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Assessment Report to Evaluate

Radiological Emergency Preparedness Exercise Process

For
Federal Emergency
Management Agency

August 1985

NUCLEAR REGULATORY COMMISSION

Docket No. 50-443-60 Official Ex. No. 97
In the matter of Public Serv. Co. of New Hampshire
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Applicant _____ RECEIVED _____
Intervenor ✓ REJECTED _____
Cont'g Off'r _____
Contractor Heritage DATE 5-18-89
Other _____ Witness _____
Reporter Donna Cook

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Theodore Barry & Associates
A TB&A Group Company

Los Angeles • Atlanta • Chicago • New York • Washington, D.C.

MAG 97

August 30, 1985

Mr. Bill McNutt
Project Officer
Federal Emergency Management Agency
500 C Street S.W.
Washington, D.C. 24072

Dear Mr. McNutt:

Enclosed please find three copies of the TB&A REP Exercise Process Assessment Report. This report contains our assessment of problem areas in the REP Exercise Process, and our recommendations for improvement. This report constitutes the "program problem areas and recommendations" summary report identified in the TB&A work plan. We are currently completing our proposed draft guidance materials, and should transmit them within two weeks.

Please contact me if you have any questions or comments on the report contents.

Sincerely,

William J. Stokes

enclosure

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I -- INTRODUCTION

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This report summarizes the review by Theodore Barry & Associates (TB&A) of the Federal Emergency Management Agency (FEMA) Radiological Emergency Preparedness (REP) exercise process, outlines the objectives and scope, summarizes the approach, and presents the format of the remainder of the report.

This report is intended for use by individuals familiar with the REP program and uses terminology common to the exercise process.

A -- OBJECTIVES

The overall goal of this project was to review the requirements and implementation of the REP exercise process, identify problem areas, and provide recommendations for program improvements. Additionally, TB&A was to develop draft guidance materials integrating recommendations with existing REP exercise procedures. Specific objectives of the project were:

- To evaluate the program management plan
- To assess existing guidance for:
 - Adequacy
 - Completeness
 - Compliance with regulations
- Assess current practices (national and regional) for:
 - Compliance with regulations
 - Compliance with FEMA guidelines
 - Program implementation
 - Degree of national/regional interaction
 - Degree of FEMA/NRC interaction
- Evaluate Program Performance
 - Conflicts in requirements - impact
 - Conflict resolution
 - Product quality
 - Prompt disposition of exercise deficiencies

- Develop recommendations
 - Improve program consistency and efficiency
 - Draft procedures/guidance

B -- APPROACH

TB&A followed the approach outlined in its work plan: data gathering through document review and interviews, formulation of findings and conclusions, and development of recommendations and draft guidance documents.

The review was conducted principally during the months of June and July of 1985. The approach focused on:

- Orientation and Information Collection -- Interviews of personnel in FEMA National, FEMA Regions II, III, and IX, NRC National and Region III, and Edison Electric Institute were the primary source of information. TB&A reviewed documents provided by the FEMA Project Officer, which included appropriate Federal Regulations, Guidance Memorandums and Procedures, sample contractor reports, sample region exercise reports and program materials, and the 1984 GAO report.
- Analysis -- The information collected was analyzed to determine current program status, and to draw conclusions on program management and regulatory uniformity. The analysis concentrated on program requirements as implemented by the regions, depth of guidance provided by Washington, and the impact of differences in the program among regions. From this analysis, conclusions were drawn for areas of program improvement and areas which require additional federal guidance.
- Recommendations and Draft Guidance Materials -- Based upon the conclusions and the overall program assessment, TB&A developed recommendations for improving program consistency and performance. These recommendations will be embodied in the TB&A proposed draft guidance materials, submitted separately.

C -- PROJECT REPORTS

TB&A will submit two project reports: an assessment report of the REP exercise process, and a set of proposed draft guidance materials. This document constitutes the TB&A assessment report. It is divided into three parts:

Introduction - provides project scope and methodology information.

Executive Summary - provides consolidated information on TB&A major recommendations and their basis.

Assessment Report - provides detailed information on the conduct of the project, project findings and specific recommendations.

II -- EXECUTIVE SUMMARY

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In May 1985, FEMA retained TB&A to provide a critique of the Radiological Emergency Preparedness (REP) exercise process and to develop recommendations for improvement. The work focus was on the preparation, conduct and evaluation activities of REP exercises at commercial nuclear power facilities.

TB&A found that program practices appear to be well-developed at the regional level. However, there was little consistency of approach or process on a national level. Additionally, we found variations and contradictions of acceptance criteria and program requirements from region to region.

The fundamental cause for these problems in the current REP program is in the federal law, which places the responsibility for implementation of a public emergency preparedness program on an organization that has no authority to implement such a program. The organizations that do have authority to implement a nuclear power plant emergency preparedness program are under no legal requirement to do so. The programmatic effects of the legal dichotomy of responsibilities is compounded by the decentralized or regional program management adopted by FEMA. Each region has developed its own program with little accountability to a central authority, thus the REP process has evolved into a program of accommodation between the region FEMA office, the appropriate state and local governments, and the facility owner (utility).

Current FEMA practices have evolved through use and role assumption from the Nuclear Regulatory Commission (NRC). FEMA National has published guidance and regulation interpretations under the provisions of the Code of Federal Regulations (CFRs) and the Memorandum of Understanding with the NRC (MOU); however, the guidance issued by the national office has been issue-specific and has not addressed the generic process. In the absence of a nationally defined practice, the regional offices have developed processes and procedures for the exercise of plants within their respective regions. The regional variations have resulted in nonuniform requirements and conflicts for multiple region sites. The evolutionary nature of current practices has led to duplication of effort among the various exercise participant agencies. Performance also varies widely; some regions will routinely identify a half dozen deficiencies per exercise, other regions thirty or forty; exercise reports may take from two to six months or longer for final issue. In addition to these programmatic problems, the regional management approach has resulted in a highly unbalanced work load, with the number of sites per region ranging from one to nineteen.

TB&A concludes that the federal law should more closely associate responsibilities with the authority to implement the required programs. TB&A recommends that FEMA consider actions to bring about such changes in the federal law. With respect to FEMA program management, TB&A recommends that FEMA consider a centralized program management administered by the Office of Natural and Technological Hazards in Washington.

A proposed redraft of federal law or the development of a centralized program will require analysis beyond the scope of this project. However, TB&A has offered preliminary thoughts on the concept of operations for centralized management to assist FEMA in considering this approach.

