
NRC Plan for Cleanup Operations at Three Mile Island Unit 2

TMI Program Office
Office of
Nuclear Reactor Regulation

U.S. Nuclear Regulatory
Commission



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**Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
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ABSTRACT

This NRC plan defines the functional role of the NRC in cleanup operations at Three Mile Island Unit 2 to assure that agency regulatory responsibilities and objectives will be fulfilled. The plan outlines NRC functions in TMI-2 cleanup operations in the following areas: (1) the functional relationship of NRC to other government agencies, the public, and the licensee to coordinate activities (2) the functional roles of these organizations in cleanup operations, (3) the NRC review and decision-making procedure for the licensee's proposed cleanup operation, (4) the NRC/licensee estimated schedule for major actions, and (5) NRC's functional role in overseeing implementation of approved licensee activities.

NRC Plan for TMI-2 Cleanup Operations

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Preface

This plan defines NRC's role in cleanup operations at Three Mile Island Unit 2 (TMI-2) and outlines NRC's regulatory responsibilities in fulfilling this role. These responsibilities include reviewing and approving Met-Ed's (the licensee's) proposals for cleanup actions, overseeing the licensee's implementation of approved activities, coordinating with other Federal and state governmental agencies on their activities in the cleanup and informing local officials and the public about the status of the cleanup operation.

Because major uncertainties in the condition of the reactor plant currently exist, portions of this plan are subject to change as cleanup work and related investigations continue. The estimated schedule given in this plan is most likely to require changes. However, the available schedule provides an adequate planning base for the present cleanup plans.

Dr. Bernard J. Snyder, Director
Three Mile Island Program Office
U.S. NRC

1.0 Objectives

1.1 The NRC Objectives in TMI-2 Cleanup Operations

The expeditious cleanup and decontamination of Three Mile Island Unit 2 (TMI-2), including removal of the fuel from the accident-damaged reactor, are necessary for the long-term protection of public health and safety. The Nuclear Regulatory Commission (NRC) is responsible for the regulation of TMI-2 cleanup operations to assure the protection of the health and safety of the public. For all post-accident operations at TMI-2, NRC has maintained the following regulatory objectives:

- (a) Maintain reactor safety and reactor building integrity,
- (b) Assure that environmental impacts are minimized, and that radiation exposures to workers, to the public, and to the environment are within regulatory limits and are as low as reasonably achievable (ALARA), and
- (c) Assure the safe storage and/or disposal of radioactive wastes from cleanup operations.

Implementing cleanup activities is the responsibility of Metropolitan Edison Company (the licensee). However, should the licensee and its parent company go bankrupt or otherwise default on its obligation to decontaminate the TMI-2 facility, NRC's role in decontamination operations may change. Should NRC's role change, its objectives in TMI-2 cleanup operations will remain the same because of its mandate to protect public health, safety, and the environment. To plan for such an eventuality, the NRC staff is preparing a contingency study of NRC actions required should the licensee be unable to finance the TMI-2 cleanup. This NRC contingency study is scheduled for completion by August 1980 and will not be addressed in this NRC plan.

1.2 The Purpose and Scope of This Plan

The purpose of this NRC plan is to define the functional role of the NRC in cleanup operations at Three Mile Island Unit 2 to assure that agency regulatory responsibilities and objectives will be fulfilled. The plan outlines NRC functions in the following areas: (1) the relationship of NRC to other government agencies, the public, and the licensee to coordinate activities, (2) the roles of these organizations in cleanup operations, (3) the NRC review and decision-making procedure for the licensee's proposed cleanup operation, (4) the NRC/licensee estimated schedule of major actions, and (5) NRC's role in overseeing implementation of approved licensee activities.

Inspection functions at the site are carried out by Office of Inspection and Enforcement personnel under the direction of the onsite TMI Program Office (TMIPO) and will not be described in this plan.

2.0 NRC Functions

The TMI Program Office (TMPO) was established within the NRC Office of Nuclear Reactor Regulation (NRR) to provide overall direction of TMI-2 cleanup operations. The TMPO has the following regulatory responsibilities:

- (1) Planning and managing all NRC involvement in TMI-2 cleanup activities,
- (2) Obtaining information and evaluating current facility status,
- (3) Analyzing and reviewing the licensee's proposed actions and procedures,
- (4) Preparing technical review documents on the safety and environmental impacts of proposed licensee cleanup actions,
- (5) Approving or disapproving the licensee's proposed actions and procedures,
- (6) Advising the Commission on major cleanup actions that require Commission decisions,
- (7) Coordinating TMI-2 cleanup activities with other governmental agencies as necessary,
- (8) Informing State and local governments and the public on the status and plans for cleanup activities,
- (9) Overseeing day-to-day licensee activities to ensure that operations are implemented according to plans approved by NRC and are in compliance with approved NRC limits, procedures, and ensure that the licensee complies with NRC orders, and
- (10) Coordinating with the NRC Office of Inspection and Enforcement on its TMI-2 inspection activities.

To perform these functions, the TMPO has staff with management and technical expertise in key areas of the TMI-2 cleanup actions, e.g., radiation protection, radiological assessment, radwaste effluent treatment, nuclear safety. Support by experts in other areas (e.g. meteorology, hydrology) is available from other NRC staff and, under arrangement with DOE, the national laboratories and consultants when determined by the TMPO to be necessary. The TMPO also coordinates its activities with the licensee, other Federal agencies, State and local government officials, and the public. Figure 2.1 depicts the major functional roles of these organizations and provides an overview of their functional relationship.

2.1 Support Functions

The NRC staff offices may be requested to provide specialized technical support in a number of areas, including the following: The Office of Nuclear Reactor

Regulation (NRR) for radiological assessment, hydrology, meteorology, geology, reactor core analysis, and instrumentation and control systems; the Office of Nuclear Material Safety and Safeguards (NMSS) in solidification of radioactive waste, disposal or storage; the Office of Standards Development (OSD) in the development of regulations, standards, and regulatory guides; the Office of the Executive Legal Director (OELD) for legal advice; and the Office of Nuclear Regulatory Research (RES) in support for any needed research programs.

