



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

MAY 21 1985

U.S. Bureau of Mines  
ATTN: Charles L. Dozois, Chief  
Division of Procurement  
2401 E Street, N.W.  
Washington, D.C. 20241

Dear Mr. Dozois:

Subject: Interagency Agreement No. NRC-02-85-004 for "Technical Assistance in Natural Resource Assessment"

Pursuant to the Economy Act of 1932, as amended, the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Bureau of Mines (BOM) desire to enter into an agreement whereby the BOM will assist the NRC by providing services on a task order basis as detailed below.

Accordingly, the terms and conditions of the subject interagency agreement are as follows:

Article I - Scope of Work

A. Background

The regulation for disposal of high level wastes in geologic repositories, 10 CFR 60, Section 60.122, requires identification and evaluation of the natural resources of the geologic setting including estimates of undiscovered deposits. The evaluation should include natural resources with and without current markets and should be described by physical factors such as tonnage or other amount, grade and quality. In addition, evidence of former mining or drilling activities must be identified.

This agreement will assist NRC staff in assessments of high level sites by providing specialized expertise in natural resources identification and evaluation.

B. Work Required

The BOM shall evaluate information on natural resources in terms of the requirements stated in 10 CFR 60, Part 60.21, and 60.122. The term "natural resources" includes all types of resources including oil and gas, metallic and non-metallic minerals. The evaluation shall be performed through reviews of relevant reports including

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but not limited to Environmental Assessments, Environmental Impact Statements, and Site Characterization Plans. Assessment of natural resource evaluation methodologies is part of each document review. Also, site visits may be necessary. The work does not include evaluating the consequences of natural resource recovery activities with respect to numerical performance standards for radioactive release rates from a repository.

The BOM shall not enter into any subcontract arrangements with respect to the effort to be performed for the NRC without obtaining the prior written approval of the NRC Contracting Officer (CO).

Task 1 - Review of the U.S. Department of Energy (DOE) Site Characterization Program Related to Natural Resources Assessment

The scope of Task 1 will include:

- 1) An evaluation of the existing natural resource data base, as provided in DOE documents, relevant documents prepared by other Federal, State, and tribal groups, and those developed by private organizations, for selected high level waste sites. Currently included are the Basalt Waste Isolation Project (BWIP), the Nevada Nuclear Waste Storage Investigations (NNWSI), up to about seven salt sites, three possible regions for crystalline rock (North Central, North East, and South East U.S.) and shaley rock. These may change due to the addition or deletion of sites.

Crystalline and shaley rock sites are not expected to be reviewed before late FY85.

- 2) Identification and evaluation of issues and information needs related to natural resources assessments.
- 3) Evaluation of assessment methodologies, including recommendations for information needs and natural resource evaluation methodologies.
- 4) Identification of mineral leases and claims and past and present prospects, mines, quarries, and wells near or on selected high level waste disposal sites.
- 5) Estimations of future resources values based on presently accepted methods for estimating foreseeable future natural resource values.

Subtask 1.1 - Environmental Assessment Review and Preparatory SCP Review

Under Subtask 1.1, the BOM shall prepare to, and review applicable sections of Environmental Assessments, Environmental Impact Statements and Site Characterization Plans (SCP's) related to natural resources. Reviews shall be

conducted in accordance with the criteria in 60.21 and 60.122. Preparation may involve reviewing certain documents or relevant parts on an as needed basis, and site visits. Written reports and meeting summaries shall be required following each site visit and workshop. Work at the written direction of the NRC CO.

#### Subtask 1.2 - Review of High-Level Waste Site Characterization Plans

The BOM shall review designated sections of high level waste Site Characterization Plans and Site Characterization Plan updates. The reviews shall only be done on an as needed basis. Reviews shall be conducted in accordance with the criteria in 60.21 and 60.122. Among the possible sites for which reviews may be needed are BWIP, NNWSI, up to about four salt sites, three possible regions for crystalline rock (North Central U.S., North East U.S., and South East U.S.) and shaley rock. The work for crystalline and shaley rock is not expected to begin until late FY85. The BOM organization shall report on the results of the SCP reviews or updates in a letter report consisting of detailed comments. Work under this subtask shall commence at the written direction of the NRC CO.

#### Subtask 1.3 - Review of Public Comments

Under Subtask 1.3, the BOM shall review public comments on Environmental Impact Appraisals, Environmental Impact Statements, Site Characterization Plans, and Site Characterization Plan updates on an as needed basis. For each review, the BOM shall evaluate the public comments on issues related to natural resources. Results of Subtask 1.3 shall be submitted to the NRC in a letter report within one month following receipt of public comments from the NRC Project Officer (PO). Work under this subtask shall commence at the written direction of the NRC CO.

