptions. They are asked to review the applicable plans, familiarize themselves with the exercise scenario and objectives, coordinate with exercise controllers, and then observe participant performance in line with exercise objectives and what plans indicate should be done. These steps and the procedures outlined above were followed in the three specific areas addressed in the IPC letter. The issues, nevertheless, were re-examined and the following additional comments are offered.

1. Providing adequate dosimetry to emergency workers is very important, as is a record of dosimetry readings and the capability of the emergency workers to read and analyze the data. The Orange County response plan states that radiological field monitoring teams will be provided with two types of dosimeters, self reading 0-200 mR and 0-5 R range, as well as R.D.s. Currently, the overall suggested dosimetry range is 0-200 R. The evaluator observed that the radiological field monitoring team members were using 0-200mR pocket dosimeters and low range radiation detection equipment that do not satisfy the intent of NUREG-0654. The 0-5 R dosimeters are not considered appropriate for the needs of a radiological field monitoring team. We believe the County's statement that the team members had 0-200mR range dosimetry available is based on a failure to distinguish between equipment used for monitoring plume vs. emergency worker exposure. The evaluator, in keeping with his assignment, reported his observations and made a recommendation regarding protection for emergency workers assigned to field monitoring activities.

2. We agree with the statement in the IPC letter that the Direction and Control area of the San Diego County EOC was not utilized as described in the plan. The evaluators also reported that many of those normally assigned to the Direction and Control group were not available for this exercise. However, the report did not state or intend to imply that the Director of Emergency Services disrupted the general operations of emergency response staff. The report stated that the Direction and Control area was not fully staffed and this had an impact on other EOC activities. The point is that exercise participants deviated from the plan in their response operations and the evaluator made an appropriate notation. We recommend that if the County plans to use the EOC facility this way in actual emergency response operations, it should be so stated in the plan.

3. The following observations regarding evacuation procedures are made in the hope that their consideration will serve to enhance the timely and efficient movement of people from areas at risk. First, it is generally agreed that certain aspects of an evacuation of the SONGS EP2 are complex and require special attention. The IPC letter states, for example, that studies show that the entire EP2 can be evacuated in approximately four and one-half hours to five hours, but the plans state that certain conditions could impede movement and require up to ten hours to evacuate the EP2. The Exercise Evaluation Report intended merely to direct attention to the apparent need for further study and refinement of existing procedures. Accordingly, we suggest

you consider the procedures outlined in Appendix 4 of NUREG-0654 in finalizing your plans. We think you will find them useful, especially in planning for a phased movement of the populations that might be in jeopardy.

The report's findings on public information were intended to make a specific point and to also suggest a refinement that might help the dissemination of information. The important point to be made is that although the procedures described in the "proposed correction column" of the Exercise Findings Matrix attached to the IPI letter can be expected to cause coordination among the jurisdictions, it does not guarantee the correctness, consistency, or accuracy of the information contained in the messages. In the case at hand, coordination among the jurisdictions took place and, in the case of Orange County, the message was reviewed by several officials, apparently approved for release and still included conflicting information that would have certainly confused the public and added to the level of anxiety. The recommendation that the decision-maker sign the message form was made assuming that the signing/approving official would read the message carefully, and hopefully catch inconsistencies or inaccuracies. Obviously, if the message included technical information that the decision-maker was not qualified to evaluate, he/she would be expected to seek expert advice from qualified staff.

The timing of the broadcast of the EBS message as described in the matrix is still somewhat vague. We would like to recommend that your written instructions regarding how the EBS will be used specifically state that the sirens will be sounded first to alert the public that important information is to be broadcast over the EBS and then be followed, after a brief delay, by the station airing the desired message. This makes sense and is supported by NUREG-06564, Appendix 3, Page 3-3 that states: "A system which expects the recipient to turn on a radio receiver without being alerted by an acoustic alerting signal or some other manner is not acceptable."

In summary, it should be noted that "recommendations for improvement" are made with the full understanding that the State and local offsite jurisdictions may disagree. These areas are considered to have little impact on public health and safety. The recommendations are meant to be helpful and are made on the basis of an observed activity that appeared not to be in the best interests of the total emergency response operation, safety of emergency workers, or in line with the most current acceptable practices. In that regard we believe that the exercise evaluation report accurately reflects what was observed during the exercise and that the recommendations are sound.