Within the scope of our assignment, TB&A has developed the balance of the recommendations, along with the proposed draft guidance materials, to improve the present program. Our recommendation is for FEMA to adopt a REP exercise program manual that will address and define: policy, program requirements, the exercise process, and conflict resolution. The manual must define the program requirements and processes, but allow adequate flexibility to accommodate site-specific situations. With the program management concepts and framework defined, revisions or modifications to specific activity instructions can be uniformly assessed and implemented through approved procedures. TB&A has included provisions for the request and formal distribution of policy clarifications and regulation interpretations in our proposed guidance materials. We have also included provisions to separate the exercise assessment process into two elements, performance evaluations and inspections. Inspections assess items that do not require an exercise, and could be either announced or unannounced.

TB&A recommends that supervisory personnel in the field operations division in Washington regularly attend plant exercises. The personnel now reviewing exercise reports have rarely attended a plant exercise. Within the proposed manual, we have also included a requirement that the evaluator assessment forms and any other pertinent data be included in the exercise report review package forwarded to Washington. Current practice is for regions to send only the draft report.

TB&A recommends that FEMA adopt a formalized document control system for exercise data, reports and evaluator's reports. There is currently no plan for retention of support documents for exercise reports. The support documentation should be retained to the next exercise, at a minimum.

FEMA should investigate methods for cost recovery of postponed, cancelled and remedial exercises. Currently, regional officials are reluctant to delay or postpone exercise dates because of the large financial burden such delays would levy on RAC agencies. Consequently, exercises proceed in spite of continual missed deadlines for submittal of objectives or finalized scenarios.

Our last recommendation does not apply to the REP process itself, but rather to the basis for the REP program. Currently, FEMA and state/local governments are expending considerable resources in the REP program, yet the basis for planning is as yet undefined, i.e., the accident source term. The final resolution of the "source term" issue could have significant effects on the REP program. This issue has been under study by NRC for over five years. TB&A recommends that FEMA actively pursue resolution of this issue with NRC.

III -- ASSESSMENT REPORT

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A -- DOCUMENTS AND INTERVIEWS

DOCUMENTS REVIEWED

In completing the assessment, TB&A reviewed the following documents:

Washington National Materials

- Memorandum of Understanding (MOU) between FEMA and NRC of April 1985
- 10 CFR Part 50, Emergency Planning and Preparedness Final Rule - Published in the Federal Register July 6, 1984
- 10 CFR Parts 50 and 70, Emergency Planning; Final Regulations - Published in the Federal Register August 19, 1980
- 44 CFR Part 350, Review and Approval of State and Local Radiological Emergency Plans and Preparedness; Final Rule - Published in the Federal Register September 28, 1983
- 44 CFR Part 351, Radiological Emergency Planning and Preparedness; Final Regulations - Published in the Federal Register March 11, 1982
- 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 - Published November 1980
- Guidance Memorandum PR-1, Policy on NURRG-0654/FEMA-REP-1 and 44 CFR 350 Periodic Requirements - Draft, Dated July 31, 1985
- Guidance Memorandum PR-1, Dated April 24, 1985
- Guidance Memorandum Ex-1, Remedial Exercises, dated July 15, 1985
- Memorandum, Procedural Policy on Radiological Emergency Preparedness Plan Reviews, Exercise Observations and Evaluations, and Interim Findings, dated August 5, 1983
- Memorandum, Uniformity of Content and Format for Radiological Emergency Preparedness (REP) Exercise Evaluation Reports, dated April 5, 1982 - Superseded by Memorandum dated August 5, 1982
- Memorandum, Joint Exercise Procedures - REP Guideline Memorandum #17, dated January 8, 1981
- Guidance Memorandum 17 Revision 1, Conducting Pre-Exercise and Post-Exercise activities, dated February 16, 1984

- GAO Report to Congress, Further Actions Needed to Improve Emergency Preparedness Around Nuclear Power Plants, GAO/RCED -84-43, dated August 1, 1984

REGION II -- MATERIALS

- Update Report on the status of Remedial Actions cited in the July 30, Interim Findings on the Adequacy of Radiological Emergency Response Preparation of State and Local Government at the Indian Point Nuclear power Station, dated December 16, 1982
- Post Exercise Assessment Report, October 23, 1984 Exercise, Salem Nuclear Generating Station
- Post Exercise Assessment Report, August 24-25 1983, Exercise of the State of New York Radiological Emergency Response Interim Compensating Measures for Rockland County for the Indian Point Nuclear Power Station
- Post Exercise Assessment Report March 9, 1983, Exercise of the Radiological Emergency Response Plans of New York State and Westchester, Rockland, Orange and Putnam Counties for the Indian Point Nuclear Power Station
- Exercise Example Packages
 - Exercise Planning:
Exercise Objectives, Submittal Schedule, Scenario Overview, Timeline, Pre-Exercise Meetings, Radiological Data Review, Off-site Scenario
 - Federal Observer Package:
Exercise Itinerary, Assignment flow chart, time/location materials. Objective Evaluation Critique form Verification of Remedial Actions, Logistics information, Free play messages, etc.
 - Federal Observer Training Material:
Overhead of maps, Monitoring Locations, Evaluation Form, Organization Charts, Evacuation Routes

REGION III -- MATERIALS

- Exercise Scenario, North Anna Power Station REP Exercise
- Memo, North Anna Exercise Corrective Actions
- October 1984 Peach Bottom Exercise Materials
 - Exercise Objectives, August 22 1984 - Maryland
 - Exercise Purpose, Objectives, and Concepts - Pennsylvania
 - Exercise Scenario - (W) INEL Comments 10/3/84

- Pennsylvania Response to Report
- Exercise Report for the October 17, 1984 Exercise of Off-site Radiological Emergency Preparedness (REP) Plans for the Peach Bottom Atomic Power Station
- Exercise Reports for the July 25, 1984, Exercise of the Off-site Radiological Emergency Preparedness Plans for the Limerick Generating Station
- Remedial Exercise at the Graterford State Correctional Institution in Support of the Limerick Generating Station - March 7, 1985
- Exercise Evaluation Report for the November 20, 1984 Supplemental Exercise of the Off-site Radiological Emergency Preparedness (REP) Plans for the Limerick Generating Station
- Objectives for the July 25, 1984 Radiological Emergency Response Exercise, Site-Specific to the Limerick Generating Station
- Scenario for the Pennsylvania - Limerick Generating Station Exercise Scheduled for July 25, 1984