The TMIPO also obtains technical support from organizations such as national laboratories and other consultants. These support tasks, e.g., the preparation of portions of the draft Programmatic Environmental Impact Statement (PEIS) for TMI-2 cleanup operations, are managed by the TMIPO.

2.2 Coordination Functions

The TMIPO coordinates NRC functions with several other Federal agencies that are participating in cleanup operations. The Department of Energy (DOE) may be involved in the disposal of highly radioactive solid wastes; the Environmental Protection Agency (EPA) is participating as the lead agency for offsite environmental monitoring programs, and the President's Council on Environmental Quality (CEQ) has been advising the Commission on its National Environmental Policy Act (NEPA) responsibilities. The TMIPO also coordinates with the Commonwealth of Pennsylvania, the State of Maryland, and local government officials on TMI-2 cleanup activities.

2.3 Advisory Functions

The TMIPO has the responsibility of keeping State and local government officials and the public informed on a continuing basis of the progress and the status of cleanup operations as well as of future plans. This function is mainly performed by the TMIPO onsite staff at TMI and by a TMIPO Field Office in Middletown, Pa., which disseminate information (for example, the weekly plant status report on the cleanup) routinely to local officials and the public. Additionally, periodic meetings are conducted to keep them informed of specific aspects of the cleanup effort.

2.4 Information and Recommendation Functions

Some major cleanup operations may require the approval of the Commission. To facilitate Commission decision making, the TMIPO will develop recommendations based on its review and evaluation of the licensee's proposed cleanup plans.* In addition, the TMIPO also periodically informs the Commission of the current status of cleanup operations and planning.

*A TMI-2 Advisory Panel will consist of not more than 15 members, and is being established to advise the NRC. This Panel will consist of three members each from the Commonwealth of Pennsylvania, local government officials, independent members of the scientific community, and from the public in the vicinity of TMI.

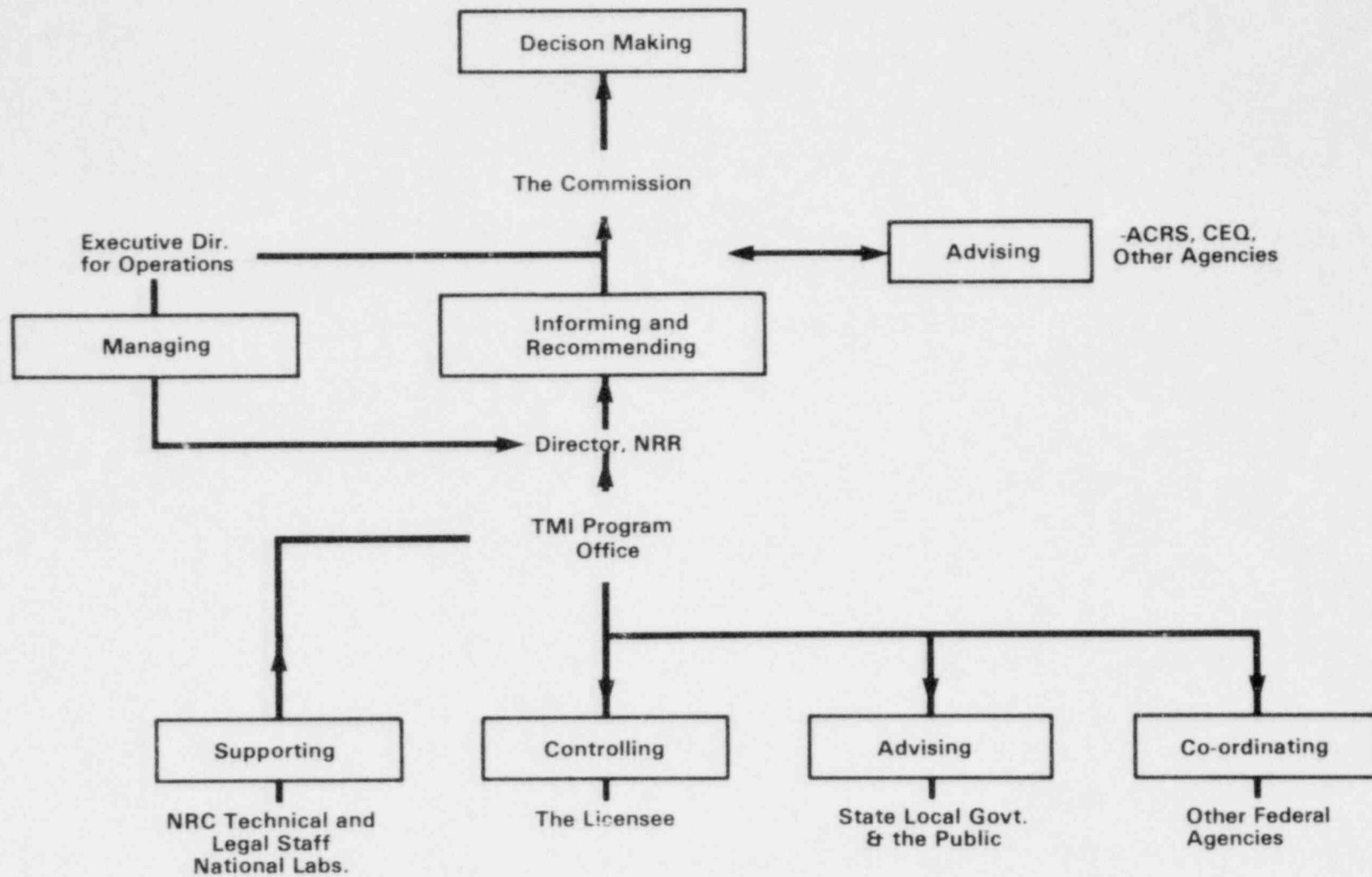


Figure 2.1 Major NRC Functional Roles in TMI-2 Cleanup Operations

2.5 Control Functions

NRC maintains regulatory control over the licensee's cleanup activities. In general, this control is accomplished in three phases: (1) long-term planning, (2) review and approval of proposed cleanup activities prior to their implementation, and (3) oversight of day-to-day operations. The NRC maintains cognizance of the licensee's long-term planning to assure that the licensee's cleanup objectives are consistent with those of the NRC in maintaining the health and safety of the public and workers, and minimizing environmental impacts. Day-to-day oversight, exercised by NRC through the TMIPO onsite staff, provides assurance that activities are implemented according to approved plans, and assures compliance with existing NRC regulations, technical specification requirements, and approved procedures.