We hope the information provided will help clarify how we apply the regulations and other prescribed program procedures in the development of exercise evaluation reports. We look forward to working closely with the State and local offsite jurisdictions to continue to improve

Page 4

Sincerely,

Enclosure

Errata to:
Camp Pendleton Marine Corps
City of San Clemente
City of San Juan Capistrano
Orange County
San Diego County
Southern California Edison Company
State Parks and Recreation - San Clemente
U.S. Nuclear Regulatory Commission, Region V
Regional Assistance Committee, Region IX



GEORGE DEUKMEJIAN
GOVERNOR

State of California

GOVERNOR'S OFFICE OF EMERGENCY SERVICES

2800 MEADOWVIEW ROAD
SACRAMENTO, CA 95832

November 5, 1987

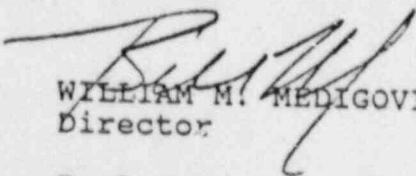
Mr. Robert L. Vickers
Regional Director
FEMA Region IX
Building 105
Presidio of San Francisco
San Francisco, CA 94129

Dear Mr. Vickers:

AUGUST "SONGS" EXERCISE EVALUATION REPORT

Enclosed for review by your Region are comments prepared by the Interjurisdictional Planning Committee regarding the August "SONGS" Exercise Evaluation Report. The committee's comments were forwarded to me, for forwarding to you, in keeping with established policy and procedure.

Sincerely,


WILLIAM M. MEDIGOVICH
Director

Enclosure

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interjurisdictional planning committee

County of Orange • County of San Diego • City of San Clemente • City of San Juan Capistrano
California State Parks • United States Marine Corps • Southern California Edison

October 19, 1987

Mr. William M. Medigovich, Director
Office of Emergency Services
State of California
2800 Meadowview Road
Sacramento, CA 95832-1499

Re: August Exercise Evaluation Report

Dear Mr. Medigovich:

The Interjurisdictional Planning Committee (IPC) responsible for off-site emergency response planning for the San Onofre Nuclear Generating Station (SONGS) has reviewed the draft Exercise Evaluation Report for the August 12, 1987 Exercise. As you know, the Committee is composed of the seven involved jurisdictions within the 10-mile Emergency Planning Zone including: the City of San Clemente, Camp Pendleton Marine Corps Base, California State Parks and Beaches, City of San Juan Capistrano, Orange County, San Diego County and the Southern California Edison Company. Additionally, the American Red Cross and the California Highway Patrol are also active participants. We appreciate the opportunity provided us to comment on the evaluation report as the IPC feels a deep sense of responsibility to assure adequate response capabilities for any SONGS related emergency.

Exercise Summary and Detail

At the onset, it should be noted that this coordinating body of local jurisdictions are the agencies responsible for the off-site emergency planning at San Onofre. In the State of California it is the local municipalities that are responsible for all local emergencies. The evaluation letter from the Federal Emergency Planning Agency, transmitted directly to the State Office of Emergency Services on September 11, 1987, identified a 30-day review period with an October 9, 1987 due date for comments. The members of the IPC did not receive copies until September 16, 1987. This left insufficient time to review, confer and prepare a coordinated response by the October 9th deadline. This response, therefore is submitted after the finalized FEMA report, however, we anticipate its inclusion in the record.

In reviewing the Exercise Evaluation Report, there seemed to be lengthy commentary on items other than those identified as needing corrective actions. The majority of this information was found to be very subjective reflecting the personal opinions of the individual evaluators and not based on requirement parameters. Much of the editorialization was not reflective of actual operations and seemed to be misunderstandings of off-site plans and procedures.

For the most part, the IPC and our individual agencies have chosen not to discuss the many assumptions presented in this report because they have little bearing on the overall adequacy of capabilities tested in this exercise. There are several issues, however, which cannot be overlooked as they are in conflict with established inter-agency operations and overall response philosophies.

