

**NOT MEASUREMENT  
SENSITIVE**

**DOE-STD-1082-94  
October 1994**

## **DOE STANDARD**

# **PREPARATION, REVIEW, AND APPROVAL OF IMPLEMENTATION PLANS FOR NUCLEAR SAFETY REQUIREMENTS**



**U.S. Department of Energy  
Washington, D.C. 20585**

**AREA SAFT**

**This document has been reproduced directly from the best available copy.**

**Available to DOE and DOE contractors from the Office of Scientific and Technical Information, P.O. Box 62, Oak Ridge, TN 37831; (615) 576-8401.**

**Available to the public from the U.S. Department of Commerce, Technology Administration, National Technical Information Service, Springfield, VA 22161; (703) 487-4650.**

**Order No. DE95001461**

## **DISCLAIMER**

**This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, make any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.**

## **DISCLAIMER**

**Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.**

FOREWORD

1. This Department of Energy (DOE) technical standard has been prepared by the Office of Environment, Safety and Health with the assistance of Steve Hosford of Phoenix Consultants and Hank George of Synergy Consultants. In addition, representatives of DOE program offices and field and operations offices, as well as DOE Management and Operating contractors, contributed substantially to the development of this standard.

2. Lessons learned in using this technical standard should be reflected in future revisions. Therefore, beneficial comments (recommendations, additions, and deletions) and any pertinent data that may improve this document should be sent for consideration to the Office of Nuclear Safety Policy and Standards (EH-60), U.S. Department of Energy, Washington, D.C. 20585, by letter or by using the self-addressed Standardization Document Improvement proposal (DOE F 1300.X) in Attachment 1.

3. Many DOE nuclear safety requirements documents (Rules, Orders, Notices, Immediate Action Directives, and Manuals) require the preparation of implementation plans for submittal to DOE for review and approval. The implementation plans detail the planned activities to meet DOE nuclear safety requirements. Upon approval by DOE, the implementation plans, together with any other plans or programs required by the DOE requirements documents become the basis for complying with the nuclear safety requirements. This standard provides an acceptable method for preparing, reviewing, and approving implementation plans for nuclear safety requirements. Nothing in this standard is intended to supersede any statement in a DOE requirements document.

4. This is a general standard for the preparation, review, and approval of implementation plans and contains only expectations common to all implementation plans. Consequently, supplementary standards may be provided which give more detailed expectations for implementation plans for specific requirements, such as the specific expectations for the preparation of

implementation plans to meet the requirements of DOE Order 5480.23 (Safety Analysis Reports). If conflicts arise, the organization responsible for implementing the DOE requirements document (hereinafter called the "implementing organization") shall contact the DOE Operations Office point-of-contact to facilitate resolution. In any case, adherence to the criteria in DOE requirements documents takes precedence over meeting technical standards.

5. DOE technical standards, such as this technical standard, do not establish requirements. However, all or part of the provisions in a technical standard can become requirements under the following circumstances:

- (1) they are explicitly stated to be requirements in a DOE requirements document; or
- (2) the organization makes a commitment to meet a standard in a contract or in a plan required by a DOE requirements document (such as in an implementation plan).

Throughout this standard, the words "should" and "shall" are used to clarify which actions need to be done to meet this standard. The word "shall" is used to denote actions which must be performed if this standard is to be met. The word "should" is used to indicate recommended practice. If the provisions in this technical standard are made requirements through one of the two ways discussed above, then the "shall" statements would become requirements, but the should statements would not.

6. The term "Operations Office" is used throughout this document. Where it is used, the term "Field Office" shall be substituted where appropriate.

7. In addition to the guidance provided in this technical standard, preparers of implementation plans shall also review the specific nuclear safety requirement documents for individual content and administrative requirements. If there are any conflicts between this technical standard and the DOE requirements documents, the provisions in the DOE requirements

documents apply. Where the provisions are complementary, the plans shall meet both the DOE requirements document and this technical standard.



## TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1. SCOPE . . . . .	1
1.1 Scope . . . . .	1
1.2 Applicability . . . . .	1
2. REFERENCES . . . . .	1
3. PREPARATION OF IMPLEMENTATION PLANS . . . . .	2
3.1 Implementation Plan Summary . . . . .	2
3.2 General Information . . . . .	3
3.3 Applicability of Nuclear Safety Requirements . . . . .	3
3.4 Safety and Implementation Guides and Technical Standards . . . . .	4
3.5 Baseline . . . . .	5
3.6 Additional Activities . . . . .	5
3.7 Graded Approach . . . . .	6
3.8 Resource Assessment . . . . .	8
3.9 Prioritization . . . . .	9
3.10 Milestones and Schedules . . . . .	10
3.11 Exemptions . . . . .	11
3.12 Compensatory Actions . . . . .	11
3.13 Tracking . . . . .	12
4. SUBMITTAL OF IMPLEMENTATION PLANS . . . . .	12
5. REVIEW AND APPROVAL OF IMPLEMENTATION PLANS . . . . .	13
5.1 Review and Approval Protocol . . . . .	13
5.1.1 Identification of Responsible Review Staff . . . . .	15
5.1.2 Review Planning . . . . .	16
5.1.3 Meetings, Conference Calls, and Status Reports . . . . .	17
5.1.4 Submittal and Distribution of Implementation Plans . . . . .	18
5.1.5 Review . . . . .	18
5.1.6 Approval . . . . .	19

5.2	Distribution of Copies of the Final Implementation Plan . . .	22
5.3	Review Responsibilities . . . . .	22
5.4	Approval Responsibilities . . . . .	23
5.5	Resolution of Issues . . . . .	24
6.	REVISIONS TO IMPLEMENTATION PLANS . . . . .	24
7.	EXTENSIONS TO THE SUBMITTAL SCHEDULE FOR IMPLEMENTATION PLANS . . . .	25
8.	IMPLEMENTATION TRACKING . . . . .	25
9.	COMPLETION OF IMPLEMENTATION PLANS . . . . .	26
10.	INCORPORATION BY REFERENCE . . . . .	26
11.	SUBJECT TERM (KEY WORD) LISTING . . . . .	27

## 1. SCOPE

1.1 Scope. This standard describes an acceptable method to prepare, review, and approve implementation plans for DOE nuclear safety requirements. DOE requirements are identified in DOE Rules, Orders, Notices, Immediate Action Directives, and Manuals (hereinafter referred to as DOE requirements documents).

