



# Federal Emergency Management Agency

Washington, D.C. 20472

MAR 15 1985

MEMORANDUM FOR: Edward L. Jordan  
Director, Division of Emergency Preparedness  
and Engineering Response  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission

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

SUBJECT: Interim Findings on Offsite Radiological Emergency Response  
Plans (RERP) for the Palo Verde Nuclear Generating Station

Attached is a copy of the Federal Emergency Management Agency (FEMA) Interim Findings on the adequacy of offsite RERP for the Palo Verde Nuclear Generating Station. The Interim Findings Report was prepared by FEMA Region IX and transmitted to FEMA Headquarters by Memorandum dated February 22, 1985.

The State of Arizona and Maricopa County, which is located in the 10-mile plume emergency planning zone (EPZ), have developed a joint offsite RERP dated July 1984, with Change Number 1 dated January 1985. They have participated in two joint full participation exercises conducted on May 11, 1983 and September 26, 1984.

The State and local plans have been reviewed by the FEMA Region IX Regional Assistance Committee (RAC), most recently on February 13, 1985. Only minor recommendations for improvement or change to eight elements of sections A, J, and P have been recommended. They have determined that all elements of sections C, D, E, F, G, H, I, K, L, M, N, and O of NUREG-0654/FEMA-REP-1, Rev. 1, have now been met.

Based on a review of the above information, FEMA finds that overall the State and local RERP are adequate. Based on the results of the November 1984 exercise, offsite emergency preparedness has been demonstrated to be adequate and there is reasonable assurance that appropriate protective measures can be implemented by offsite jurisdictions around the Palo Verde Nuclear Generating Station to protect the health and safety of the public in the event of a radiological emergency.

If you have any questions on the above, please contact Mr. Robert S. Wilkerson, Chief, Technological Hazards Division, at 287-0200.

Attachment  
As Stated

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555  
May 13, 1985

50-528/529/530 Palo Verde

MEMORANDUM FOR: Chief, Document Management Branch, TIDC  
FROM: Director, Division of Rules and Records, ADM  
SUBJECT: REVIEW OF UTILITY EMERGENCY PLAN DOCUMENTATION

The Division of Rules and Records has reviewed the attached document and has determined that it may now be made publicly available.



J. M. Felton, Director  
Division of Rules and Records  
Office of Administration

Attachment: As stated



# Federal Emergency Management Agency

Region IX Building 105  
Presidio of San Francisco, California 94129

22 FEB 1985

MEMORANDUM FOR: ASSOCIATE DIRECTOR  
STATE AND LOCAL PROGRAMS AND SUPPORT

FROM: Regional Director *R. D. [Signature]*

SUBJECT: State of Arizona/Maricopa County Fixed Nuclear  
Facility Off-Site Emergency Response Plan,  
July 1984 (Palo Verde Nuclear Generating Station  
Site).

The enclosed report details the subject plan review and evaluation findings with respect to each of the planning standards and criteria set forth in 44 CFR 350.5 as required by 44 CFR 350.11.

The State of Arizona/Maricopa County Fixed Nuclear Facility Off-Site Emergency Response Plan, dated July 1984, applicable to the Palo Verde Nuclear Generating Station, has been determined to be adequate to protect public health and safety by providing reasonable assurance that appropriate protective measures can be taken offsite in the event of a radiological emergency.

A copy of subject plan is enclosed for your consideration. The change pages, dated January 1985, have been incorporated therein and are identified.

Questions directed to either enclosure will be responded to by John Sucich (FTS 556-9840).

Enclosures (2)

REPORT OF THE  
REVIEW AND EVALUATION FINDINGS  
FOR THE

STATE OF ARIZONA/MARICOPA COUNTY FIXED NUCLEAR  
FACILITY OFF-SITE EMERGENCY RESPONSE PLAN  
JULY 1984  
(Palo Verde Nuclear Generating Station)

Background. The initial draft of the above entitled plan was submitted by the State for informal review by the Federal Emergency Management Agency, Region IX, in December of 1981. Subsequent updates to the draft plan were reviewed by the Federal Emergency Management Agency Region IX staff and members of the Region IX Regional Assistance Committee (RAC) during 1982 and 1983. (A draft plan was submitted in 1982 by the State of Arizona, requesting formal review. A Federal Register Notice was published, review and recommendations for improvement were provided to the State, but the plan was not processed in accord with the Final Rule (Code of Federal Regulations Part 350, effective October 28, 1983) due to the draft status of the plan.)