- 1) The discussion on Page 13 on Radiological Field Monitoring Teams does not accurately reflect what transpired in the field during this exercise. All field monitoring teams had in their possession and were issued the required dosimetry and carried all the instrumentation which covers the 0-2000 mR range. This we believe is not just low range radiation detection instruments and does satisfy the intent of NUREG-0654.
- 2) The San Diego County EOC evaluation Page 14, does not reflect what actually occurred. The Direction and Control area of the EOC was not used during this exercise. The primary reason for this is that few of the individuals who would normally sit in Direction and Control were present at the exercise due to circumstances beyond control. Dan Eberle, the Director of the Office of Disaster Preparedness, played the role of the major decisions makers. While he was located in the operations room, his station was physically separated from the operations group. His presence was in no way disruptive to the operational functions. San Diego County was and is comfortable with that arrangement during this exercise.
- 3) The comments on Page 15 regarding "phased" evacuation are not only erroneous but reflective of a lack of understanding of the IPC plans. There is a phased evacuation set forth in our plans. The California State Parks and USMC at Camp Pendleton at the Alert Level, conduct precautionary evacuation of beaches and recreational areas near the plant site. At the Site Area Emergency level the California State Parks close additional recreation areas and the USMC conducts a precautionary evacuation of the EPZ. At the Site Area Emergency level there is an evacuated (only emergency workers remain) 2.3 mile area around the plant. If an evacuation is effected of the remaining 7.7 mile area of the EPZ, our evacuation studies indicate that the EPZ can be evacuated in approximately 4 1/2 to 5 hours with our existing road network. These studies are based on a simultaneous evacuation of the entire EPZ not the reduced EPZ resulting from the phase evacuation.

Exercise Findings Matrix

The IPC finds much of the commentary included within the Exercise Findings Matrix to be a misinterpretation of the operations demonstrated in the Exercise. Consequently, we have tried to give complete explanations of established procedures so that the actions evaluated are reviewed in their appropriate perspectives.

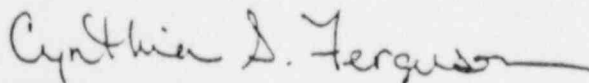
The IPC has spent much time, effort and money on developing coordinated emergency response procedures. For the most part there is complete agreement on all the elements of the basic plan and we have accepted those nuances that are special to each agencies implementations. This has proven to work well for us. Perhaps this should be the manner in which exercise evaluations are made. That is, keeping in mind the site specific operations and procedures and the adequacy there in demonstrated and by not applying a generic review or evaluation procedure and forcing compliance.

Over the years, the IPC has learned much from our FEMA evaluators. We are not overlooking the contributions which have been made to the strengthening of the development process. We are all aware that it has taken a concerted effort to accomplish what has been established to date. San Onofre has presented some unique problems which have required unique solutions. Because of the enormous cooperation and coordination taken, these solutions have the support of the communities, the jurisdictional governments and have been supported by numerous and lengthy studies with the scrutiny of the surrounding public. It only seems equitable then that the evaluations of these efforts reflect the same kind of sensitivity to the situation and consider the workability of the plans on a case-by-case basis.

The IPC has in the past utilized the recommendations of our exercise evaluators and incorporated them into our plans and planning efforts. However, as the years progress and new evaluators come forward, we are finding recommendations contradictory to previous years which initiate the initial change to the plans. Because our plans are dynamic this can be expected periodically.

As a group we have tried to maintain a level of flexibility to deal with new issues and the myriad of concerns each jurisdiction holds. It is this flexibility and cooperation that is necessary if this planning, exercise and evaluation process is to be positive and of significant benefit to the entire emergency response planning effort.

Very truly yours,



Cynthia S. Ferguson, Chairperson
Interjurisdictional Planning Committee

Attachments

CSF:kjs

cc: Federal Emergency Management Agency
Mr. Robert L. Vickers, Regional Director

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
SAN ONOFRE NUCLEAR GENERATING STATION EXERCISE 4.