1.2 Applicability. This standard is intended for use by all DOE organizations and their contractors when preparing, reviewing or approving implementation plans for DOE nuclear safety requirements.

Implementation plans are called by a variety of names in the DOE nuclear safety requirements documents. For example, in 10 CFR Part 835, they are met by the Radiation Protection Programs (RPPs); and in the proposed 10 CFR Part 834 they are met by Environmental Radiation Protection Programs (ERPPs). All of these plans and programs, as well as a number of other plans and programs identified in other DOE nuclear safety requirements documents, are considered to be implementation plans for DOE nuclear safety requirements. Consequently, the provisions of this technical standard apply to the preparation, review, and approval of those plans. The Operations Office point-of-contact should be contacted if clarification is needed on the applicability of this standard to specific plans and programs.

## 2. REFERENCES

DOE ORDER 5480.23, NUCLEAR SAFETY ANALYSIS REPORTS

10 CODE OF FEDERAL REGULATIONS (CFR) PART 820, PROCEDURAL RULES FOR DOE NUCLEAR ACTIVITIES.

10 CFR PART 830, NUCLEAR SAFETY MANAGEMENT

10 CFR PART 834, RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT

10 CFR PART 835, OCCUPATIONAL RADIATION PROTECTION

### 3. PREPARATION OF IMPLEMENTATION PLANS

The implementation plans detail how the site, facility, or activity has met or will meet the nuclear safety requirements.

The format for the implementation plan is not specified. This flexibility will permit the implementing organizations to take advantage of pre-existing documents. For example, when making the transition from nuclear safety Orders to nuclear safety Rules, the Department expects the implementing organizations to use the implementation plans developed and approved for the Orders as a basis for the Rule implementation plans. Typically, these plans should be revised or supplemented only as necessary to reflect any new requirements in the Rules or additional information requested in this standard or other DOE implementation guidance. The level of detail provided in implementation plans should be the same for Rules or Orders.

The following sections describe the minimum content expected in implementation plans. The headings in these sections may also be used to define the format for the plans.

3.1 Implementation Plan Summary. Each implementation plan shall contain a summary section in the front to allow DOE management and reviewers to quickly assess the more significant information contained in the plan. The summary shall identify the following minimum information:

- (1) any requests for exemptions contained in the plan;
- (2) the total additional funding required to meet the requirements of the plan and the expected sources of funding by fiscal year;
- (3) any significant new programs or activities needed to meet the requirements;
- (4) any significant impacts to other programs or activities not included in the plan;
- (5) any constraints to implementing the plan;
- (6) those areas where there is currently full compliance with the requirements.

3.2 General Information. The implementation plan shall include general information which: (1) identifies the subject DOE requirements document addressed in the plan; (2) identifies whether the plan is the initial submittal or a revision; (3) identifies the facilities or activities, missions, and contractors involved; and (4) briefly discusses the content and format of the plan.

3.3 Applicability of Nuclear Safety Requirements. DOE nuclear safety requirements documents state the types of facilities and activities to which they are applicable. The implementation plan shall identify the specific facilities or activities covered by the plan. Any determination by the implementing organization that a specific requirement is not applicable to the facilities or activities addressed in the plan shall be documented in the implementation plan to ensure that the determination is clearly communicated. DOE approval of the plan will constitute agreement with applicability statements contained therein.

Applicability statements shall not be used to provide relief where the requirements are clearly stated to be applicable in the DOE requirements document. Relief from requirements which are clearly applicable must be granted by an approved exemption as discussed in Section 3.11 of this technical standard.

The information provided in the plan shall clearly identify which of the following three categories applies to each requirement for a given facility, site, or activity:

- (1) the requirement is applicable and the implementation plan defines the actions and schedules for compliance;
- (2) the requirement is applicable and an exemption is being requested;  
or
- (3) the requirement is not applicable for the reasons documented in the implementation plan.

The plan shall also identify any requirements which are only partially applicable, the limits of the applicability, and the reasons for the limitation.

Individuals shall contact the appropriate Operations Office to assist with any needed clarification of applicability statements. The Operations Office shall contact the Office of Primary Interest (DOE Office responsible for issuing and maintaining the document in question) for any needed interpretations of Orders, Notices, Immediate Action Directives, Manuals, or guidance materials or the Office of General Counsel for interpretations of Rules.

3.4 Safety and Implementation Guides and Technical Standards. The implementation plan shall identify the safety and implementation guides (hereinafter referred to as guides) and technical standards which are to be adopted as the means to meet DOE requirements documents. The use of guides and technical standards is not required; however, it is encouraged for the following reasons:

- (1) the use of previously approved methodologies will streamline the review and approval process; and
- (2) the use of guides and technical standards will enhance the consistent and successful implementation of requirements across the DOE complex.

The implementing organization shall consider methods and guidance from guides and technical standards when developing the implementation plans; however, alternative methods that achieve comparable results are acceptable. When an implementing organization identifies an alternate way to implement the requirements, a reasonable opportunity will always be provided to demonstrate compliance with the requirements using the alternate method. Demonstration of compliance does not require the implementing organization to address the differences between the alternate method and the method in the guide or technical standard unless the comparison is necessary to demonstrate acceptability.

When guides or technical standards are used, the implementing organization shall indicate if they are adopted in their entirety or adopted with exceptions. The exceptions, if any, shall be specifically noted.

Methodologies and guidance provided in guides and standards are acceptable DOE methodologies when adopted in their entirety. Methodologies and guidance which are adopted with exceptions will be reviewed on a case-by-case basis.

The adopted guides and technical standards shall be listed either by (1) including a list of applicable guides and technical standards in the implementation plan, or (2) incorporating a list of guides and technical standards by reference.

Commitments in implementation plans to meet all or parts of guides and technical standards are enforceable as part of the implementation plan.