For the following activities, written procedures proposed by the licensee will require TMIPO review and approval, as required by proposed Section 6.8 of the facility Technical Specifications (Ref. 1):

- "(a) The applicable procedure recommended in "Appendix A" of Regulatory Guide 1.33, Revision 2, February 1978 [Ref. 2].
- (b) Recovery Operations Plan implementation.
- (c) Surveillance and test activities of safety-related and radioactive waste management equipment.
- (d) Security Plan implementation.
- (e) Emergency Plan implementation.
- (f) Radiation Protection Plan implementation.
- (g) Recovery Mode implementation, especially Recovery Mode procedures which involve a reduction in the margin of safety, including those which
 1. Directly relate to core cooling,
 2. Could cause the magnitude of radiological releases to exceed limits established by the NRC,
 3. Could increase the likelihood of failures in systems important to nuclear safety and radioactive waste processing or storage, and
 4. Could alter the distribution or processing of significant quantities of stored radioactivity or radioactivity being released through known flow paths."

3.0 NRC Review and Decision-Making Procedure

As noted in Section 2.5 above, NRC review and approval are required prior to the implementation of cleanup operations by the licensee. To the extent applicable, the review will draw upon the evaluation of the cleanup alternatives discussed in the Programmatic Environmental Impact Statement (PEIS). The review will focus on the safety and environmental impacts of the proposed operation. The TMIPO staff will render a decision on the proposals based on these impacts. For proposed operations where the environmental implications are within the scope of the activities evaluated in the PEIS, the review will reference the appropriate PEIS sections to account for a discussion of its environmental impact.

3.1 Proposals From the Licensee

NRC intends to review the licensee's proposed actions and, consistent with NRC's responsibilities, ensure that public health and safety and the environment will be adequately protected. In order to expedite the implementation of the licensee's activities, it is therefore imperative that the licensee make timely submittals of proposed actions that contain sufficient information to enable the TMIPO Staff to conduct safety and environmental reviews. Previous reviews of the operation of EPICOR II and of the reactor building atmosphere cleanup indicate that a review and approval period of six months would be typical without a prior environmental review. After the PEIS has been issued, this period may be substantially reduced, assuming the proposed activity is within the scope of the PEIS and the submittal is sufficiently complete.

3.2 The NRC Review Process

The TMIPO has access to sufficient technical expertise to review, evaluate, and decide on the adequacy of TMI-2 cleanup actions proposed by the licensee. All actions proposed by the licensee will be reviewed by TMIPO to determine whether the action can be undertaken with reasonable assurance that it will not endanger the health and safety of the public and is environmentally acceptable. The extent to which supplementation of the PEIS (e.g., preparation of an Environmental Impact Statement or an Environmental Impact Appraisal and a Negative Declaration) will be performed, will be dependent on the degree to which the PEIS has addressed the environmental considerations attributable to the proposed action.

Figure 3.1 illustrates NRC's review process of those proposed actions with the potential for significant environmental impacts not included within the scope of the PEIS. The results of these reviews will be documented in an Environmental Impact Statement supplementing the PEIS.

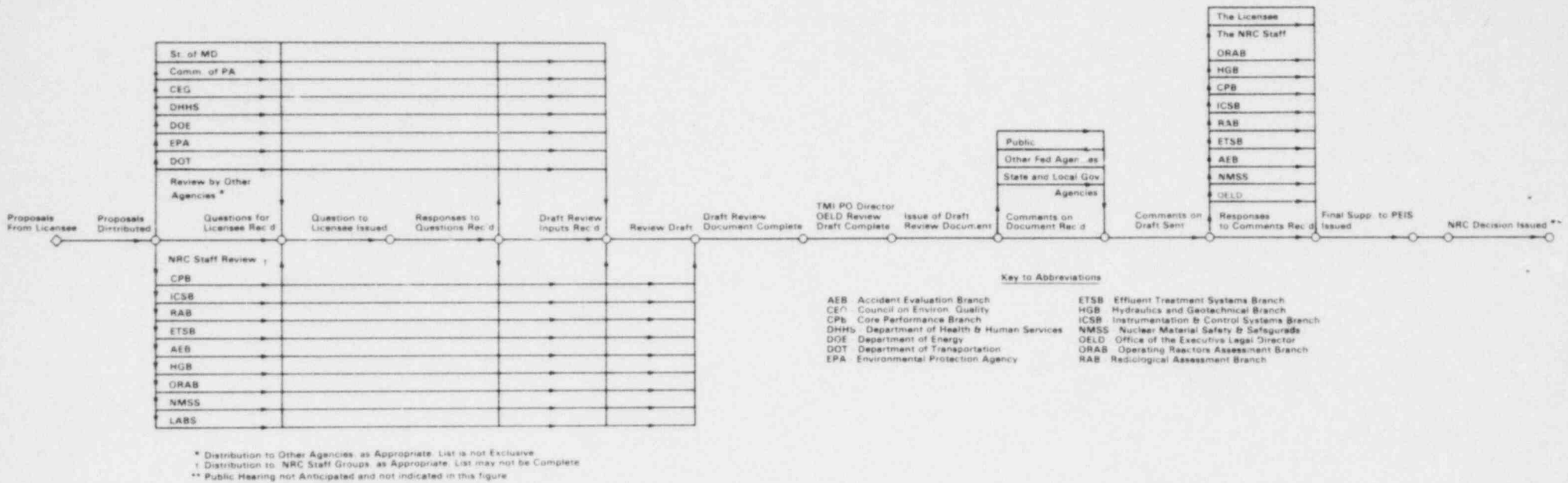


Figure 3.1 General NRC Review Process for TMI-2 Cleanup Operation Requiring a Supplement to the PEIS

In addition to the expertise within the TMIPO, the reviews of proposed actions may require additional support from NRC's technical and legal staff. Figure 3.1 lists the technical staff groups that may provide this support. For specific anticipated cleanup operations, technical staff groups that may provide reviews are identified in Section 4.