EXERCISE FINDINGS MATRIX

FINDING

PROPOSED CORRECTIVE ACTION/DATE FOR COMPLETION

1. Public Information. The offsite jurisdictions in and around the San Onofre Nuclear Generating Station have participated in four full-scale exercises and one limited exercise since 1981. Each exercise resulted in a significant finding of weakness related to the Public Information System and/or Emergency News Center activities. Corrective action recommendations were implemented by the offsite jurisdictions subsequent to each exercise that appeared to successfully correct the problem area identified. Still, the public information aspects of the alert and notification system (i.e., Emergency Broadcast System) continue to encounter problem areas organizationally, in plan development and implementation, and training for its effective use. For example, the evaluators assigned to observe activities related to alert and notification/public information reported the following:

While the previous finding concerning Emergency Broadcast System (EBS) radio station KEZY has been corrected, more training of the Orange County communications personnel should be done. The communications operator at the Orange County Emergency Operations Center (EOC) appeared slightly confused at times on how to funnel EBS messages to the radio station. However, the messages did reach the station and the alert system was activated on time. The EOC needs to confirm the contents of the EBS message back from the radio station prior to broadcasting. KEZY was very cooperative and enthusiastic about the program. Orange County EOC communications placed the EBS station on standby at 9:20 a.m.

The Orange County plan calls for the EBS message to be transmitted from the radio station just prior to the sirens being activated. This procedure is in reverse of standard guidance and criteria. The operator at Control One (Orange County Communications) was well trained in siren activation procedures and demonstrated these procedures satisfactorily.

The Communications Operator assigned the task of transmitting the EBS message to the radio station was not aware that the time entered on the message form ("request message release time") was intended as the time that the radio station was to broadcast the EBS message. Instead, this individual held the first EBS message until the designated time before beginning the transmission to the EBS station. This action would have unnecessarily delayed the subsequent broadcast of the EBS message to the public.

The current Orange County Plan for EBS message transmittal establishes that the reading of the EBS message is done directly from the County over the phone to the station. It is recorded at the station on cassette and then the cassette is played over the air as instructed (i.e., # of times and exact time to be aired) San Diego County's Plan is basically the same. This procedure allows for a coordinated message to be approved by all jurisdictions prior to the activation of the siren system and prior to the activation of the EBS. Once the message is approved it is then read and scheduled for release at the time that the sirens are sounded. This is in consonance with standard guidance criteria and the ANI. We do not believe it to be in conflict with FEMA recommendations either.

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The first Orange County EBS message for simulated release by the EBS radio station to the public contained internally inconsistent information which would have caused confusion in the public perception. The coordinated decision made by the offsite jurisdiction decision-makers was for announcement of the Site Area emergency with no protective actions required. In fact the message released contained both an instruction to the public to take shelter and that no protective actions were necessary. There was no system demonstrated to assure that the Orange County decision-maker (Operational Area Coordinator) was aware of or approved the content of the message released. The offsite jurisdictions (Orange County, San Diego County, San Juan Capistrano, San Clemente, State Parks and Camp Pendleton) all concurred on the pen and ink changes to the pre-scripted EBS message and none of these individuals caught the inconsistency. Also, the message was distributed to several desks within the Orange County EOC and none of these exercise participants, some of whom were part of the decision-making process, caught the inconsistency.

At San Diego County there was a coordinated effort displayed in the dissemination of EBS messages. However, there was a problem area identified. The first EBS message at the Site Area emergency level issued by San Diego County was not in concert with the Orange County EBS message. The Site Area emergency EBS pre-scripted message agreed upon by the offsite jurisdictions was to have read: "There is a potential health hazard to the public if the release continues, but there is no need for protective action at this time." As noted, this was the conflict in the released message including a protective action of "sheltering" above in the Orange County message. The San Diego County message did not include the phrase "...but there is no need for protective actions at this time." Therefore, the sheltering aspect was consistent, but not as coordinated with Orange County. Thus, Orange and San Diego were releasing conflicting information to the public.