3.5 Baseline. The implementing organization shall determine the extent to which the requirements are already met. This effort is generally referred to as establishing the baseline. The implementation plan shall identify the requirements which are already met and the actions taken to meet them. These actions are the baseline activities. Because the baseline activities are part of the activities which define how the requirements are met, the baseline activities or programs are to be documented in the implementation plan and are subject to the same assessments and enforcement as other commitments in the implementation plan when the plan is approved by DOE.

Implementing organizations are encouraged to use existing documentation and information wherever possible and reliable for establishing the baseline.

3.6 Additional Activities. Following the baseline effort, the implementing organization shall identify what additional activities are necessary to meet the requirements. The combination of the baseline activities and the additional activities shall identify all actions necessary to achieve full compliance with the requirements. In general, the level of detail of the activities listed in the implementation plan should define the commitments for implementation and should not include the day-to-day

activities reflected in facility-specific procedures. However, the information provided shall be specific enough to allow clear interpretations of the intent of the commitment. Examples of the appropriate level of detail for additional activities are 1) "development and implementation of a recordkeeping program," and 2) "development and implementation of a revised lockout and tagout program."

The additional activities identified in the plan shall include not only the development of programs to meet the requirements, but also the actions necessary to implement those programs, such as procedure development and training. During the development of the additional activities list, the implementing organization is expected to consider adopting alternate implementation activities which may be more cost-efficient ways to meet the requirements.

3.7 Graded Approach. The complete set of activities necessary to meet the nuclear safety requirements, as well as the level of depth, rigor, and thoroughness in applying them to a given facility, are determined by applying a graded approach. The graded approach is defined in 10 CFR Part 830.3 as "a process by which the level of analysis, documentation, and actions necessary to comply with a requirement ... are commensurate with the following: (1) the relative importance to safety, safeguards, and security [risk]; (2) the magnitude of any hazard involved; (3) the life cycle stage of a facility; (4) the programmatic mission of a facility; (5) the particular characteristics of a facility; and, (6) any other relevant factor." The graded approach will permit the implementing organization to tailor the implementing activities for each facility or activity to appropriately address these considerations.

Consideration of the risks and hazards of the facility [items (1) and (2) in the definition] will allow the implementing organization to focus resources on those activities most likely to reduce the associated risks and hazards by tailoring the implementing actions to the specific risks and hazards at the individual facilities and activities.

The consideration of the life cycle stage of a facility [item (3) above], will permit the implementing organization to assess the best application for the current life cycle stage of the facility (e.g., a facility in the decommissioning phase would not require extensive documentation on the original design basis for the safety analysis report, but rather would need to focus on assessing information required for current and future decommissioning activities).

The programmatic mission of a facility [item (4) above] may suggest a need for more rigorous implementation of a requirement than would be necessary for safety considerations alone. DOE as the owner of the facilities has the responsibility to protect capital equipment and missions at its facilities. These programmatic responsibilities may result in stricter requirements than would be justified by safety risks or hazards alone. For example, a component such as a circulating pump may have a minimal safety function but could be critical to the continued operation of a facility. Consequently, both DOE and the implementing organization may agree that a more rigorous maintenance program should be applied than what would be required by the safety significance alone. Programmatic considerations cannot be used to reduce the rigor of implementation.

The particular characteristics of a facility [item (5) from the definition] will also influence how nuclear safety requirements are applied. This consideration overlaps the four considerations discussed above. For example, the training activities developed to meet nuclear safety requirements would be substantially different in a laboratory versus a production facility. The differences would be influenced by (1) the specific risks, (2) the specific hazards, (3) the life cycle stage of the facilities, and (4) the enhancements required to support the mission. In addition, the training activities would need to be tailored to the particular hardware and operations of the facilities.

There is no cookbook procedure for application of the graded approach to all of the nuclear safety requirements. When a DOE requirements document is developed, the Office of Primary Interest may include information in the

safety or implementation guide to help the implementing organization in grading. In general, however, the implementing organization is empowered, because of its detailed knowledge of the specific features and operation of their facilities and activities, to use its best judgement in the determination of the appropriate activities for full implementation of a requirement. The implementing organization shall propose the method for applying a graded approach to the particular facilities or activities in the proposed programs or plans submitted to DOE. When approved, those activities become the basis for assessment and enforcement.

Following the identification of the appropriate activities to meet the requirements, the implementing organization may determine that on the basis of limited resources or other considerations that it is not in DOE's best interest to implement the requirement. In such cases, the implementing organization shall request an exemption (see Section 3.11 of this technical standard). It is important to not confuse the graded approach with the exemption process. The graded approach is to be used to determine the appropriate manner to comply with a requirement; it is not to be used to provide relief from meeting the requirement. Exemptions are used to provide relief.

The implementation plan shall document the basis for selecting the action pursuant to the graded approach whenever a graded approach is used.

**3.8 Resource Assessment.** The implementation plan shall provide an estimate of the additional life cycle costs to implement the nuclear safety requirements. The goals of this element of the implementation plan are as follows: (1) to communicate the expected new costs of implementation to DOE management for the purposes of budget planning and prioritization; (2) to identify the need to explore more cost effective means of achieving compliance; and (3) to identify cases where exemptions should be requested on the basis of insufficient benefit versus the expected implementation costs. Identification of required resources should also serve to open a dialogue between DOE and the implementing organization on adjusting costs and activities to the available resources.

When performing the assessments, the estimator shall consider monetary costs, as well as non-monetary resource considerations such as the limited availability of special job capabilities (e.g., pipe fitters, welders, health physicists). The assessment shall (1) be guided by available quantitative and qualitative information; (2) reflect the current status of plant conditions, configurations, and processes; (3) consider the availability of materials and resources; and (4) consider any other information that is relevant to the nuclear safety requirements.

Organizations shall seek to achieve the broadest consistency in the methods used to evaluate the resource requirements so that the assumptions, evaluations, and results of the assessment can be objectively compared with the equivalent parameters of other resource assessments. This will assist DOE and contractor management to determine priorities for the use of funding. All assumptions and estimates shall be made using the best available knowledge and information.