### C. Task Orders

The reviews described in subtasks 1.1, 1.2, and 1.3 shall be initiated through issuance of individual task orders signed by the NRC CO. Each task order shall be numbered consecutively and shall identify the applicable subtask for which the effort is to be performed.

Task orders issued under this interagency agreement shall contain a statement of work for the effort to be performed, reporting requirements, period of performance, any site visits to be conducted, and a ceiling amount for the effort to be performed, to which both technical effort and travel costs are to be applied. This ceiling amount is not to be exceeded without obtaining the prior written approval of the NRC CO.

## D. Reporting Requirements

### 1. Monthly Letter Status Report

Due to the type of work required under this agreement, the requirement for a monthly letter report is waived. In its place shall be a monthly conference phone call between BOM and the NRC PO. This call should be initiated by BOM and should be placed by the 15th of each month. The call shall discuss per individual task order:

- a. The work performed during the previous month.
- b. Milestones reached, update of subcontractor (if any) activities and meetings attended (list personnel, dates, place, purpose, and summary of meeting).
- c. Potential or actual contractual problem areas and their impacts (if the schedule has slipped or if the budget will be exceeded, this shall be stated and reasons explained).
- d. The personnel time expenditures during the previous month with the performing organization and subcontractor time expenditure listed separately.
- e. Costs and uncosted obligations, listed separately (a) during the previous month, (b) cumulative to date (fiscal year and total), and (c) projection by month report which shall provide the initial projections, and subsequent reports shall either indicate revised projections, ~~and subsequent reports shall either indicate revised projections~~ or indicated "no change in the cost and uncosted obligation project."
- f. A listing of subcontractor reports received that month.

### 2. Letter Reports

BOM shall submit timely final letter reports in order to bring issues of importance to the attention of the NRC PO. The letter reports shall discuss significant findings and conclusions pertinent to the objective of the report in the context of their impact on licensing. Also, the letter report should include a summary of the results and conclusions in the context of their impact on licensing needs and recommendations with regard to the project objectives as defined in this Statement of Work. This is designed to enhance the useability of reports to the licensing staff and the agency as a whole.

Each final letter report shall include a list of references. A system of cross references shall be used. In all areas where "work by others" is reviewed and used, BOM shall specify which conclusions are his and which are the original author's.



### 3. Draft and Final Topical Reports

The BOM shall prepare draft and final topical reports at the conclusion of each task or subtask assignment. The reports should include an Executive Summary that summarizes the results in the context of their impact on licensing and licensing needs and recommendations with regard to the project objectives as defined in the Statement of Work. Changes of reporting schedules shall be made by the NRC PO and BOM jointly. Draft and final reports shall be prepared in accordance with NRC Manual Chapter 3202 for technical reports. The draft shall meet the format requirements of a formal report; it shall have been edited and reviewed by the BOM and, with the possible exception of minor editing corrections, shall be ready to be incorporated in appendices or technical positions if the NRC has no comments. The BOM shall submit six copies of draft reports to the NRC PO in accordance with Section D.4 of this Statement of Work. Within the 15 working days following submission of the draft report, the NRC PO will comment in writing on these reports. The BOM shall respond to these comments in writing within 15 days following receipt of NRC comments. The final report shall be submitted within 20 working days after receipt of NRC comments and shall address a resolution of all NRC review comments.

### 4. Report Distribution

The following summarizes the required report distribution under this interagency agreement. The NRC PO shall provide the BOM with current NRC mailing addresses for this distribution.

<u>Distribution</u>	<u>Letter Reports</u>	<u>Draft Topical Reports</u>	<u>Final Topical Reports</u>	<u>Final Rpt Fiche*</u>
NRC Project Officer	1	1	6	0
Office of the Dir., NMSS (Attn: PSB)	1	1	1	0
WM Division Director	1	1	1	0
WMGT Branch Chief	1	1	1	0
WM Document Control Center	1	1	1	1**
Document Management Branch, TIDC	0	0	0	1**
Office of Research	1	1	1	0

\*Refer to Enclosure 1, Microfiche Specifications

\*\*Duplicate Fiche

\*\*\*Master Fiche

5. Submission of Documents to NRC Public Document Room

All NMSS technical high-level waste project documents will be transmitted to the NRC Public Document Room (PDR) and appropriate Local Public Document Room (LPDR's) by the Division of Waste Management. All administrative documents, e.g., financial reports, should be submitted separately from technical reports. Proprietary documents, should be submitted separately from technical reports. Proprietary documents must be properly identified by the BOM in accordance with 10 CFR Part 2.790, Availability of Official Records, and will not be submitted to the PDR's.