In addition, the Site Area emergency message Two for San Diego County was noted as being written at 10:00 a.m. with a requested message release time of 10:00 a.m. Their General emergency message Two was noted as being taken at 10:19 a.m. when the declaration of General Emergency occurred at 10:29 a.m. (The Site Area emergency message Two for Orange County was time-marked at 9:54 a.m. and the

While there was information advising both sheltering and evacuation actions the decision maker in Orange County was present and approved the context of the message released. Documentation of this was made and provided to the evaluator on the spot. The confusion was not with the procedure or ability demonstrated but with the evaluator's understanding of who was the OAC.

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS
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| <p>General Emergency message Two was time-marked at 10:36 a.m.). While the message was being coordinated by Orange County with other jurisdictions, the San Diego County Administrative Officer was taking the information down in longhand on a notepad rather than making entries directly to the EBS pre-scripted message form. These EBS pre-scripted message forms are a part of the plan. The procedures are intended to enhance the dissemination of correct and consistent information to the public from both counties. Thus, the EBS message forms should be readily available to whomever is responsible for participating in the coordination activities related to public information EBS messages.</p> | |
| <p>Both EBS messages contained the instruction directed to the population who reside within "10-Miles" of the plant site. The statement is contrary to the planning concept adopted by the State and local offsite jurisdictions for this site. The statement "10-Miles" has no significant meaning to the public. The EBS messages should use the same designations used in the public information brochure.</p> | |
| <p>Based in part on the foregoing the exercise evaluator assigned to the Orange County EOC reported to the Regional Assistance Committee (RAC) Chairman that in his opinion the way Orange County officials handled the EBS message constituted a "deficiency." The RAC Chairman referred the matter to the RAC. The RAC unanimously decided that the finding should be categorized as an "Area Requiring Corrective Action" and was applicable to San Diego County as well as Orange County. The RAC requested that the exercise Project Officer obtain agreement from the offsite jurisdictions to take immediate corrective action and to be prepared to demonstrate the ability to quickly and efficiently process EBS messages at the next annual full activation of the siren system on September 16, 1987. This was done and the demonstration will take place on September 16, 1987. The results will be included in the final edition of this report.</p> | <p>A subsequent EBS Exercise was conducted September 16, 1987, which corrected any of the discrepancies identified in this finding.</p> |
| <p>In accordance with the classification as an area requiring corrective action, the offsite jurisdictions will be required to correct this problem area prior to the next regularly scheduled biennial exercise during 1989. Corrective actions will address the following areas of concern:</p> | |
| <p>a. Interjurisdictional procedure #5 (Alert and Warning) requires update and modification to specifically identify jurisdictional coordination and responsibility (Interjurisdictional Procedure #6</p> | <p>The IPC will review IP #5 and make modifications as deemed appropriate prior to the next exercise.</p> |

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| <p>can serve as an excellent example for accomplishment of this requirement).</p> <p>(1) The Emergency Broadcast System (EBS) radio station will be alerted prior to siren activation and timed to follow the siren sounding by at least two minutes to permit the public to tune to EBS radio stations consistent with data provided in the public information brochure;</p> <p>(2) The EBS pre-scripted messages will be redesigned to permit more expedient coordination and processing (e.g., extensive editing requirements or deletion of paragraphs intended at another level of protective action will be omitted);</p> <p>(3) The new pre-scripted messages will include a system for decision-maker authorization prior to release; and</p> <p>(4) Protective actions decided upon (e.g., shelter and/or evacuation) will be stated in terms of boundaries identified in the public information brochure distributed to the public (all references to the 5- or 10-Mile emergency planning zone should be deleted).</p> <p>b. A hard-copy transmittal capability is required to coordinate both EBS messages and news releases at all emergency response facilities involved with public information releases.</p> <p>c. Training workshops for all assigned to areas of responsibility for effective public information activities related to alert and notification will be accomplished after completion of the above listed activities, but prior to the next full-scale biennial exercise.</p> <p>Since this exercise closed the period for accomplishment of objectives established by FEMA, in accord with <u>Guidance Memorandum, PR-1, Policy on NUREG-0654/FEMA-REP-1 and 44 CFR 350 Periodic Requirements</u>, this exercise finding will remain an open item until the next regularly scheduled biennial exercise during 1989.</p> <p>NUREG REFERENCE: E.5 and 7.</p> | <p>The IPC will evaluate whether there is an internal requirement for hard copy capabilities and make recommendations within the next year.</p> <p>Training workshops will be planned and implemented to incorporate any changes/modifications made relative to alert and notification procedures.</p> |