The implementing organization shall identify the expected sources of funding for the proposed new activities.

After evaluating the resource impacts, the implementing organization shall consider if a more cost-effective means of achieving the intent of the requirement is available. As a minimum, the use of more cost-effective methods of compliance, or exemptions (see section 3.11 of this standard), shall be considered whenever the resource expenditures necessary to meet a requirement are not commensurate with the expected safety improvements.

The implementing organization shall limit the effort used to develop the resource assessments to only that level of detail necessary to achieve the goals of the assessment as stated above.

3.9 Prioritization. The implementation plan shall include a discussion of the prioritization process used to integrate the proposed activities into a facility or site schedule of activities. The prioritization process is to be

used to develop the proposed schedules and shall be sufficiently flexible to accommodate changes at later dates.

The prioritization process shall consider available information from safety analyses and other sources and give primary attention to controlling and reducing risks to the public, the environment, and the workers to an acceptable level. It should also consider other factors such as mission needs, outage schedules, and external regulations.

The prioritization process should be selected in consultation with the applicable DOE Operations Office and Program Offices to ensure that the prioritization of efforts meets DOE expectations. In order to tie budgets to schedules, priorities should be determined in accordance with the DOE Environment, Safety, and Health (ES&H) Management Plan wherever budgets are determined on the basis of that plan. For other facilities, the use of the ES&H Management Plan process or a compatible process is encouraged in determining the priorities.

3.10 Milestones and Schedules. The implementation plan shall identify proposed milestones with achievable schedules developed in accordance with the additional activities and the prioritization process identified in the plan (see Sections 3.6 and 3.9 above). In developing the schedules, the implementing organization shall consider the resources available to support the work, as well as any major work reductions or schedule changes in other areas that will be required in order to meet the proposed schedules. The implementation plan shall identify major impacts to activities or commitments outside the scope of the plan which will be caused by the proposed additional activities.

Schedules shall be developed using the best information available with any assumptions on availability of resources (monetary or non-monetary) clearly stated. The milestones and schedules will be enforceable commitments upon approval of the plan. Schedule commitments must be firm commitments and consequently, shall not be listed as contingent on funding. Thus, it is essential that line program representatives participate in the review and

approval of implementation plans which involve additional funding needs. Following approval of the implementation plans, DOE has a responsibility to provide appropriate funding to support approved activities and schedules. If funding is subsequently unavailable when needed to support the implementation plan schedules, the implementation plans should be revised to reflect the new schedules supported by funding (provided any schedules specifically prescribed in the DOE requirements documents are met or schedule exemptions are approved). Such revisions shall be submitted to DOE for review and approval.

Alternatively, implementing organizations may consider requesting an exemption for unfunded activities, if the criteria for granting an exemption are met (see Section 3.11 of this technical standard).

3.11 Exemptions. Exemptions are to be requested whenever relief is sought from an applicable DOE requirement. The implementation plan shall clearly identify any exemptions that have been approved or are being requested from the subject requirements. Implementing organizations may submit requests for exemptions as part of the implementation plan provided that they relate to the same requirements. Requests for exemption that are submitted as part of the implementation plan shall be identified in the implementation plan summary for early recognition. Early identification of exemption requests is important because they may need to follow a separate review and approval process.

The provisions for requesting and granting exemptions to rules are stated in 10 CFR Part 820, Subpart E, "Exemption-Relief." All exemptions to rules must be approved by the Secretarial Officer designated in 10 CFR Part 820, Subpart E notwithstanding the level of approval delegated for the implementation plan. The provisions for granting exemptions to Orders, Notices, Immediate Action Directives and Manuals are specified in the directives documents.

3.12 Compensatory Actions. The implementation plan shall include a description of any compensatory actions that will be adopted prior to full implementation of the requirements. Compensatory actions are temporary

actions taken to provide adequate protection of individuals and the environment prior to full implementation of the actions necessary to meet the requirements.

3.13 Tracking. The implementation plan documents the implementing organization's commitments with regard to meeting the nuclear safety requirements. The plan will be used to measure progress in achieving compliance with the requirements, as well as maintaining continuing compliance. Therefore, the implementing organization shall have a commitment tracking program to ensure that both the baseline and additional activities described in the implementation plan are met on schedule and continue to be met following the initial implementation. The implementation plan shall contain a brief description of the implementing organization's commitment tracking program.

#### 4. SUBMITTAL OF IMPLEMENTATION PLANS

The implementing organization shall submit implementation plans to the designated DOE Operations Office point-of-contact within the schedule specified in the DOE requirements document. The Operations Office point-of-contact shall time and date stamp the receipt of the implementation plan.

The implementing organization shall contact the Operations Office point-of-contact in advance of the submittal date to determine the number of copies to be submitted. Documents which are incorporated by reference shall be submitted with the implementation plan unless other arrangements are made with the Operations Office point-of-contact. In addition, if the implementation plan is not a stand-alone document (able to be reviewed independent of other documents), the implementing organization shall contact the Operations Office point-of-contact prior to submittal of the implementation plan to discuss which supporting documents are to be transmitted with the implementation plan or made available for onsite review.

Also see section 5.2 below for software submittal requirements for final plans.

## 5. REVIEW AND APPROVAL OF IMPLEMENTATION PLANS

5.1 Review and Approval Protocol. The Department's protocol for review and approval of implementation plans is described below. The protocol defines the roles, interfaces, and responsibilities of Department organizations with respect to review and approval of implementation plans for nuclear safety requirements. This protocol is consistent with the "Conceptual Framework for Implementation Plan Review Teams" endorsed by the Office of Energy Research, the Office of Nuclear Energy, the Office of Defense Programs, the Office of Environmental Management, and the Office of Associate Deputy Secretary for Field Management in a memorandum dated September 9, 1994. This protocol is consistent with and supersedes the Draft Review and Approval Protocol composed by the Rule Implementation Steering Group and referenced in Step 6 of the September 9 Conceptual Framework.