The BOM shall clearly identify, by FIN number, all project documents transmitted to the Division of Waste Management.

E. NRC Furnished Materials

At the initiation of the agreement, the NRC PO will provide the BOM with a copy of the procedural and technical portions of 10 CFR Part 60, the NRC Standard Format and Content Guide for the Site Characterization Report, a copy of the scheduled major events in the DOE's selection, design, and construction of a geologic repository, and a selected bibliography of reports and publications that have been developed for each site.

F. Meetings and Travel

The BOM shall attend planning or review meetings generally of one day or two days at NRC in Silver Spring, Maryland, as specified by the NRC PO. The BOM shall attend technical meetings or site visits as specified by the NRC PO. For purposes of estimating, a minimum of two trips (including site visits and trips to Washington, DC) are anticipated.

All travel shall be approved in advance by the NRC PO. Authority to perform travel will be provided through issuance of task orders signed by the NRC CO.

G. Quality Assurance

For all draft and final technical reports delivered under this agreement, the BOM shall assure that an independent review and verification of all numerical computations and mathematical equations and derivations are performed by qualified personnel other than the original author(s) of the reports. If the BOM proposes to verify/check less than 100 percent of all computations and mathematical equations and derivations in the report(s), (such

as might be the case when there are a large number of routine, repetitive calculations), the BOM must first obtain written approval from the NRC PO. Computer-generated calculations will not require verification where the computer program has already been verified. The NRC PO has the option of auditing all documentation including project correspondence, drafts, calculations, and unrefined data.

#### H. Presentations and Technical Papers

A copy of all written and oral presentations given at professional meetings and technical papers submitted for publication/technical journals which are associated with this project shall be transmitted to the NRC PO in advance of the presentation or publication on the appropriate form to be provided by the NRC PO.

#### Article II - Period of Performance

Authority for the performance of work required through issuance of task orders shall commence on the effective date of this agreement and shall continue for twenty-four months thereafter.

#### Article III - Estimate of Cost and Obligation of Funds

The estimated cost of the anticipated effort is \$425,000.00. The amount currently obligated by the NRC is \$150,000.00 and shall only be utilized as authorized through the issuance of task orders. Funds authorized through task orders shall be used for both technical and travel efforts.

Advance payments of funds to the BOM are authorized under this interagency agreement.

#### Article IV - Level of Effort

A level of effort will be placed on each task order for performance of work under this agreement. Such a target ceiling may be increased at the NRC CO's and NRC PO's discretion by notice from the NRC CO to BOM in writing. The estimated level of effort for the work under this SOW is approximately 2.2 staff years for both years of effort.

#### Article V - Technical Direction

Mr. Richard Lee (FTS 427-4526) is designated as the NRC Project Officer for the purpose of assuring that the services required under this Statement of Work are delivered in accordance herewith. All technical instructions to the BOM are issued through the NRC Project Officer. As used herein, technical instructions are those which provide details, suggest possible lines of inquiry, or otherwise complete the general scope of work set forth herein. Technical instructions shall not constitute new assignments of work or changes of such nature as to result in an adjustment in cost or period of performance of any task orders issued under this interagency agreement.

MICROFORM SPECIFICATIONS FOR  
DIVISION OF WASTE MANAGEMENT CONTRACTS

Microfiche used for submittal purposes shall conform to the following specifications:

1. Microfiche containing source documentation shall conform to the NMA Type 1 format (ANSI/NMA MS.5) consisting of 98 frames arranged in 7 rows and 14 columns.
2. The reduction ratio shall be 24:1 for all microfiche.
3. The microfiche shall be standard 148mm x 105mm.
4. The microfiche shall be one silver-halide master and one diazo placed in individual acid free envelopes.
5. Diazo duplicates may be either blue/black or black.
6. The microfiche shall be titled in the following manner:

FIN No.	Title of Report	Date
Contract No.		
NUREG/CR No.		
Fiche No.		

Fiche number refers to pagination information, e.g., 1 of 2, 2 of 2, etc.

7. Title information shall be eye readable on a clear background.
8. The submittal of microfiche containing proprietary material shall be coordinated with the Document Management Branch, Division of Technical Information and Document Control, U.S. Nuclear Regulatory Commission, 20555 to set format and procedures for submittal.
9. Foldouts, if any, shall be segmented and filmed in logical order.
10. The first frame shall be blank, and the second frame shall contain the resolution target (NMS 1010A).
11. Questions on microfiche specifications should be submitted in writing to:

Document Management Branch, Division of Technical Information  
and Document Control, U.S. Nuclear Regulatory Commission,  
Washington, D.C. 20555.