Other government agencies having an interest in the review, monitoring, and in some cases, participation in some phases of the cleanup operations are indicated in Figure 3.1. Areas of interest that may involve the participation of such agencies for specific cleanup operations are identified in Section 4.

Figure 3.2 illustrates the NRC review process for a licensee-proposed action that does not have the potential for a significant environmental impact not already within the scope of those alternatives reviewed in the PEIS, but that does require a licensing action (e.g., amendment to the facility Technical Specification). These reviews will result in the issuance of a Negative Declaration (ND) stating that an Environmental Impact Statement in addition to the PEIS will be unnecessary. In that case, an Environmental Impact Appraisal would be issued in support of the ND. Again, the TMIPO can call upon the support of other NRC staff groups for these reviews should their expertise in specialized areas be required.

For those proposed actions that have been adequately evaluated in the PEIS and do not require a change in the license or technical specifications, (e.g. detail procedures), the TMIPO will review and approve or reject the proposed actions without the issuance of an environmental review document in addition to the PEIS.

4.0 The Master Schedule of Major NRC/Licensee Actions

Each cleanup operation can be accomplished by a number of alternative methods. A review of generalized alternatives will be presented in the PEIS. The alternative chosen for a specific operation will depend, to a large degree, on the condition of the facility and the anticipated environmental impact. Information about these conditions will become available only as the cleanup progresses. Depending on the alternatives selected, the type and extent of preparation and support facilities required will vary. For this reason, the anticipated schedule of NRC/licensee actions designates the type of operation and support activities only and not the methods to be used. An outline of the master schedule of anticipated NRC/licensee action is presented in Figure 4.1. The dates in Figure 4.1 are based on the most recent projections of the licensee (as of mid-April 1980) and are subject to change as the cleanup progresses.* Nevertheless, the activities will likely occur in the sequence listed.

*Figure 4.1 is based on the licensee's April 1980 estimate of about three years to complete the cleanup. However, in NRC's PEIS, the staff estimates that the time required to complete the cleanup will range from three to six years.

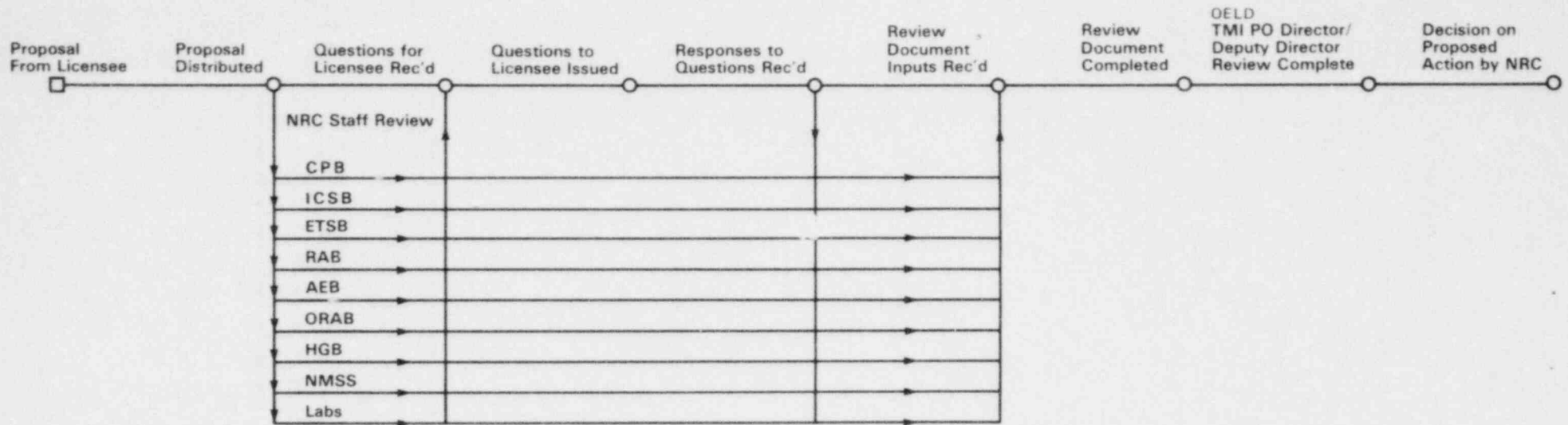


Figure 3.2 General NRC Review Process for Proposed Licensee Operations with No Potential for Significant Environmental Impact

See Figure 3.1 for Key to Abbreviation

* Written by TMI:FO (e.g., Negative Declaration and Environmental Impact Appraisal) if proposed action involves license amendment

Six to ten months has been allowed for NRC review and decision making for each major operation anticipated. This period allows for the recognition of uncertainties about the condition of the facility, for situations that may not have been included within the scope of PEIS, and for design review of supporting equipment and facilities associated with cleanup operations. If the proposal is within the scope of the PEIS assessment this period may be reduced. No hearing time is reflected in our schedule.

Although there are overlapping cleanup efforts (e.g., the processing of contaminated water would be an on-going task), the cleanup operations, in general, will proceed sequentially according to the milestones shown in Figure 4.2. Also listed are a number of major support activities and facilities that have to be in place for each milestone prior to those cleanup operations.

Prior to the first milestone, the reactor building atmosphere and cleanup will have been completed by the purging operation and the contaminated water in the auxiliary building is being processed by the EPICOR-II system. Alternatives for the disposal of the water processed by the EPICOR-II system will be discussed in the PEIS.

The following sections discuss the NRC/licensee activities anticipated to achieve these milestones.