Implementing organizations who will prepare the implementation plans and the DOE organizations responsible for review and approval of the plans must have a shared vision of what should be in the completed plans before submission of the plan to DOE. In order to ensure this shared vision and the development of successful implementation plans, early and continual dialogue between the implementing organization and the Review Team is essential. This dialogue should begin well before the implementation plan is submitted to DOE. The process described below was built on the lessons learned in similar efforts and was designed to facilitate that dialogue.

Because review and approval of the plans will often involve multiple Departmental organizations, the review and approval process must provide for coordination, consistency of review, and resolution of issues among those offices. In addition, the review and approval process must address both the technical adequacy of the proposed implementation plans and the programmatic responsibilities (i.e., funding and mission). These responsibilities will require additional coordination within the Department as they may reside in different organizations.

The review and approval process must be sufficiently flexible to accommodate a wide variety of subjects addressed by the DOE requirements documents and yet be adequately structured to permit efficient completion of the review and approval within the schedule specified in the DOE requirements document (typically 90 or 180 days).

In the review and approval process, the Operations Office is responsible for coordination between the implementing organization and the Department's Headquarters staff. This focused interface will ensure consistency in the information provided to the implementing organization and allow the implementing organization to interact with a single point-of-contact.

The Department's Rule Implementation Steering Group (RISG) will provide oversight for the process and ensure consistency in the review and approval efforts across all nuclear safety rule requirements. The RISG will resolve issues which are generic to the rule implementation plan process.

For each DOE requirements document (or group of DOE requirements documents, if appropriate) an Implementation Working Group will be formed to provide oversight and coordination of implementation plan reviews for the specific DOE requirements document to ensure consistency across the Department. The Working Group may also recommend to the CSOs that approval authority be delegated to the Operations Offices for specific implementation plans or groups of implementation plans. The Working Group memberships will include one representative from each Cognizant Secretarial Office (CSO) and each affected Operations Office with contractors or organizations subject to the DOE requirements document (hereinafter referred to as affected CSOs or affected Operations Offices). The Working Groups shall ensure that an Implementation Plan Guide (technical and program guidance) is established to do the following: (1) ensure consistent implementation plans across the DOE complex; (2) facilitate identification of specific reviewers and schedule development; and (3) review implementation status through the entire review and approval process. The Working Group will also maintain a core set of subject matter experts to address generic questions that require consistent

solutions for all implementation plans. The Working Groups are responsible for coordinating CSO approvals.

An Implementation Plan Review Team is formed for each implementation plan to conduct the review of the plan. The Review Team members will include Headquarters and Field Operations personnel with technical expertise and coordinating responsibility for program decisions (e.g., funding, schedule). Operations Office personnel will serve as points-of-contact and Review Team Leaders for implementation plan reviews applicable to their sites. Individual participation in Review Team activities will vary in level of effort and time frame based on review and approval needs.

The Operations Office point-of-contact plays a key role in coordinating all implementation plan review and approval activities between Headquarters and the implementing organization.

The process to be followed for the development, review, and approval of implementation plans is discussed below. Two typical schedules for these activities are included in Attachment 2. These schedules are for 90-day and 180-day implementation plan review requirements.

#### 5.1.1 Identification of Responsible Review Staff.

5.1.1.1 Implementation Working Groups. The Working Groups shall ensure consistency in the review process across the DOE complex, monitor review progress, and resolve any issues related to the review and approval process. The Working Group leader shall be designated by the RISG for plans developed to meet the nuclear safety rules. For plans developed to meet other nuclear safety requirements, the Working Group leaders shall be determined by the CSOs or their designees. The Working Groups shall provide assistance to the Review Team Leaders to ensure that each team has adequate programmatic and technical capabilities. The Working Group shall also prepare an Implementation Plan Guide as discussed in 5.1.2.1 below.

5.1.1.2 Points-of-Contact. Each Operations Office Manager shall identify a point-of-contact for each DOE requirements document to the RISG. The Operations Office point-of-contact shall be the primary interface with the implementing organization for all activities associated with the development, submittal, review, and approval of the implementation plans. The Operations Office point-of-contact shall also be the Review Team Leader. Any exception to the point-of-contact as the Review Team Leader shall be approved by the Working Group. The Review Team Leader shall coordinate assignment of Review Team members with the CSOs and the Operations Office through the Working Group. The Operations Office Manager may also designate an office coordinator for nuclear safety requirements activities.

5.1.1.3 Implementation Plan Review Teams. As discussed in the previous paragraph, the Operations Office point-of-contact shall normally be the Review Team Leader. The Operations Office Manager may provide additional team members and technical assistance as necessary and agreed by the Working Group. In addition, each affected CSO shall identify the Program Office representatives for each Review Team to the Review Team Leaders through the Working Group. The CSO may assign multiple reviewers to a single site or a single reviewer.

## 5.1.2 Review Planning.

5.1.2.1 Implementation Plan Guide. For each requirements document or group of DOE requirements documents, the Working Group shall prepare an Implementation Plan Guide which defines DOE's specific technical and programmatic expectations for the implementation plans. The guide shall include the following types of information: (1) criteria and/or checklists of items to be considered during the review, (2) approaches to key issues, (3) direction on use of existing plans and approvals, (4) review and approval authorities, and (5) specific issues relating to Headquarters or Operations Office review responsibilities. The guide shall be as brief as possible, shall be user friendly, and shall not repeat general guidance available in other guidance documents such as this technical standard. The Working Group

members shall provide assistance and/or training to the Review Teams on the use of the guide.

o

5.1.2.2 Implementation Action Plan. For each implementation plan, the Review Team Group shall prepare an Implementation Action Plan that defines the Review Team activities, priorities, and schedule. A copy of the plan shall be provided to the implementing organizations for information.

5.1.2.3 Responsibility and Interface Matrix. The Working Group shall prepare and maintain a matrix that identifies the Review Team Leader, Review Team members, and DOE programmatic and technical contacts for each implementation plan.