REGION IX -- MATERIALS

- Evaluator Package - San Onofre Nuclear Generating Station, August 7, 1985 Exercise
- Diablo Canyon Nuclear Power Plant, 1984 Emergency Preparedness Field Exercise - October 30, 1984
 - Evaluator Field Exercise - October 30, 1984
 - Objectives and Guidelines
 - Scenario
- Exercise Report for the October 30, 1984 Exercise of the Off-site Radiological Emergency Preparedness (REP) Plans for the Diablo Canyon Nuclear Power Plant
- Exercise Report for the October 19, 1983, Exercise of the Off-site Radiological Emergency Preparedness Plans for the Diablo Canyon Nuclear Generating Station
- Exercise Evaluation Findings - Diablo Canyon Nuclear Generating Station, October 20, 1982
- Diablo Canyon Exercise Evaluation, August 19, 1981 Exercise

REGION X -- MATERIALS

- 1984 Trojan Report, Emergency Response Plan Exercise, FEMA RX/RAC, Exercise Date: October 17, 1984

- Memo, Exercise Uniformity and Exercise Evaluation Process, Dated May 23, 1985
- Forms - Verification of Corrective Actions, Trojan Exercise October 17, 1984
- Exercise Documents, 1984 Trojan Exercise, October 17, 1984
 - Time/Event/Expected Action
 - Team Report Checklist
 - REP Plan Implementing Procedure, Public Relations Department
 - REP Plan Implementing Procedure, Emergency Notification
- General Instructions to Evaluators on the Use of Module Sections and Exercise Critique Inputs, FEMA RX/1405E/D93E/ 9/21/84

WESTINGHOUSE IDAHO NUCLEAR COMPANY INC. REPORTS TO FEMA

8-22-84, Region V,	"Quad Cities Controller Manual and Support Recovery/Re-entry Data"
8-23-84, Region II,	"Salem Scenario Review"
8-22-84, Region V,	"Utility Scenario, State Scenario, State/Local Objectives for Point Beach"
8-24-84, Region VII,	"Quad Cities Exercise Supplementation Controller Data"
8-23-84, Region II,	"Indian Point Objectives"
9-17-84, Region II,	"Revised Salem Scenario Data"
9-17-84, Region V,	"Draft Objectives, Guidelines, Scenario-Monticello"
9-19-84, Region VII,	"State/Local Objectives, State Scenario, Utility Scenario/Controller Package - Ft. Calhoun"
10-13-84, Region III,	"Peach Bottom Scenario"
10-05-84, Region VII,	"Wolf Creek: Objectives, Guidelines and Scenario"
10-10-84, Region II,	"Revised N.J. Computational Procedures"
10-08-84, Region II,	"Revised Salem Exercise Data"
10-12-84, Region IV,	"Watts Bar Exercise Report"
10-12-84, Region II,	"Radiological Data, Indian Point"
10-16-84, Region II,	"Final Salem Scenario Data"
10-19-84, Region III,	"North Anna Scenario"
10-29-84, Region VI,	"Comanche Peak Objectives and Scenario"
11-13-84, Region V,	"State/County Objectives and Scenario, Perry"
12-19-84, Region VI,	"Drill Objectives and Off-site Radiological Data"
12-20-84, Region II,	"Salem Draft Post-exercise Assessment"
1-22-85, Region II,	"Oyster Creek Scenario Meeting"
1-25-85, Region II,	"Oyster Creek Scenario"
2-11-85, Region V,	"Illinois and Wisconsin Objectives and Scenario, Zion"
2-25-85, Region II,	"Indian Point Assessment Report"
3-26-85, Region V,	"Utility Scenario, State/County Objectives for Dresden"
3-25-85, Region VII,	"State/Local Exercise Objectives for Callaway"
4-03-85, Region III,	"Susquehanna Exercise Scenario Review"
3-29-85, Region II,	"Indian Point Scenario Revision"
4-05-85, Region II,	"Salem Remedial Exercise Scenario"

3-29-85, Region II,	"Indian Point Scenario Comment Revisions"
4-04-85, Region VI,	"Arkansas Exercise Scenario and State/Local Objectives"
4-29-85, Region II,	"Oyster Creek Scenario"
4-25-85, Region VII,	"Offsite Scenario, Calloway"
5-01-85, Region II,	"Indian Point Remedial Post Exercise Assessment Comments"
9-21-84, Region VII,	"Review and Evaluation of Exercise Objectives and Scenario"

INTERVIEWS CONDUCTED

In completing the assessment, TB&A interviewed the following personnel:

Roger Kowieski	- FEMA Region II, RAC Chairman
Rick Kinard	- FEMA Region III
John Sucich	- FEMA Region IX, RAC Chairman
Susan Elkins	- FEMA Region IX
Marshal Sanders	- FEMA National
Margret Lawless	- FEMA National
Megs Hepler	- FEMA National
William McNutt	- FEMA National
Dan Sullivan	- FEMA National
Dwight Poe	- FEMA National
Dave Matthews	- NRC, Washington
Monty Phillips	- NRC, Region III
Ken Travis	- Edison Electric Institute
Joe Keller	- Westinghouse Idaho Nuclear Company, Inc.

B -- FINDINGS AND CONCLUSIONS

PROGRAMATIC

Current guidance from Washington is issue specific and does not address a nationally defined program.

Present instructions from Washington are distributed as "Guidance Memorandums" (GMs) or as general information memorandums. These memorandums address specific issues and have not defined a standard REP Exercise Process to be followed nationwide.

Regional program requirements and regulatory interpretations often conflict from region to region, and may conflict with published Guidance Memorandums.

In the absence of a nationally defined procedure, each region has developed Regional REP Exercise policies, programs, practices and regulatory interpretations. These practices reflect regional preferences or perceptions, and often conflict from region to region. In addition to administrative conflicts, the application of regulations may vary from region to region. These conflicts have created dual sets of exercise criteria for multiple region sites.

TB&A found examples where integrated exercises were impractical due to conflicting administrative processes of the involved region. In another situation, TB&A found that a utility offsite call-up plan had been accepted and approved under Part 350, but had been rejected as inadequate by the neighboring FEMA Region. Finally, differing interpretations of the 15 minute rule led to an exercise practice that was acceptable in one region, but was considered a Category A deficiency by the neighboring region. These examples are not isolated incidents, but appear to typify the current program inconsistencies.

The regions do not appear motivated to develop national program uniformity.

Each regional office has developed its program to address problems encountered within the regional jurisdiction. As such, there is anxiety that an imposed change may reduce the level of regional program quality. Therefore, the programs as developed and implemented by the region are sustained as the accepted program.