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2. Radiological Exposure Control. The City of San Clemente failed to issue any emergency personnel with dosimetry. The Director for Emergency Services at the City Emergency Operations Center (EOC) was of the opinion that personal film badges were sufficient to fulfill this requirement. A number of EOC staff need to be issued self-reading recording devices to ensure that personnel are not receiving excess exposures. Provisions should also be put into the plan for any EOC personnel who may temporarily leave the EOC to first be issued dosimeters (unless the dosimeters are pre-positioned in vehicles being used). Also, a number of non-emergency EOC personnel occupy the building within which the EOC is located (e.g., police and fire personnel). Thus, the plan should be modified to include dosimetry use by these people.

The City of San Clemente will include in their plans the provision of issuing self-reading recording devices to all emergency personnel as noted in the Radiological Exposure Control Finding.

UREG REFERENCE: K.3.a. and b.2.

EXERCISE EVALUATION REPORT
OFFSITE RADIOLOGICAL EMERGENCY PLANS AND PREPAREDNESS EXERCISE
SAN ONOFRE NUCLEAR GENERATING STATION

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| <p>2. Pre-exercise activities included the review of offsite plans and procedures represented as being current (most, if not all, were dated 1983). During the evaluator orientation and during the exercise, it was noted that several plans and procedures were updated documents to the plans presented as current. The Federal Emergency Management Agency, Region IX, has no record of receiving any 1984 plan update submissions for any of the jurisdictions in and around the San Onofre Nuclear Generating Station (except from the utility). NUREG-0654 requires annual review and update, if required, of all plans and procedures. Telephone rosters are to be updated on at least a quarterly basis in accord with NUREG-0654. Some resource support telephone numbers were noted by evaluators as being out-of-date. Plan maintenance activities should include a procedure for systematic telephone updates (e.g. standard operating procedures that identify the need for employees and agencies to furnish that information upon change, etc.). If review of such documents result in a determination that no update is necessary, that information should be reported to the Federal Emergency Management Agency, Region IX, through the California Office of Emergency Services, as appropriate.</p> | <p>P.4. P.10.</p> | <p>The offsite jurisdictions' radiological emergency response plans will be updated by April 1986.</p> <p><u>OCTOBER 9, 1987</u></p> <p>THE CURRENT LEVEL OF EFFORT IN THE AREA OF PLANNING BY THE OFFSITE JURISDICTIONS AT THIS SITE APPEARS TO ENSURE THAT THE RECOMMENDATIONS FOR 1) REVIEW AND REVISION, AS APPLICABLE; 2) INTERJURISDICTIONAL PROCEDURES REFLECT THE ENTIRE SPECTRUM OF COORDINATION AMONG THE VARIOUS JURISDICTIONS; AND 3) A SYSTEM FOR ANNUAL UPDATE (OR A LETTER ATTESTING THAT THE PLAN HAS BEEN REVIEWED AND FOUND NOT TO REQUIRE AN UPDATE) AND TRACKING OF CHANGES, WILL BE ACCOMPLISHED PRIOR TO THE NEXT REGULARLY SCHEDULED BIENNIAL EXERCISE.</p> <p>SEE THE EXERCISE FINDINGS FOR EACH JURISDICTION TO DETERMINE THE LEVEL OF ACCOMPLISHMENT AND STATUS OF THE CURRENT PLAN.</p> <p>Updates for each jurisdiction's plans were made, however, not in concert with the previously proposed corrective action. All off-site jurisdictions will continue to up-date our plans after each exercise and drill. Plans will, at minimum, be up-dated 120 days following the annual exercise. A letter attesting to that review will be prepared for each plan.</p> |
| <p>JURISDICTION AND/OR FACILITY:</p> | | |
| <p>INTERJURISDICTIONAL PLANNING COMMITTEE</p> | | |