### 5.1.3 Meetings, Conference Calls, and Status Reports.

5.1.3.1 Initial Site Meeting. The Review Team and a member of the Working Group shall meet with the implementing organization at the earliest feasible date to discuss the basic expectations for implementation of the DOE requirements document and to discuss any issues which might impact the timely and acceptable completion of the implementation plan. Issues to be discussed should include: (1) how to best use existing plans or other information in developing the implementation plan; (2) potential exemptions; (3) baseline activity expectations; (4) plans and schedules for ongoing interactions; and (5) funding sources for new activities identified as necessary to come into compliance. The Operations Office point-of-contact has primary responsibility for planning and coordinating this meeting.

5.1.3.2 Status Meetings. Periodic status meetings shall be held with the implementing organization to fully discuss all elements of the proposed implementation plans that could affect the acceptability of the plans.

5.1.3.3 Periodic Conference Calls. The Operations Office point-of-contact shall coordinate regular conference calls with the implementing organization and the Program Offices to address and resolve issues as they arise. As necessary, site or headquarters meetings shall be held to resolve

difficult issues. The Operations Office point-of-contact has primary responsibility for coordinating phone conferences, as well as necessary meetings to resolve issues.

5.1.3.4 Implementation Status Reports. The Review Teams shall provide brief monthly status reports to the appropriate Working Groups and to the RISG identifying the status of the review, any significant issues or constraints, and any planned resolutions.

5.1.4 Submittal and Distribution of Implementation Plans. As discussed in Section 4 of this technical standard, implementing organizations shall submit implementation plans directly to the Operation Office point-of-contact. The Operations Office point-of-contact shall transmit a copy of the implementation plan to the Review Team members and a copy of the transmittal memorandum to the affected CSOs within four working days of the receipt of the plan. The transmittal memorandum shall identify the required date for completing the review.

#### 5.1.5 Review.

5.1.5.1 Implementation Plans Reviewed by Review Teams. Implementation plans shall be reviewed by an integrated Review Team with Program and Operations Office representatives as discussed in Section 5.1.2.1 above. Program Office team members and their contacts shall, as a minimum, participate in the review of issues involving funding, missions, schedules, priorities, and exemptions. The Review Team Leader shall facilitate resolution of unique or difficult issues not addressed in the Implementation Plan Guide.

Review Team members shall assist the implementing organization in clearly understanding what actions or changes are necessary to result in an acceptable implementation plan. DOE comments and feedback shall be routed through the Review Team Leader to ensure consistent feedback. The Review Team Leader shall also be responsible for resolving conflicts prior to communication with the implementing organization.

All reviewers shall expedite their reviews to allow closure on an acceptable implementation plan as early as possible.

5.1.5.2 Delegated Approval Authority for Implementation Plans. The CSO may delegate the authority to approve specific implementation plans. Any such delegation shall be provided in writing to the designee.

The Operations Office point-of-contact is responsible for identifying to the affected CSOs any implementation plans which are based upon previously approved implementation plans and do not involve (1) additional funding commitments, (2) commitment schedule changes, (3) new programmatic impacts, or (4) exemptions from the requirements. These implementation plans will typically be new plans for nuclear safety rules which were preceded by DOE Orders on the same subject or revisions to previously approved plans. Typically, the review and approval authority for these plans will be delegated to the Operations Office by the CSO.

Wherever the authority to approve an implementation plan has been delegated to the Operations Office by all of the affected CSOs, the Operations Office may choose to have the Review Team consist entirely of Operations Office personnel provided any technical and programmatic requirements can be handled by the designated team.

The authority to approve exemptions to rules cannot be delegated.

#### 5.1.6 Approval.

5.1.6.1 Approval Recommendations by the Review Team. The Review Team Leader is responsible for ensuring that the Operation's Office Manager receives the Review Team's final recommendation for approval no less than five weeks prior to the approval date specified in the DOE requirements document. That recommendation shall either endorse acceptance of the implementation plan as submitted (or changed through negotiations during the review process) or, if issues cannot be resolved with the implementing organization, provide

recommendations regarding specific additional commitments or changes to be incorporated in the plan.

5.1.6.2 Operations Office Review of the Review Team Recommendations.

The Operations Office Manager shall review the recommendation of the Review Team and either endorse the recommendation or provide specific recommendations for an acceptable plan. The Operations Office Manager is responsible for ensuring that the Working Group receives the recommendations of the Review Team along with any recommendations from the Operations Office no later than three weeks before the approval date stated in the DOE requirements document (with information copy to the affected CSOs).

In some cases involving multiple CSOs, approval authority may be delegated by one or more CSOs, but not all CSOs. In such cases, the Operations Office Manager shall indicate approval of the implementation plan when it is transmitted to the Working Group. The Working Group shall coordinate the remaining approvals with the CSOs and return those approvals to the Operations Office Manager.

For cases in which the approval authority has been delegated by all affected CSOs to the Operations Office Manager, the Operations Office Manager should skip to step 5.1.6.4 Approval Letter, below.

5.1.6.3 CSO Approval Memorandum. Each affected CSO shall indicate approval of the implementation plan in a memorandum to the Operations Office. The Working Group is responsible for drafting the approval memorandum, obtaining CSO approvals, and forwarding such approvals to the Operations Office Manager. The Working Group shall ensure that the Operations Office Manager receives the approval memorandum no later than one week before the approval date in the DOE requirements document.

5.1.6.4 Approval Letter. The Operations Office Manager shall transmit the approval memorandum by letter to the implementing organization no later than the approval date specified in the DOE requirements document.

5.1.6.5 Imposition of Implementation Plans. The Review Team will endeavor to resolve any issues identified during the review process with the implementing organization. If conflicts exist which cannot be resolved with the implementing organization, the Department will exercise its authority to modify proposed implementation plans to include those action and schedules that the Department finds appropriate for achieving full compliance in a reasonable and timely manner. In such cases, the CSO approval memorandum shall be replaced by a memorandum imposing a revised plan. The revised plan shall be transmitted to the implementing organization by the Operations Office Manager. These plans may be renegotiated at a later date, but until they are replaced by another approved plan, they will be the enforceable basis for implementation of the DOE requirements document.

5.1.6.6 Implementation Plans which are not Approved by Final Date. Implementation plans which are not reviewed and approved within the approval period specified in the DOE requirements document shall be considered to be approved unless another implementation plan is imposed by the Department. These plans may be renegotiated at a later date, but until they are replaced by another approved plan, they will be the enforceable basis for implementation of the rule.