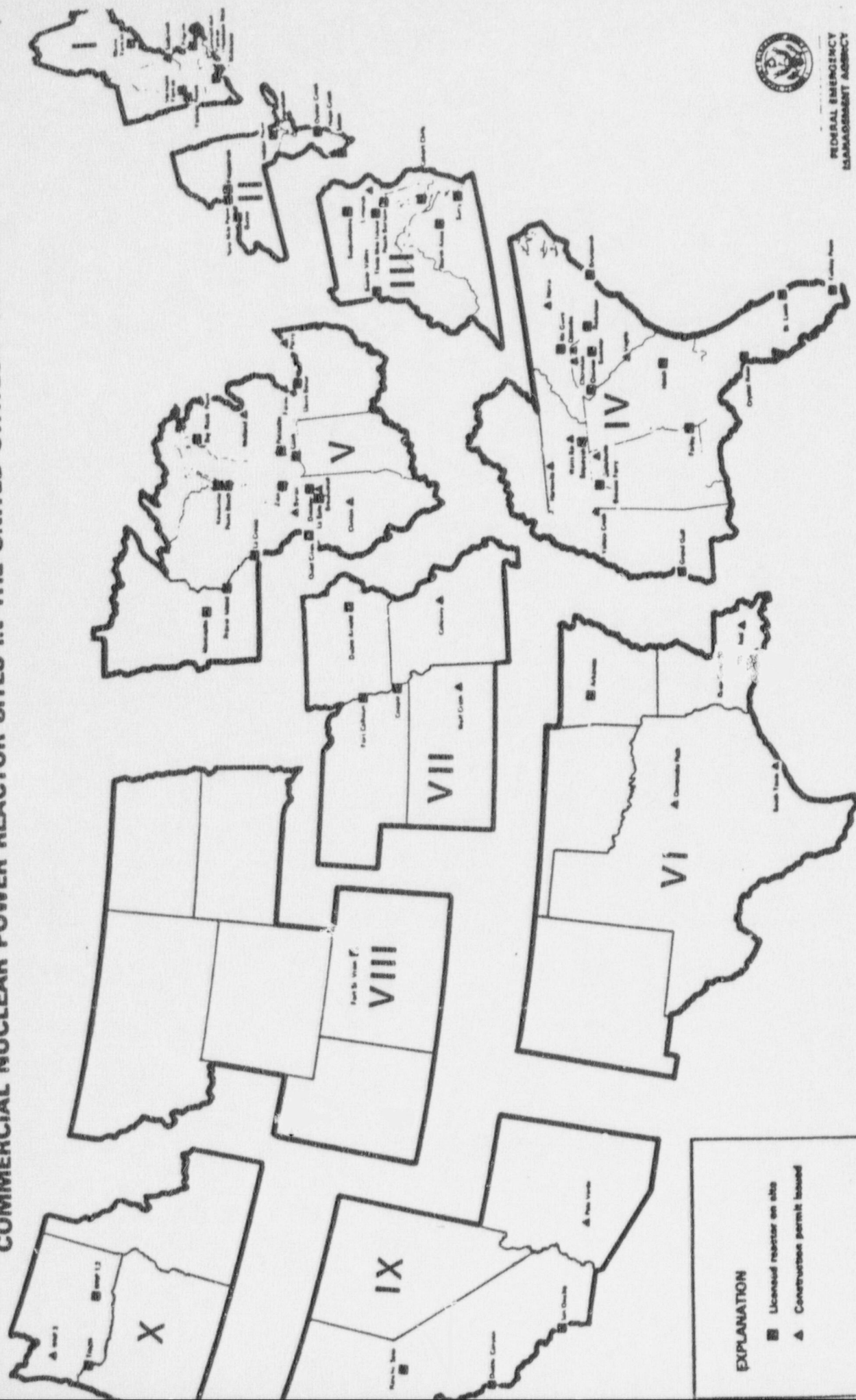
There is little accountability to a central coordinator.

Organizationally, the REP exercise programs are administered and managed by regional officials who report to the Region Director. The groups implementing the program are organizationally independent of the central administering office. Because of this, the national office has not been totally successful at implementing uniformity measures. Some regions will accept the provisions of the Guidance Memorandums while others will accept with modifications or develop their own programs.

Regional program management has created a highly unbalanced workload.

Program management, along existing regional boundaries, has created a highly unbalanced workload. Nuclear power plants in the United States are concentrated in the upper Midwest and the Southeast. Approximately 50 percent of the country's nuclear power plant sites lie in Regions IV or V. Region VIII has only one nuclear plant within its boundaries, while Region V has nineteen. Exhibit III-1 depicts the commercial nuclear sites and FEMA Regional Boundaries. Exhibit III-2 tabulates the number of plant sites within a region.

COMMERCIAL NUCLEAR POWER REACTOR SITES IN THE UNITED STATES — MAY 1984



FEDERAL EMERGENCY
MANAGEMENT AGENCY

EXPLANATION

- Licensed reactor on site
- ▲ Construction permit issued

COMMERCIAL NUCLEAR POWER SITES BY FEMA REGION

Region I - 7	Region VI - 5
Region II - 8	Region VII - 5
Region III - 6	Region VIII - 1
Region IV - 18	Region IX - 4
Region V - 19	Region X - 3

The national exercise deficiency tracking system is not operational.

FEMA does not now employ a national or centralized tracking program for exercise deficiencies or objectives demonstrated. FEMA National has procured such a program, but it has not been implemented as of this review.

FEMA has not developed an exercise document control or records retention program.

Currently, REP exercise evaluation documents are dispositioned as deemed appropriate by the regions. Requirements or provisions for record retention following region draft of the exercise report have not been imposed by FEMA. In some cases, the records are discarded once the report is issued. In most cases, the evaluator inspection reports are not available to substantiate exercise report findings or conclusions.

PRE-EXERCISE

Pre-exercise regional practices range from exercise management to exercise oversight.