On July 17, 1984, the Director for the Division of Emergency Services, Department of Emergency and Military Affairs, State of Arizona, hand-delivered the current plan with a letter dated July 16, 1984 requesting formal review in accord with 44 CFR 350. A subsequent letter, dated July 24, 1984 completed the requirement for a statement of adequacy by the State in accord with 44 CFR 350.7(d). Receipt of the plan was acknowledged by the Federal Emergency Management Agency Region IX letter dated July 27, 1984 and a notice published in the Federal Register on August 27, 1984.

A public meeting, as required by 44 CFR 350.10, was completed on May 16, 1983, chaired by a representative of the Federal Emergency Management Agency, Region IX. The report of that public meeting is a matter of record.

Plans and preparedness exercises were conducted on May 11, 1983 and September 26, 1984. Recommendations for corrective actions relative to these exercises were effected and reports are a matter of record at both the Federal Emergency Management Agency and the United States Nuclear Regulatory Commission.

A highly successful alert and notification demonstration was conducted on August 11, 1984 and the report of that event is also a matter of record.

The July 1984 Plan was reviewed during August 1984 by the Region IX RAC, preliminary comments made available to the State and Change Number 1 to the Plan submitted by the State, dated January 1985. The Region IX RAC reviewed the change pages to the Plan and, at a meeting on February 13, 1985, collectively concurred in the following findings and recommendations.

Findings. The review and evaluation comments that follow are submitted in accord with the requirements of 44 CFR 350.11 on the basis of the criteria established by 44 CFR 350.5. Unless otherwise noted or referenced, the Plan meets the standards established by NUREG-0654/FEMA-REP-1, Rev.1.

(1) Primary responsibilities for emergency response by the nuclear facility licensee, and by State and local organizations within the emergency planning zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established and each principal response organization has staff to respond to and augment its initial response on a continuous basis.

Finding: The Plan adequately addresses the response organization at the State and County level, but does not contain sufficient detail with regard to Federal Government support, nor does it reflect interrelationships of all the response organizations. The Plan does not contain a primary/support diagram.

NUREG Reference(s) A.1.a. Each plan shall identify the State, local Federal and private sector organizations (including utilities), that are intended to be part of the overall response organization for Emergency Planning Zones. A.1.c. Each plan shall illustrate these interrelationships in a block diagram. A.2.a. ...shall include a clear and concise summary such as a table of primary and support responsibilities using the agency as one axis, and the function as the other. A.3. ....shall identify the emergency measures to be provided and the mutually acceptable criteria for their implementation, and specify the arrangements for exchange of information.

Recommendation(s):

- a. That a primary/support diagram be developed for inclusion into the plan during the next fiscal update. (This has been an ongoing recommendation and the RAC does not understand the State's hesitancy to provide this data in the Plan.)
- b. That an organization chart, reflecting the total response organization, be developed for inclusion into the plan during the next fiscal update (including the utility, federal agency support organizations, and volunteer organizations, etc.).
- c. That the Plan be amended to reflect "DOE" instead of "AHS" for clarity and consistency with regard to the system for requesting Federal Government assistance (e.g., pages B-2-3, B-3-1, B-3-3, B-3-4, etc.). Page B-2-5, Item D should include EPA as part of DOE reference...DOE/EPA.
- d. That the Plan detail how contact for requesting Federal Government assistance will be effected (in consonance with Federal agency response plans and/or the Federal Radiological Emergency Response Plan/FRERP).

e. Editorial comment notes a requirement to amend the Plan Glossary to include DOE; change RERP to FRERP, clarify period at end of sentence two, Item D., 1., a., (2), at page A-5 inasmuch as the content continues on to Page A-6; and attention be given to providing short description or reference to other plans being addressed in the Plan (e.g., Red Cross will effect operations to....should include perhaps a short "how" explanation or reference to their response operations plan).

NUREG Reference(s) P.5. The emergency response plans and approved changes to the plans shall be forwarded to all organizations and appropriate individuals with responsibility for implementation of the plans. Revised pages shall be dated and marked to show where changes have been made. P.8: Each plan shall contain a specific table of contents. Plans submitted for review should be cross-referenced to these criteria.

Recommendation(s):

a. The plan contains distribution sheets, a revision contents page, and a NUREG reference list. The NUREG reference list is inaccurate in many instances and the revision contents does not include any data that would show where changes have been made. To expedite processing of the plan and the review by the RAC, staff of the Federal Emergency Management Agency Region IX did provide a concentrated recap of the change pages (included herewith). The Plan requires work in these areas and a revised change page reference to indicate the specific changes being made. The record of changes should be ongoing.