5.1.6.7 Approval of Plans Containing Exemption Requests. Implementation plans may contain requests for exemptions. When they do, the requests may be granted in the approval memorandum for the implementation plan, provided that all of the requirements for processing exemptions are met. For rules the approval shall be granted by the appropriate DOE Secretarial Officer as stated in 10 CFR Part 820, Subpart E and the approval document shall state how the provisions of 10 CFR Part 820, Subpart E are met. Alternatively, exemptions may be approved separately and referenced in the implementation plan approval letter.

Upon submittal of the plans, the Review Team Leader shall determine if any exemption requests submitted in the plans need to be reviewed and approved separate from the implementation plans. Where separate review and approval is necessary, the Review Team Leader shall alert the CSO Review Team

representatives to initiate a separate and expeditious review of the exemption requests.

Typically, DOE nuclear safety requirements state that implementation plans are considered approved 180 (or 90 days) days after submittal, unless they are approved or rejected by DOE at an earlier date. This does not apply to exemptions. Approval of implementation plans containing requests for exemption are conditional pending approval of the exemption request. If the exemption requests are subsequently disapproved, the implementing organization shall amend the implementation plan and submit the revised plan for approval within the time period specified in the letter transmitting the disapproval determination. If no time period is specified, the implementing organization shall revise and submit the implementation plan for approval within 90 days of receipt of the rejection of the exemption request.

Conditional approval of an implementation plan does not constitute or imply approval of the exemptions contained therein.

5.2 Distribution of Copies of the Final Implementation Plan. The Operations Office Manager is responsible for distributing approved plans to the implementing organization (if changed from the originally submittal plan), the Office of the Docketing Clerk (in the Office of Enforcement) in the Office of Environment, Safety, and Health and to the affected CSOs. Copies of approved plans transmitted to the Office of Docketing Clerk shall include both a hard cover copy and a software copy. The software copy shall be in IBM compatible Wordperfect version 5.1 or above or in an ASCII file. As required by 10 CFR Part 820, the Office of the Docketing Clerk will maintain a file of enforceable actions based upon rule violations and noncompliance with implementation plans.

5.3 Review Responsibilities. The Review Team shall determine if the implementation plan provides an acceptable method to meet the requirements in accordance with the direction provided by the Working Group in the Implementation Plan Guide. The Review Team shall also determine if the plan adequately addresses the elements discussed in Section 3 of this technical

standard (Preparation of Implementation Plans). DOE has provided safety and implementation guides which define acceptable methods for meeting the requirements. These guides are not mandatory. The implementing organization is encouraged to use these methodologies where they are reasonable and economical; however, the implementing organization may elect to propose an alternate way to meet the requirements. In cases where an alternate method is proposed, the Review Team shall evaluate the proposed method to ensure that it will be adequate to meet the requirements and provide a comparable level of safety.

The Review Team shall verify that the implementation plan provides sufficient detail to permit DOE to measure the progress towards meeting the DOE requirements.

The Review Team shall also ensure that (1) the projected budget and schedule information contained in the implementation plan is reasonable and consistent with funding projections, (2) the prioritization of efforts meets DOE expectations, (3) the proposed milestones and schedules will meet DOE needs, (4) the applicability of the requirements is correctly identified, and (5) the compensatory actions are acceptable.

The Review Team should expect to see significant variations in the level of detail and size of individual implementation plans because of the diversity of types, sizes, and missions of DOE facilities. In order to facilitate timely reviews and agreement on complex implementation plans, the members of the Review Team should visit the site and/or facility and have frequent communication with the implementing organization during both the preparation and the review of the implementation plan.

5.4 Approval Responsibilities. DOE approval of the implementation plan constitutes acceptance by the CSO that

- (1) the proposed activities represent an acceptable method to meet the requirements;

- (2) the resources identified in the plan are necessary and sufficient to ensure completion of the activities contained in the plan and are expected to be available to support the proposed schedules;
- (3) the proposed milestones and schedules are acceptable;
- (4) the applicability of the requirements is correctly identified; and
- (5) the identified compensatory actions are acceptable.

5.5 Resolution of Issues. Review and approval issues related to a specific DOE requirements document shall be brought to the Working Group for resolution. Issues relating to the implementation plan process as a whole, shall be brought to the RISG for resolution.

## 6. REVISIONS TO IMPLEMENTATION PLANS

The implementation plans are living documents which will need to be revised and updated during the life cycle of the site, facility, or activity. Approved implementation plans shall be revised as needed to reflect the addition or deletion of other work at a facility or other factors that affect the ability to meet the approved schedule, such as prospective changes in the level of funding or assumptions regarding the availability of materials and other resources. Several DOE nuclear safety requirements documents contain conditions under which implementation plans may be revised without prior approval from DOE. In such cases the implementing organization shall submit the revised implementation plan to DOE within 30 days of the effective date of the plan (unless another schedule is specified in the DOE requirements document). All other changes to implementation plans shall be reviewed and approved by DOE prior to the effective date of the change (this does not apply to editorial changes which do not materially change the plan or revisions required to reflect organizational changes). Revised implementation plans shall be submitted in a timely manner for DOE approval (generally at least 180 days before the change is to be effective), along with justification for the revision. Proposed revisions will be considered to be approved 180 days after submittal to DOE, unless they are approved or rejected by DOE on an earlier date or other provisions are stated in the DOE requirements document.

The changes to the implementation plan shall be clearly indicated (e.g., sidebars) to facilitate timely review. Revised plans are to be submitted to DOE in the manner described in section 4 above and reviewed and approved in the manner described in section 5 above.

Any changes to implementation plans which will result in a requirement not being met require an approved exemption.

## **7. EXTENSIONS TO THE SUBMITTAL SCHEDULE FOR IMPLEMENTATION PLANS**

An implementing organization may request an extension to the time allowed to prepare and submit an implementation plan through the Operations Office point-of-contact. The Operations Office point-of-contact will coordinate the approval or rejection of an extension request with the appropriate CSOs. Requests for extension shall be submitted within sufficient time for DOE to review and approve the extension before the original due date. Extensions will be granted only for good cause, such as the complexity of the plan or the impact of multiple plans on an implementing organization's resources. Such requests should be drafted as narrowly as possible to permit timely compliance with as many nuclear safety requirements as possible.