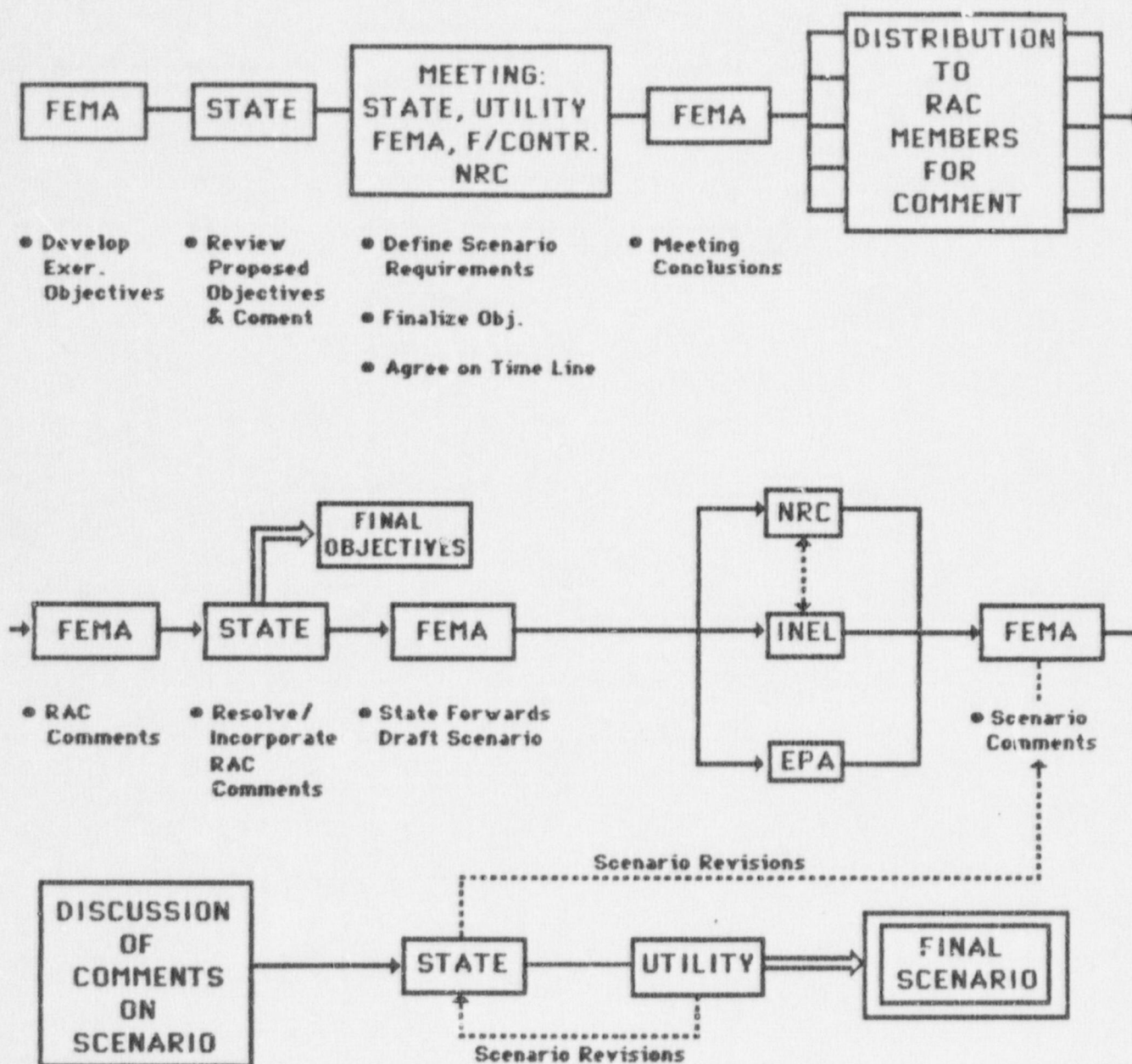
The procedure and responsibilities for pre-exercise activities is an evolved program developed uniquely within each region. As such, the role of FEMA, and its relations with other RAC members, varies from region to region.

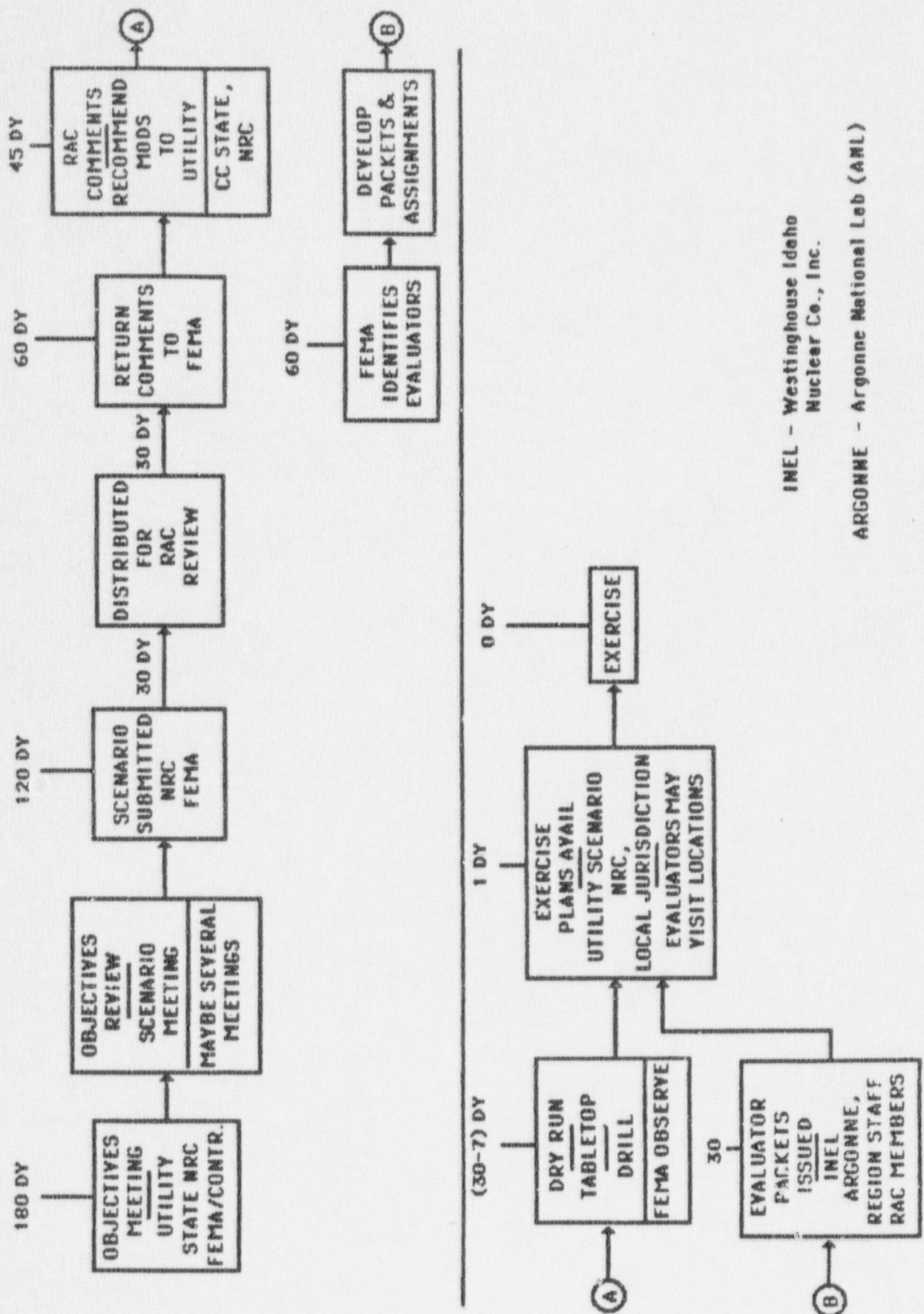
In most regions, the state forwards the exercise objectives to FEMA and/or NRC for review, comment, and concurrence. However, in at least one region, FEMA develops the proposed exercise objectives and forwards them to the state(s). The participant meeting appears to be the common approach for final agreement of objectives and principal scenario activities. However, there is no common approach to the pre-meeting review and comment cycle between FEMA, RAC members and NRC. Exhibits III-3 and III-4 depict exercise activity processes in two FEMA regions.