4.1 Processing of Reactor Building Sump Water

a. Licensee's Proposal for Action. The proposal should contain, at a minimum, the following information:

- (1) status of sump water and cleanup objectives,
- (2) design criteria and cleanup system technical details,
- (3) operating procedures to meet cleanup objectives and criteria addressed in the PEIS, and
- (4) the safety and environmental consequences of (and environmental consequences to) the proposed action, including estimates of occupation exposures and radiation-protection measures to reduce these doses to as low as reasonably achievable (ALARA).

b. Support Systems and Facilities. Major systems and facilities to support the cleanup operation would require NRC review and approval prior to their operation. Such items presently identified are the sump water processing system, solid radwaste processing system, processed water storage facility, and solid radwaste staging facility. This list is not intended to be all-inclusive.

c. NRC Review of the Proposed Action

The NRC review will follow the process described in Section 3, with the following special considerations for this cleanup operation. Participation by the

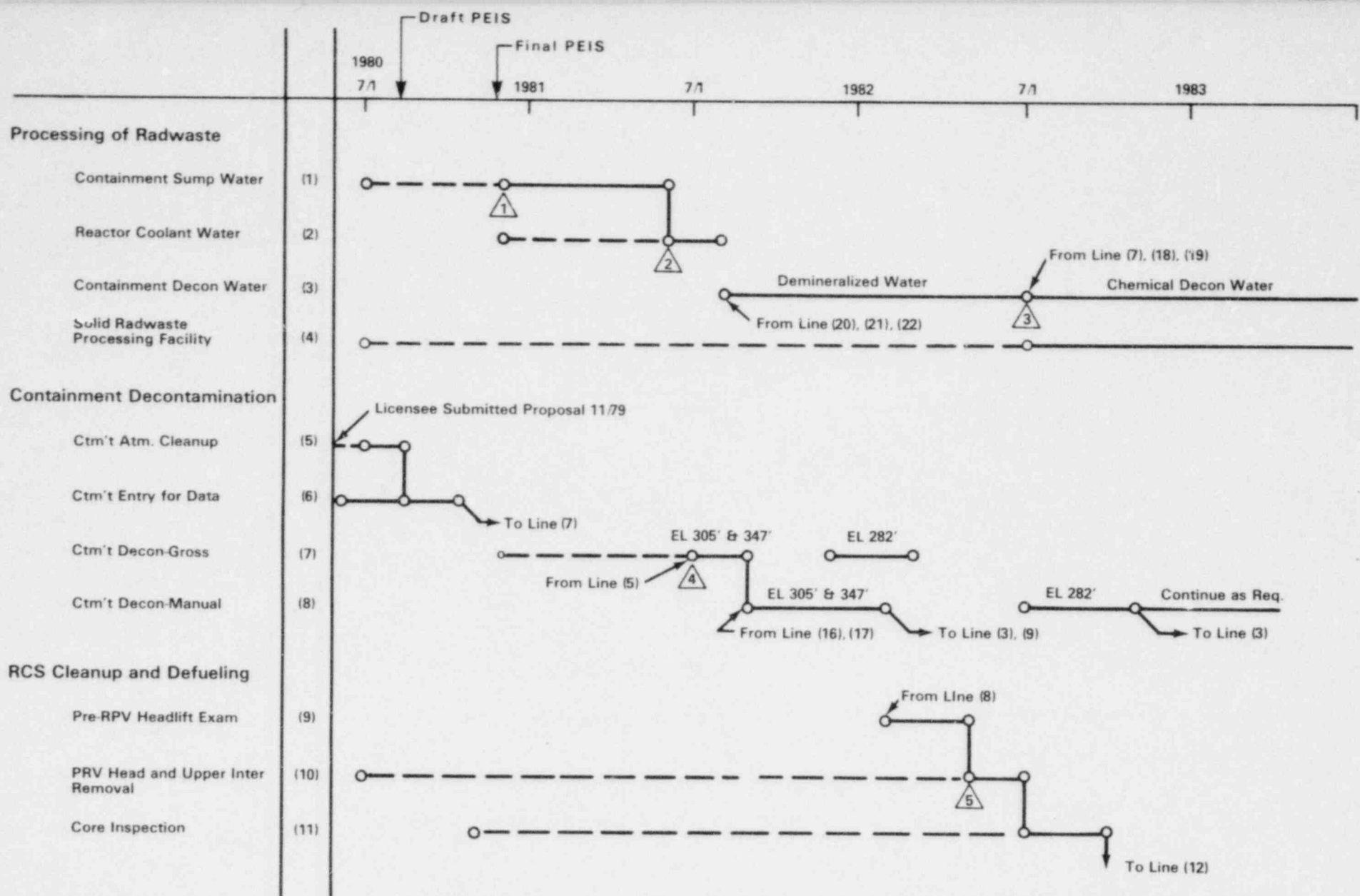


Figure 4.1 Master Schedule of Major NRC/Licensee Actions*
(continued on next page)

* Based on the Licensee's projection as of April 1980

- △ Milestone on Critical Path. See Figure 4.2
- Operation or Construction
- - -○ Planning and Engineering