An exemption is required to extend any schedule mandated in the DOE requirements documents unless specific provisions for schedular relief are provided.

## **8. IMPLEMENTATION TRACKING**

Following approval of the plan and during the implementation process, the DOE Operations Office shall oversee the contractor's progress in meeting the commitments in the implementation plan (for example, schedules, milestones, and costs) and maintain a dialogue on any problems that arise.

## 9. COMPLETION OF IMPLEMENTATION PLANS

Following completion of the commitments in the implementation plan, the implementing organization shall retain a copy of the implementation plan, as a record of implementation plan commitments. The implementing organization shall also retain records which document the completed actions. The records shall be maintained for the period of time that the facility or activity is subject to the DOE requirements document.

The implementation plans will contain commitments to perform ongoing activities, such as periodic surveillances to ensure ongoing compliance. By their nature, some ongoing activities will not be terminated within the lifetime of the facility. Consequently, the implementation plans will be considered complete when all of the one time efforts are complete and the continuing efforts are incorporated into plant procedures or programs which are being implemented.

## 10. INCORPORATION BY REFERENCE

The implementing organization may choose to incorporate information into the implementation plan by referencing all or selected portions of other documents. In such cases, the portions of the referenced document which are incorporated into the implementation plan are also subject to the provisions of this standard.

Because referencing is an editorial tool, not all documents that are referenced in an implementation plan will be "incorporated by reference." Consequently, the implementing organization shall clearly indicate which documents (or portions of documents) are part of the implementation plan commitments. The implementing organization shall maintain a file of all documents incorporated by reference and shall make these documents available to DOE upon their request. See also section 4 above for submittal criteria.

## 11. SUBJECT TERM (KEY WORD) LISTING

The following list of subject terms (key words) is provided so that this document may be found during retrieval searches.

applicability  
baseline  
compensatory actions  
cost  
exemption  
funding  
graded approach  
guide  
immediate action directive  
implementation  
implementation plan  
milestone  
manual  
notice  
nuclear safety requirement  
order  
prioritization  
resource assessment  
rule  
schedule  
technical standard  
tracking

**CONCLUDING MATERIAL**

**Review Activities:**

DOE HQ

DP  
EH  
EM  
ER  
FE  
HR  
NE  
NN  
PO  
PR  
RW

FIELD OFFICES

AL  
CH  
ETEC  
FERNALD  
ID  
NV  
Oakland  
OR  
RL  
RF  
SR

Power Authorities

BPA  
WAPA

AREA OFFICES

Amarillo  
Brookhaven  
Dayton  
Golden  
Kansas City

LABORATORIES

ANL  
BNL  
INEL  
LANL  
LBL  
LLNL  
METC  
PNL  
PPNL  
Sandia  
SSCL  
SLAC

**Preparing Activity:**

DOE EH-62

**Project Number:**

SAFT 0017

**U.S. DEPARTMENT OF ENERGY**  
**DOCUMENT IMPROVEMENT PROPOSAL**  
(Instructions on Reverse)

1. Document Number		2. Document Title	
3a. Name of Submitting Organization		4. Type of Organization (Mark one)	
3b. Address (Street, City, Zip Code)		<input type="checkbox"/> Vendor <input type="checkbox"/> User <input type="checkbox"/> Manufacturer <input type="checkbox"/> Other (Specify: _____ )	

5. Problem Areas (Attach extra sheets as needed.)

a. Paragraph Number and Wording

b. Recommended Wording

c. Reason/Rationale for Recommendation

6. Remarks

7a. Name of Submitter (Last, First, MI)	7b. Work Telephone Number (Include Area Code)
7c. Mailing Address (Street, City, State, Zip Code)	8. Date of Submission

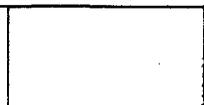
**INSTRUCTIONS:** In a continuing effort to improve the U.S. Department of Energy (DOE) Technical Standards, this form is provided for use in submitting comments and suggestions for improvements. All users of DOE Technical Standards are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (DO NOT STAPLE) mailed to the address indicated or faxed to (615) 574-0382.

1. The submitter of this form must complete blocks 1 through 8.
2. The Technical Standards Program Office (TSPO) will forward this form to the Preparing Activity. The Preparing Activity will reply to the submitter within 30 calendar days of receipt from the TSPO.

**NOTE:** This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contractors. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

#### **OMB Burden Disclosure Statement**

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, Records Management Division, HR-422 - GTN, Paperwork Reduction Project (1910-0900), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0900), Washington, DC 20503.



U.S. Department of Energy Technical Standards Program Office  
c/o Performance Assurance Project Office  
P.O. Box 2009, Bldg. 9201-3  
Oak Ridge, Tennessee 37831-8065

## TYPICAL SCHEDULE FOR IMPLEMENTATION PLANS

DEVELOPMENT

Requirements document issued by DOE	- 30 days
Requirements document effective (typical)	0 days
Review Team established	15 days
Review Guide issued	30 days
Initial site visit	60 days
Conference call	90 days
In process status meeting	120 days
Conference call	150 days
Submittal of plan	180 days

REVIEW AND APPROVAL90 Day

Submittal of plan to Operations Office (Ops Office)	0 days
Ops Office sends plan to Review Team/CSOs	4 days
Review Team recommendation to Ops Office Manager	55 days
Ops Office Manager sends recommendation to Working Group	69 days
Working Group returns CSO approval to Ops Office	83 days
Ops Office Manager issues to implementing organization	90 days

180 Day

Submittal of plan to Ops Office	0 days
Ops Office sends plan to Review Team/CSOs	4 days
Review Team recommendation to Ops Office Manager	145 days
Ops Office Manager sends recommendation to Working Group	159 days
Working Group returns CSO approval to Ops Office	173 days
Ops Office Manager issues to implementing organization	180 days