Experience indicates consistent problems with scenario submittal compliance, adequacy and last minute revisions.

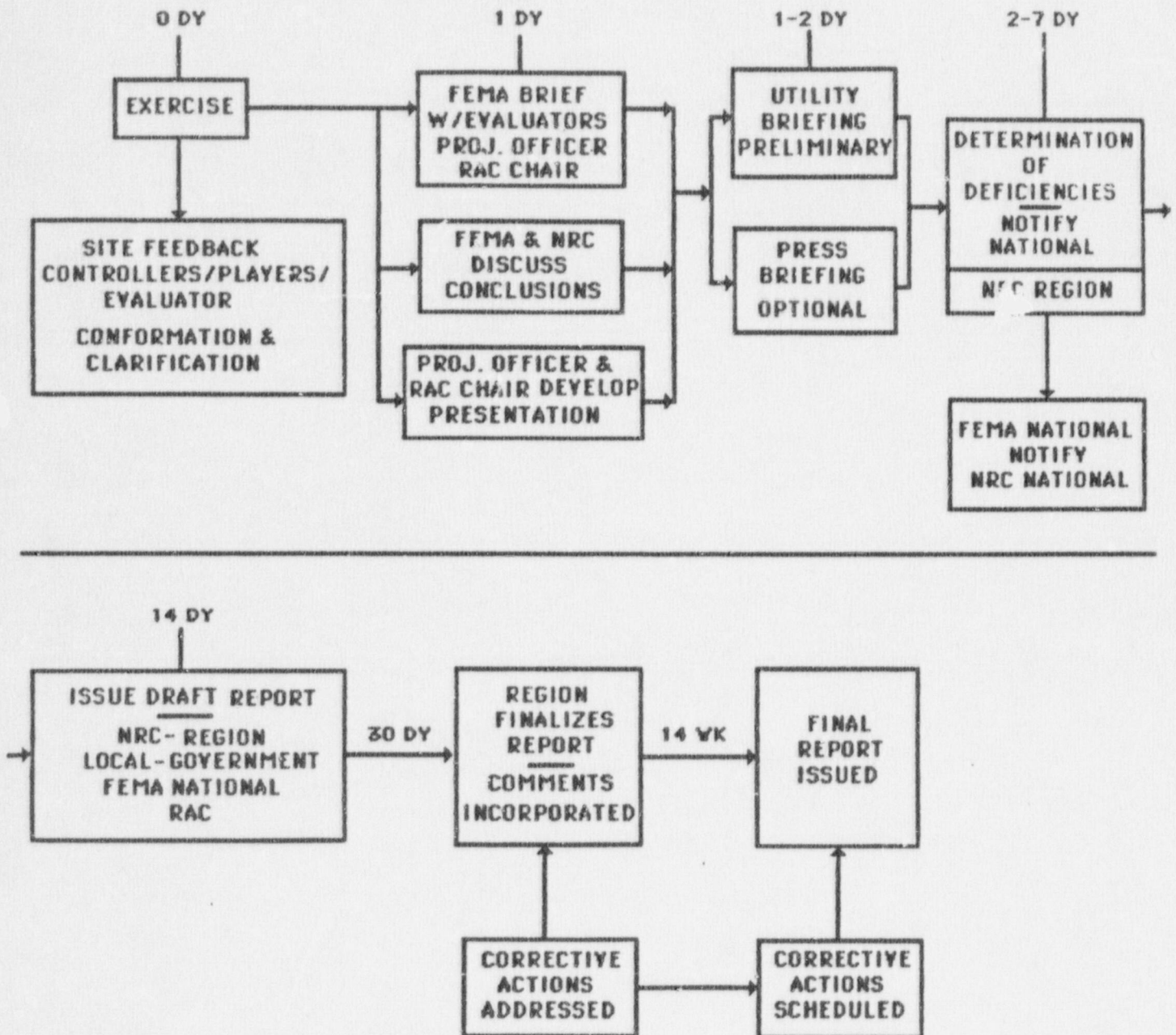
Exercise scenarios are consistently late and often do not provide an adequate level of play. Often, scenarios are revised or modified up to the day preceding the exercise. A nuclear plant exercise is a labor intensive process that requires a great deal of effort from the evaluators as well as the participants. FEMA regional offices are reluctant to postpone exercise dates because of the added burden and potential resource allocation conflicts a postponement would place on RAC members, FEMA, state and local agencies and other participating organizations. As such, FEMA has little recourse to late submittals or last-minute changes in the scenario.

With respect to scenario adequacy, the review provisions are undefined. There currently is a lack of guidance or standard procedures for review of exercise scenarios prior to acceptance by FEMA. The scenario review itself appears uncoordinated. FEMA, the FEMA Consultant (INEL), and the NRC all appear to review scenarios for off-site consequences. The review performed by INEL appears thorough; however, it is performed and utilized at the discretion

FEMA REGION II

REGION IXINEL - Westinghouse Idaho
Nuclear Co., Inc.

ARGONNE - Argonne National Lab (AML)

REGION IX

of the region. The scenario review performed by FEMA appears to be duplicative of the NRC, yet the FEMA review is not coordinated with the NRC. Scenario review coordination with NRC and defined set of FEMA Review criteria would eliminate the duplication of efforts.