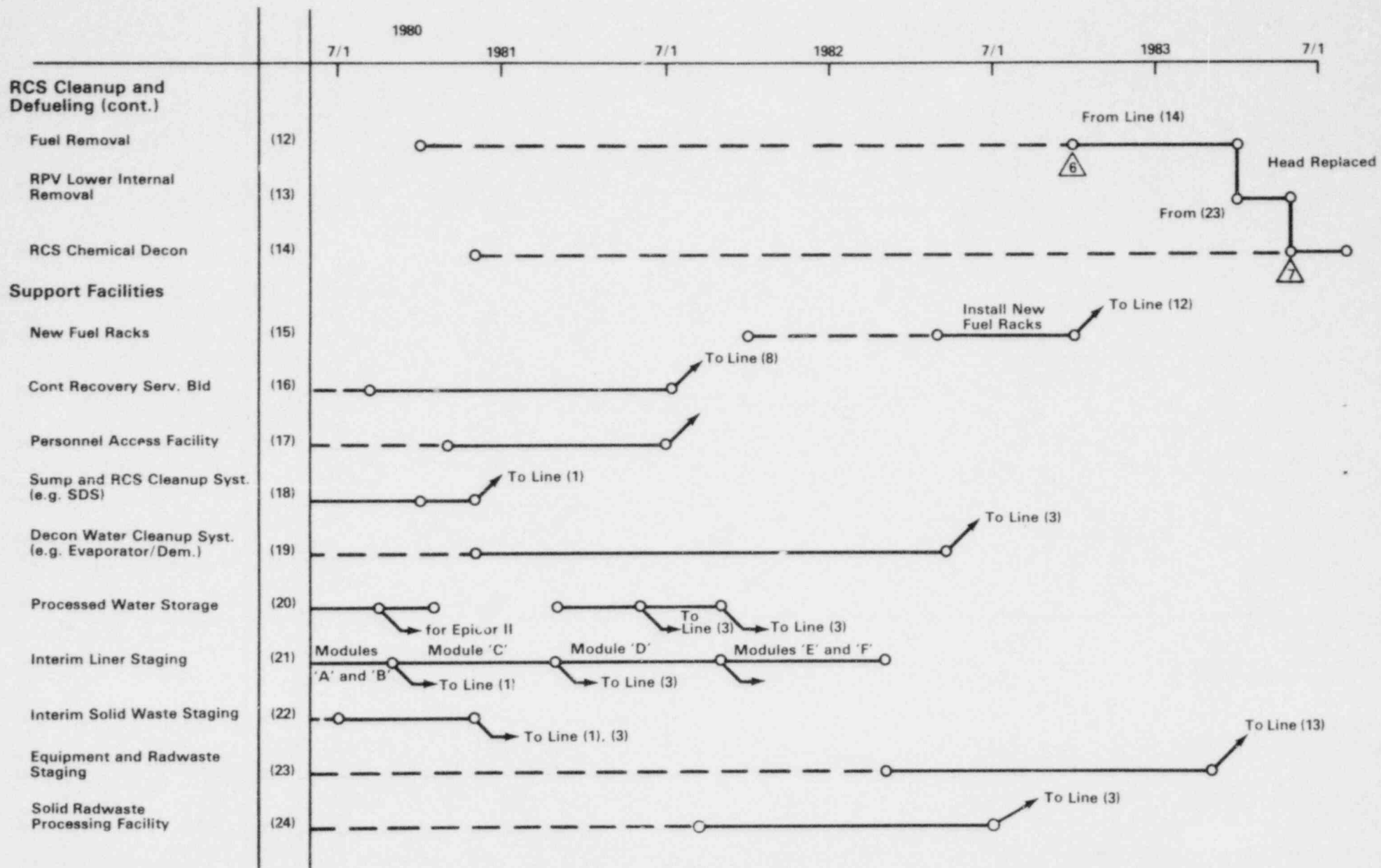


Figure 4.1 (Continued)

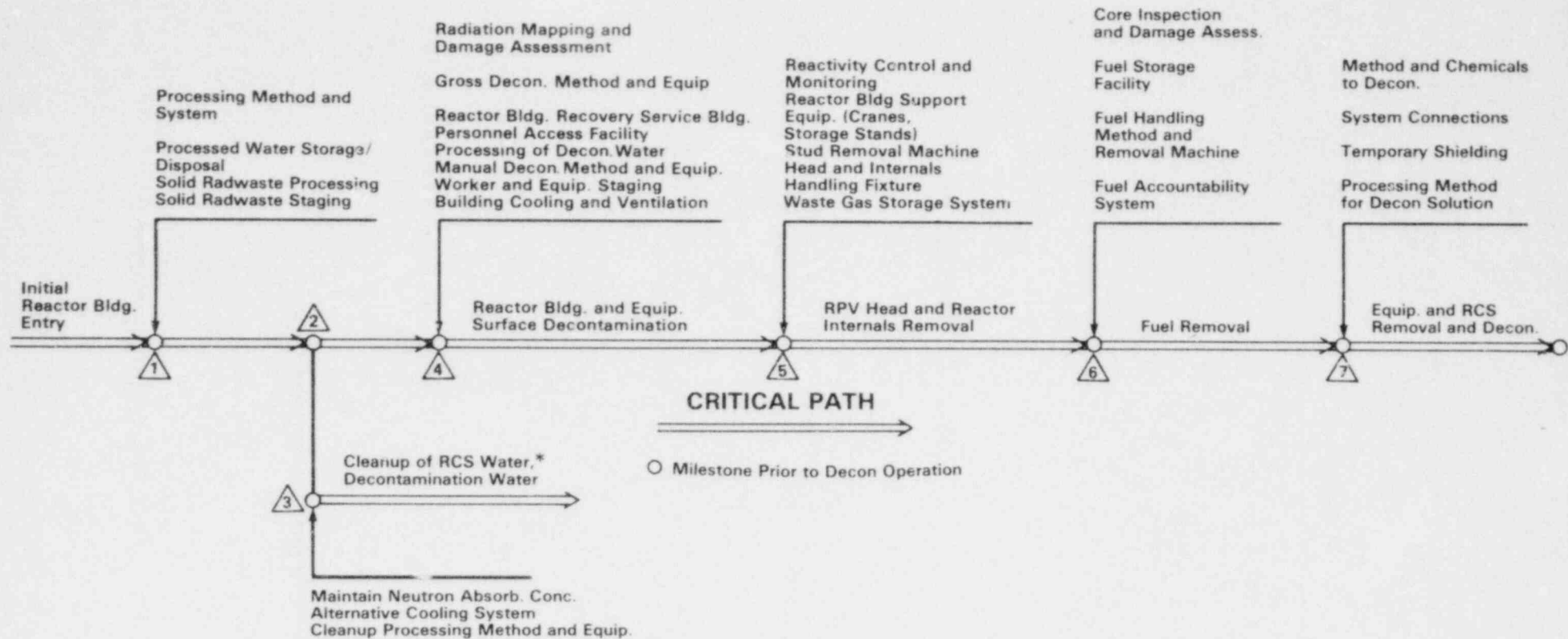


Figure 4.2 Critical Path and Key Preparations for Cleanup Operations

* Sump Water Cleanup, Reactor Building and Decontamination Operations Schedule May Substantially Overlap or Be Interchanged