(2) On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified. (This standard applies only to NRC licensees but is included here for completeness.)

Finding: Not applicable to this review process.

(3) Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate state and local staff at the licensee's near-site Emergency Operations Facility have been made and other organizations capable of augmenting the planned response have been identified.

Finding: Adequate.

(4) A standard emergency classification and action level scheme, the basis of which include facility system and affluent parameters, is in use.

by the nuclear facility licensee, and state and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures. . . . . .

Finding: Adequate.

(5) Procedures have been established for notification, by the licensee, of state and local response organizations and for the notification of emergency personnel by all response organizations; the content of initial and followup messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway emergency planning zone have been established.

Finding: Adequate.

(6) Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

Finding: Adequate.

(7) Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance and procedures for coordinated dissemination of information to the public are established.

Finding: Adequate.

(8) Adequate emergency facilities and equipment to support the emergency are provided and maintained.

Finding: Adequate.

(9) Adequate methods, systems and equipment for assessing and monitoring equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Finding: Adequate.

(10) A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

NUREG Reference(s): J.10.e. Provisions for the use of radioprotective drugs, particularly for emergency workers and institutionalized persons within the plume exposure EPZ whose immediate evacuation may be infeasible or very difficult, including quantities, storage, and means of distribution. J.10.f. State and local organizations' plans should include

the method by which decisions by the State Health Department for administering radioprotective drugs to the general population are made during an emergency and the predetermined conditions under which such drugs may be used by offsite emergency workers.

Finding: The Plan does contain provisions for the distribution of protective drugs to emergency workers, but it is not clearly noted in the contents of the radiological monitoring kits listed in the plan. The drug, for use by the general public is under review as a protective action and planned for inclusion upon the final decision. The State has advised that it will consider the issue during the decision making process, should such an event take place before the plan can be amended. The finding is that the subject has been addressed, certain aspects have been planned for, and until such time as more definitive information with regard to state law is available, the Federal Emergency Management Agency Region IX will monitor this closely in coordination with DOE/EPA.

(11) Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

Finding: Adequate.

(12) Arrangements are made for medical services for contaminated injured individuals.

Finding: Adequate.

(13) General plans for recovery and reentry are developed.

Finding: Adequate.

(14) Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills and deficiencies identified as a result of exercises or drills are (will be) corrected.

Finding: Adequate.

(15) Radiological emergency response training is provided to those who may be called upon to assist in an emergency.

Finding: Adequate.

(16) Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

Finding: Adequate.



The Region IX RAC consider the planning approach of the State/County to be difficult to review by virtue of its reliance on various other planning documents. ~~It would be helpful to those unfamiliar with the State/County approach~~ to have explanatory language contained in the various components of the State/County Offsite Response Plan that, while not providing elaborate planning elements, would provide how the particular task was going to be accomplished.

For benefit of a complete review process, it is only fair to include the opinion of the State that: "The RAC has a tendency to evaluate REP in terms of an expectation of finding every constituent of a detailed evaluation in one place, in one document and in such detail that all operational decisions are cast in advance. It should be pointed out that the need to integrate emergency response to a nuclear power generating station accident into existing response systems precludes such an overly simplistic approach. The IEMS concept fostered by FEMA is the latest in Federal recognition of the comprehensive nature of government response. NUREG 0654 is both an operational planning and preparedness program document. For this reason a credible evaluation must include the operations plan and all systems, procedures and administrative elements of the program including the integration of REP into existing emergency management systems."

Further, NUREG 0654 does state at Page 29, paragraph 2 that "... The guidance does not specify a single format for emergency response plans but it is important that the means by which all criteria are met be clearly set forth in the plans."

The RAC have concluded, after review of various state documents and consultation with the State/County and evaluation of operational exercises, that the State of Arizona/Maricopa County Fixed Nuclear Facility Off-Site Emergency Response Plan adequately addresses the standards required by 44 CFR 350.5 and that further improvements will be effected through a cooperative effort during the development of the Department of Energy's Regional Federal Radiological Monitoring and Assessment Plan and the Federal Emergency Management Agency Region IX Emergency Response Plan site-specific data. The Region IX RAC do not consider the above recommendations to preclude adequate operational capabilities that have been demonstrated during the exercises of the State/County plans and preparedness measures.