Evaluator packets appear well developed, with relatively consistent content.

Evaluator Packet Contents have evolved through use, and appear well developed with the essential contents relatively consistent.

Regional offices feel the modular report should be revised.

The Modular Report Format serves well as a checklist or reference, but it is not applicable to all exercises. Regional offices would prefer to develop evaluator checklists that are based on the site's emergency plan and tailored to the exercise objectives.

EXERCISE

Pre-exercise briefings and exercise activities appear consistent and adequate.

Pre-exercise activities consist of evaluator briefings on the conduct of the exercise, scenario timeline, duties and responsibilities, and post exercise report schedules. Time permitting, evaluators may visit assigned locations on the day preceding the exercise.

Exercise evaluators are selected from FEMA regional staff, RAC members and FEMA technical contractors (Argonne or INEL).

Some regions conduct post-exercise discussions among the evaluators, controllers, and players at a given facility.

Some regions have evaluators conduct post-exercise discussions among the evaluators, controllers and players upon termination of the exercise. The discussions provide immediate feedback to players and clarifications for the evaluator. This activity appears to have evolved through experience and serves multiple purposes.

POST EXERCISE

Post-exercise techniques for FEMA internal briefings have developed through use, and appear to suit the needs of the situation.

Following the exercise, the FEMA evaluators will caucus to perform a preliminary assessment of the exercise. In some regions, the caucus is handled as a "round table" discussion; other regions utilize team leaders to summarize the findings and brief the RAC Chairman. Either approach may be preferable depending upon the exercise circumstances. However, a general briefing provides added opportunity to clarify issues or misinterpreted events.

Post-exercise caucus with NRC should be handled as a formal meeting with a preliminary lists of findings presented.

Upon completion of a preliminary assessment, the RAC Chairman will caucus with the NRC team leader to review findings and results. This caucus may occur as a formal meeting or informal discussion prior to participants briefing. Typically, the caucus will cover only the most prominent problems without a written assessment of preliminary findings.

Post-exercise disclosure of findings to NRC participants and public may not be timely or informative.

NRC performs a closed-door exit interview with the utility on the day following the exercise, and participates in public meetings, generally with a prepared summary of preliminary findings. The NRC Exercise Report is issued by the NRC regional office in two to four weeks.

Some FEMA regions will discuss preliminary findings in the formal participants briefing, others reserve identification of findings until issuance of the official exercise report. Recent changes in the national guidance allows regional offices to distribute copies of draft exercise reports prior to Washington review. Some regions distribute draft reports, others do not.

Participation in post-exercise public meetings is optional except for a Part 350 Exercise. Several regions actively participate in all public meetings, others participate only as required. In a recent post-exercise public meeting for a multiple region site, one regional office actively participated; the co-evaluating region did not attend.

The public confidence in the program's effectiveness and integrity is eroded by late, inadequate and inconsistent dissemination of information.

Report processing takes an excessive length of time for issue of the final Report.

Publication of the final exercise report may take from three to six months or longer, from the date of the exercise until final distribution from Washington.

The cause for variations in the time to issue reports is not clear. For a Quad Cities exercise; the Region V report was issued three and one half months after the exercise; the Region VII report, evaluating the same exercise, was issued six months after the exercise.

The exercise report review process is hampered by a lack of review guidance, inadequate support documentation, and minimal on-site participation by Washington personnel.

All exercise reports are forwarded to Washington for review, approval and issue. Currently there are no guidance materials addressing the scope of the review, the review process, review checklists, review documentation, resolution of conflicts, etc.

Typically, the review package sent to Washington consists solely of the draft report compiled by the regional office. The evaluator data sheets are not forwarded with the report draft. The present process can only identify major discrepancies or issues recognized through the experience of the reviewer.

Washington national personnel do not attend the REP exercises. The Field Service personnel who review regional exercise reports have little actual experience or participation in the conduct of REP exercises, and do not attend the exercises they are reviewing.

C -- RECOMMENDATIONS

FEMA should consider a centralized management approach to the REP exercise process.

TB&A recommends that FEMA consider centralized program control or accountability to improve program consistency, effectiveness and workload management. TB&A has developed a preliminary organization concept that provides for four REP operations offices reporting to the office of Natural and Technological Hazards. Each office would be responsible for the exercise program within designated regions. Exhibit III-5 depicts a breakdown of REP offices by region with a balanced number of sites per office. The existing field operations group could assume a technical contractor management role and a program quality assurance role. The charter of the policy group would remain unchanged. Exhibit III-6 depicts our recommended organization.

The above discussion is presented to assist FEMA in considering this approach. Specific recommendations will require analyses beyond the scope of this study.

FEMA should adopt a standardized REP exercise program manual.

TB&A recommends that FEMA develop uniformity and consistency through a standardized program, defined in a REP exercise program manual. Exhibit III-7 is a preliminary table of contents for the manual.

The purpose of the manual would be to establish policy, identify applicable requirements and define processes necessary for the conduct of REP exercises. The objective in the development of the manual is to identify those activities necessary for the conduct and evaluation of an exercise, and provide standard procedures for their accomplishment.