Office of Nuclear Reactor Regulation (NRR) technical staff, such as the Radiological Assessment Branch (RAB), may be required because the operation will involve worker exposure during radwaste treatment activities. The participation of the Office of Nuclear Material Safety and Safeguards (NMSS) will be required to continue the review of solid radwaste processing and disposal. DOE may be requested to participate in the disposal of high level radwastes, while the Commonwealth of Pennsylvania, the State of Maryland, and the EPA may participate in processed water disposal alternatives. DOE national laboratories may be involved in the review of solid radwaste and acceptable waste form generation. CEQ may participate in the review of waste disposal alternatives and provide advice on the NRC's NEPA responsibilities. The U.S. Department of Transportation (DOT) may review information on the transportation of radwastes.

4.2 Cleanup of Reactor Coolant System (RCS) Water

a. Licensee's Proposal for Action. The proposal should contain, at a minimum, information about:

- (1) radioactive contamination and chemical properties of the RCS water,
- (2) fuel debris and other impurities in the RCS water,
- (3) proposed methods to process any fuel debris in the RCS water and on the treatment of chemicals in the water,
- (4) design criteria and technical details of systems to treat the contaminated water, and
- (5) the safety and environmental consequences of (and environmental consequences to) the proposed action, including estimates of occupation exposures and radiation-protection measures to reduce these doses to as low as reasonably achievable (ALARA).

b. Support Systems and Facilities. In addition to the support systems identified in Section 4.1 b, special processing systems may be necessary for the cleanup of fuel debris and other impurities in the RCS water. Alternate methods of reactor cooling and reactivity control may be necessary. Solid radwaste processing and staging facilities, other than those discussed in Section 4.1.b, may also be necessary.

c. NRC Review of Proposed Action. The NRC review will follow the process described in Section 3. Special considerations for the cleanup of RCS are similar to those for the cleanup of reactor building sump water discussed in Section 4.1.c.

4.3 Reactor Building and Equipment-Surface Decontamination

a. Licensee's Proposal for Action. The proposal should contain, at a minimum, the following information:

- (1) radiation levels and damage assessment gathered when the reactor building was initially entered and surveyed,

- (2) a proposal for gross and (subsequent) manual decontamination methods that specifies equipment and detergents or other chemicals needed for cleanup operations,
- (3) a proposal for processing the decontamination water and detergents,
- (4) the safety and environmental consequences of (and environmental consequences to) the proposed action, including estimates of occupation exposures and radiation-protection measures to reduce these doses to as low as reasonably achievable (ALARA),
- (5) a proposal for design criteria and technical details of equipment proposed for the operation that specifies procedures for the decontamination.

b. Support Systems and Facilities. The following support systems and facilities would also require NRC review: reactor building recovery-service building, personnel access facility, health-physic facility, and reactor building cooling and ventilation system.

c. NRC Review of Proposed Action. The NRC review process will follow that discussed in Section 3 with the following special considerations for this cleanup operation. In addition to TMIPO staff, other NRR technical staff members may participate in the review. RAB staff in particular may be requested to review worker radiation protection. NMSS and Operating Reactors Assessment Branch (ORAB), because of their experience with decontamination of other reactor systems, may be requested to participate in this review.

4.4 Reactor Pressure Vessel (RPV) Head and Reactor Upper Internals Removal

a. Licensee's Proposal for Action. The proposal should contain information on methods of RPV head and reactor upper plenum assembly removal. Special consideration should be given to damage from the accident that would possibly hinder removing the RPV head (e.g. distortion, warping, and/or physical dislocation). The proposal should contain, at a minimum, the following information:

- (1) the radiation levels expected at the worker occupancy areas,
- (2) total occupational exposure and radiation-protection features,
- (3) potential accident consequences should heavy machinery or reactor internals strike the core after RPV head removal, and
- (4) the procedure to be followed for removal operations.

b. Support Systems and Facilities. Support systems, facilities, and equipment requiring NRC reviews include systems to monitor and control the reactivity of core debris, and a waste gas system for the collection and storage of waste gases from the primary cooling system; facilities for the staging and storage of RPV head and internals; and an RPV head and internals handling fixture, and a stud-removal equipment.

c. NRC Review of Proposed Action. In addition to TMIPO staff review of the proposal, RAB may be requested to participate in reviewing the information on radiation levels and on the adequacy of radiation protection (e.g., the results of reactor building surface decontamination and the proposed shielding of the reactor core after RPV head removal). The Accident Evaluation Branch (AEB) may be requested to aid in the review of the potential consequences of additional core damage caused by equipment or material accidentally dropping into the core.

4.5 Fuel Removal

a. Licensee's Proposed Action. The proposal should contain information on the status of the reactor following the RCS water cleanup and RPV head and reactor upper plenum removal operations, with special attention given to those factors that would affect core examination (e.g., reactor water purity, fuel assembly debris, and radiation levels at the top of the RPV). The proposal should also describe, at a minimum, the following:

- (1) the proposed core examination objectives and methods,
- (2) fuel removal methods (including the anticipated damaged condition of the reactor core and proposed procedures to remove the fuel under those conditions),
- (3) methods to retrieve and clean materials that may become detached (e.g. fuel pellets, cladding chips) during the proposed fuel removal,
- (4) methods of fuel transfer, canning, and storage,
- (5) fission-product gas monitoring and consequences of releases,
- (6) the safety and environmental consequences of (and environmental consequences to) the proposed action, including estimates of occupation exposures and radiation-protection measures to reduce these doses to as low as reasonably achievable (ALARA),
- (7) an accident analysis of the potential consequences of dropped fuel assembly and/or an accident caused by equipment dropped onto the reactor core,
- (8) the design criteria and technical information about the equipment proposed for the core examination and fuel removal operations, and
- (9) detailed procedures for each phase of the defueling operation.