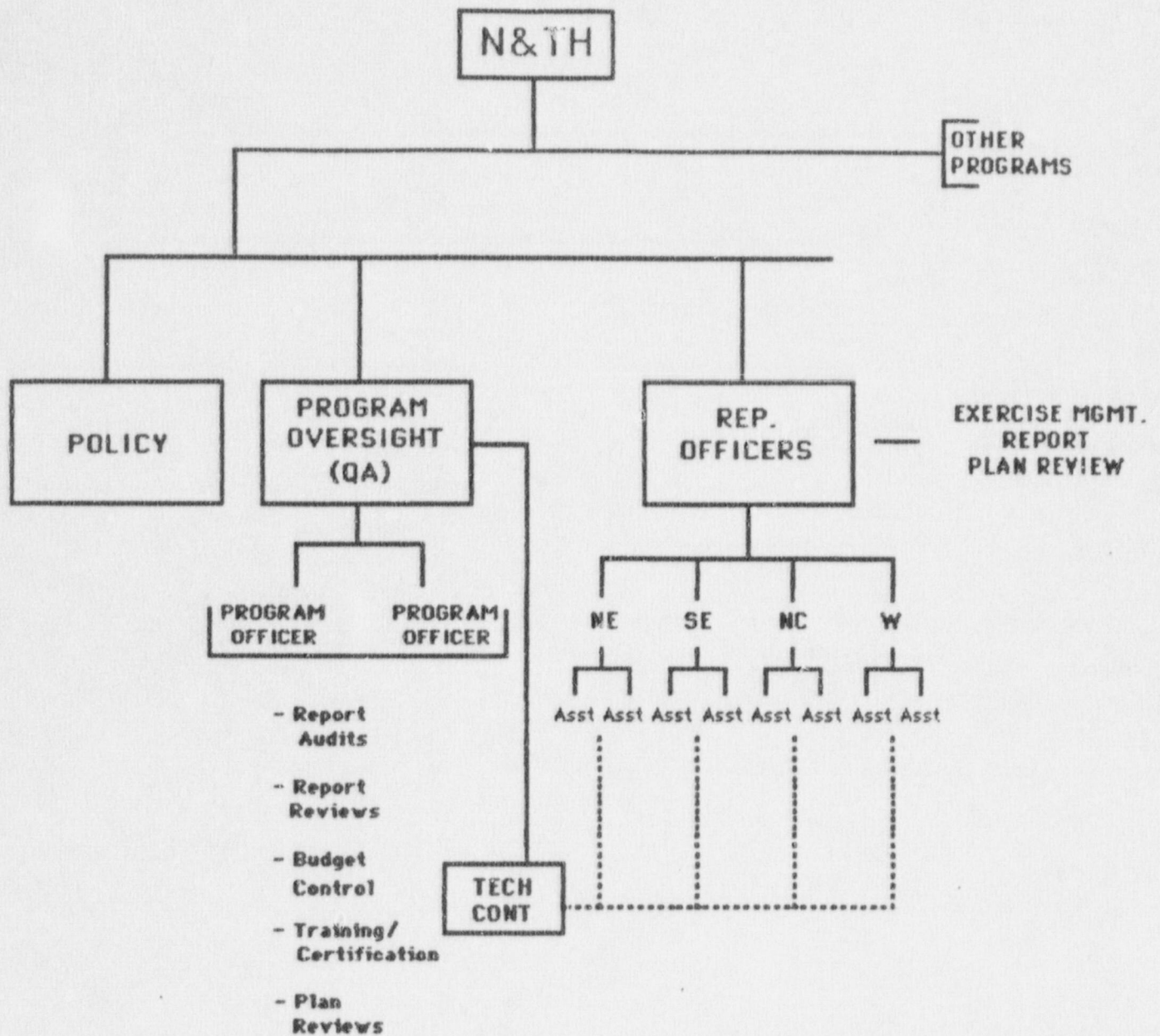
The program manual should:

- Define the program plan
- Define roles and responsibilities
- Establish a uniform process for exercise planning and evaluation activities

COMMERCIAL NUCLEAR POWER SITES
BY PROPOSED CENTRAL DIVISIONS

Northeast Division (NE)	- Regions I, II, III	- 21 Sites (NY)
Southeast Division (SE)	- Region IV	- 18 Sites (ATL)
Northcentral Division (NC)	- Region V	- 19 Sites (CH)
Western Division (W)	- Regions VI, VII, VIII, XI, X	- 18 Sites (SF)

Note: Regions VI, VII, may be grouped, for geographical considerations, to form a Southcentral Division containing 10 sites. The Western Division would then consist of Regions VIII, XI, X, containing 8 sites.



PROPOSED GUIDANCE MATERIALS
-DRAFT-

REP EXERCISE PROGRAM MANUAL
-CONTENTS-

- A. Policy
- B. Program Requirements
 - Part 350 Exercise
 - Maintenance Exercise
 - Remedial Exercise
- C. Exercise Process
 - Pre-Exercise
 - Exercise
 - Post Exercise
- D. Document Control
- E. Conflict Resolution

- Establish standard schedules for major actions, activities, and submittals
- Define procedures and establish checklists for review of documents:
 - Exercise Objectives
 - Exercise Scenario
 - Evaluator Reports
 - Exercise Reports
- Define procedures and content requirements for production of documents:
 - Evaluator Packet
 - Evaluator Reports
 - Exercise Reports
- Establish standard practices for interfacing organizations:
 - Objectives Review
 - Scenario Review
 - Post-exercise caucus
 - Participant Briefing
 - Public Briefing
 - Findings Notification
- Establish process and requirements for the exercise report review:
 - Review package support documentation
 - Review cycle schedules
 - Review cycle
- Clarify process for conflict resolution and provide internal checks for uniform application of regulations
- Establish provisions for a document control and retrieval system:
 - Establish minimum retention period
 - Establish list of retained documents
- Establish objectives and deficiency tracking system(s)
 - Accessable to all offices
 - Adaptable to trend analysis and prioritization

FEMA should adopt a two-stage exercise evaluation approach.

The TB&A Guidance Material will reflect a two stage evaluation approach for exercise performance assessment. A significant portion of the exercise evaluation involves assessment of adequacy of facilities, equipment or specific communications procedures. These assessments could be handled as non-exercise inspections, conducted the day before the exercise or at any other time (announced or unannounced), at the discretion of the RAC Chairman.

TB&A has identified exercise dependent assessments as performance evaluations and non-exercise dependent assessments as inspections:

Performance Evaluations

- Exercise Activities
- Scenario Response

Inspections (Announced or Unannounced)

- Facilities, Facility Equipment, Field Team Equipment
- Dose Projection/Assessment Equipment
- Facility Activation
- Siren Activation, 15 Minute Notification
- EBS Message Distribution

FEMA should adopt a higher degree of interaction with NRC.

FEMA should develop a higher degree of interaction with NRC, particularly in the area of scenario reviews and post-exercise evaluations. Utilization of the NRC scenario review results may offset a portion of the FEMA review burden.

FEMA should consider cost recovery measures for postponed exercises.

FEMA should consider imposition of cost recovery measures for postponed and remedial exercises. Cost impacts are a major consideration in enforcement of schedule submittal requirements.

- Formalized Contracts With Performance Criteria and Penalties
- Cost Recovery Assessments

FEMA national personnel should routinely attend REP exercises.

TB&A recommends that the FEMA National Personnel responsible for the review of REP exercise reports should routinely attend selected exercises. Their attendance will provide experience with the exercise events and processes, an appreciation for unique situation requirements and insight into the different methods of operations of assigned regions.

FEMA should also consider inter-regional exercise assignment for FEMA regional staff assigned to the REP exercise program. This approach would provide a vehicle for inter-region transfer of methodologies, procedures, experiences, and practices.