b. Support Systems and Facilities. A number of support systems and special equipment for the proposed actions will require NRC review. These items include equipment for core examination; fuel containers and a storage facility; underwater cutting and grappling equipment; fuel handling and lifting apparatus; fission-product gas monitoring and processing system; and detached material collection and cleanup systems.

c. NRC Review of Proposed Action. In addition to TMIPO staff review of the proposal, additional NRC staff support may be required in this review. AEB may be requested to review the potential accident consequences of dropping the fuel assembly or of dropping heavy equipment on the fuel assembly. Core Performance Branch (CPB) and Instrumentation and Control Systems Branch (ICSB) may be requested to review the condition of the core and special instruments and control systems proposed for the operation, respectively. NMSS may be requested to review alternative methods for long-term disposal/storage. The Office of Nuclear Regulatory Research may be requested to study the condition of the reactor core and to ensure that recriticality is prevented during defueling. EPA, along with State and local government agencies, will be informed of estimated releases of fission product gases, if any are expected. DOT may be requested to review proposals for the transportation (and may be requested to provide assistance for disposal or storage) of the fuel when it is removed. DOE may be requested to review proposals for disposal or storage of the removed fuel.

4.6 Reactor Coolant System Decontamination

a. The Licensee's Proposal for Action. The proposal should contain information on the levels of contamination of and damage to the reactor system components that require decontamination or removal. For each of these major components, cleanup methods should be proposed (e.g. drain/flush and chemical decontamination and/or removal). The proposal should also contain, at a minimum, the following information:

- (1) the amounts, activity levels, and chemical properties of liquid radwastes generated from the proposed action,
- (2) the method for processing the liquid radwaste,
- (3) radiation protection features and estimates of occupational exposures,
- (4) design criteria and system descriptions, and
- (5) procedures proposed for the operation.

b. Supporting Systems and Facilities. Depending on the condition of the facility and on the proposed method of cleanup, supporting systems for this operation may include the use of the reactor coolant pumps, special equipment for high-pressure flushing of coolant lines, systems to prepare and introduce chemical decontamination solution, solid radwaste processing systems, and processed decontamination water and solid radwaste storage or staging facilities.

c. NRC Review of Proposed Action. In addition to TMIPO staff review of the proposal, RAB may be requested to review the radiation doses to the workers during decontamination and radwaste processing. Effluent Treatment Systems Branch (ETSB) may be requested to participate in review of the radwaste processing system. ORAB may be requested to review the proposed decontamination process because of the branch's experience in reviewing decontamination

operations at other reactor facilities. NMSS will continue to review proposals for disposal/storage of the radwaste. EPA, along with State and local government agencies, may participate in the review if processed cleanup water releases are proposed. DOE may be requested to provide assistance if disposal of high-level radwastes is involved.

5.0 Licensee Implementation of Actions

The licensee is responsible for maintaining reactor safety and for implementing NRC-approved actions throughout the TMI-2 cleanup operation. NRC's responsibility is to ensure that the licensee's actions meet NRC cleanup objectives and that they are implemented according to existing regulations, TMI-2 operating license and Technical Specifications, and approved procedures. The NRC is also responsible during the implementation of cleanup actions for coordination with other agencies involved in the cleanup.

NRC Actions

The NRC, mainly through the onsite TMIPO, will maintain cognizance of the current status of on-going cleanup operations to ensure that they are proceeding according to NRC orders, the facility operating license and Technical Specifications, and approved procedures.* The licensee's monitoring data and effluent releases reports will be reviewed. Independent monitoring of licensee results will be performed. This information and the progress of cleanup operations will be routinely communicated to government officials and the public by, for example, the issuance of weekly plant status reports.

Other-Agency Actions

Other agencies will participate in cleanup operations. For example, the EPA will monitor the area around Three Mile Island, while DOE is coordinating a local citizen's program to monitor radiation levels in the vicinity of TMI. Also, the TMIPO has, and will continue to be contact with the Pennsylvania Department of Environmental Resources. These and any other activities that may be needed from Federal, State, or local government agencies will be coordinated by the TMIPO.

6.0 References

1. Three Mile Island Nuclear Station, Unit 2, proposed Technical Specifications, Appendix A to Operating License DPR-73, Section 6.8, NUREG-0432. Copies are available for inspection and copying for a fee at the NRC Public Document Room, 1717 H St. N.W., Washington, D.C. 20550.
2. U.S. Nuclear Regulatory Commission, Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)." Copies are available from the NRC PDR (1717 H St., N.W., Washington, D.C. 20555) for inspection and copying for a fee, and for sale at the U.S. Government Printing Office, Washington, D.C. 20402, ATTN: Regulatory Guide Account.

*See Section 2.5 for the list of procedures requiring approval.

NRC FORM 335 U.S. NUCLEAR REGULATORY COMMISSION BIBLIOGRAPHIC DATA SHEET,		1. REPORT NUMBER <i>(Assigned by DDC)</i> NUREG-0698	
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AUTHOR(S) Ronnie Lo & Bernard J. Snyder		3. RECIPIENT'S ACCESSION NO.	
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6. ABSTRACT <i>(200 words or less)</i> This NRC plan defines the functional role of the NRC in cleanup operations at Three Mile Island Unit 2 to assure that agency regulatory responsibilities and objectives will be fulfilled. The plan outlines NRC functions in TMI-2 cleanup operations in the following areas: (1) the functional relationship of NRC to other government agencies, the public, and the licensee to coordinate activities, (2) the functional roles of these organizations in cleanup operations, (3) the NRC review and decision-making procedure for the licensee's proposed cleanup operation, (4) the NRC/licensee estimated schedule of major actions, and (5) NRC's functional role in overseeing implementation of approved licensee activities.		10. PROJECT/TASK/WORK UNIT NO.	
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