If this interagency agreement is acceptable to the BOM, please so indicate by signing in the space provided and returning two (2) fully executed copies to me. The third fully executed copy is to be retained for your records. Any questions regarding this agreement are to be directed to Mrs. Cindy Fleenor on 492-4519.

ACCEPTED:

U.S. BUREAU OF MINES

BY:

TITLE: *Acting* Wagner W. Jett  
Chief, Division of Procurement

DATE:

6-3-85

ACCEPTED:

U.S. NUCLEAR REGULATORY COMMISSION

BY:

TITLE: Timothy F. Hagan, Contracting Officer

DATE:

5/21/85

Enclosures:

1. Microform Specifications for Division of Waste Management Contract
2. NRC Manual Chapter 3202



PUBLICATION OF REGULATORY AND TECHNICAL DOCUMENTS  
PREPARED BY NRC CONTRACTORS, INCLUDING REPORTS  
PREPARED UNDER OR PURSUANT TO INTERAGENCY AGREEMENTS

HANDBOOK

U.S. NUCLEAR REGULATORY COMMISSION  
DIVISION OF TECHNICAL INFORMATION AND DOCUMENT CONTROL

Approved: January 25, 1978

Form NRC-489  
(1-75)

U. S. NUCLEAR REGULATORY COMMISSION  
NRC MANUAL

TRANSMITTAL NOTICE

CHAPTER NRC-3202 PUBLICATION OF UNCLASSIFIED REGULATORY AND TECHNICAL  
DOCUMENTS PREPARED BY NRC CONTRACTORS, INCLUDING REPORTS  
PREPARED UNDER OR PURSUANT TO INTERAGENCY AGREEMENTS

SUPERSEDED:

Number	Date
Chapter _____	_____
Page _____	_____
_____	_____
_____	_____
Appendix _____	_____

TRANSMITTED:

Number	Date
TN _____ 3200-3	
Chapter _____ NRC-3202	1/25/78
Page _____	_____
_____	_____
_____	_____
Appendix _____ NRC-3202	1/25/78

REMARKS:

This chapter and appendix establish responsibilities, basic requirements, standards and procedures for the documentation, production and dissemination of regulatory and technical reports prepared by NRC consultants and by NRC contractors and their subcontractors, including reports prepared under or pursuant to interagency agreements.

U. S. NUCLEAR REGULATORY COMMISSION  
NRC MANUAL

Volume: 3000 Information and Foreign Activities  
Part : 3200 Technical Information and Document Control

ADM.

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Chapter 3202 PUBLICATION OF UNCLASSIFIED REGULATORY AND TECHNICAL  
DOCUMENTS PREPARED BY NRC CONTRACTORS, INCLUDING REPORTS  
PREPARED UNDER OR PURSUANT TO INTERAGENCY AGREEMENTS

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3202-01 COVERAGE

This chapter and its appendix handbook establish responsibilities, basic requirements, standards and procedures for the documentation, production and dissemination of regulatory and technical reports prepared by NRC consultants and by NRC contractors and their subcontractors, including reports prepared under or pursuant to interagency agreements. These reports are hereafter referred to as contractor documents. This chapter does not cover NRC staff-generated documents, environmental impact statements, NRC docket material, or the documents generated by NRC boards, panels and advisory committees.

3202-02 OBJECTIVES

021 To assure production of information and reports as required by the Energy Reorganization Act of 1974 and the Freedom of Information Act.

022 To assure that dissemination of regulatory and technical documents is consistent with requirements for public availability of information on the regulatory process.

023 To assure that national security, patent rights, copyrights, and commercial proprietary rights are not compromised by the release, distribution, or dissemination of information from the NRC.

024 To assure that formal NRC contractor documents will carry the registered NRC designation NUREG as the prime identification.

3202-03 RESPONSIBILITIES AND AUTHORITIES

031 The Director, Office of Administration, develops and maintains, in consultation with Directors of Offices and Divisions, NRC standards, procedures and guides for the production and dissemination of regulatory and technical contractor documents.

Approved: January 25, 1978

032 The Director, Division of Technical Information and Document Control:

- a. develops and administers a central document control system for identifying, printing and distributing contractor documents and responding to requests for them.
- b. develops and maintains guides and standards for the documentation, formatting, printing, dissemination, and public sale of contractor documents.
- c. assures that a system exists for review of contractor documents for adherence to patent, copyright and security policies prior to dissemination.
- d. establishes and administers interagency agreements necessary for the dissemination and public sale of contractor documents and controls the duplication and printing of contractor documents to assure adherence to the Government Printing and Binding Regulations issued by the Joint Committee on Printing (JCP), Congress of the United States.
- e. establishes distribution data banks, maintains official standard distribution lists for automatic distribution of contractor documents, and controls distribution to assure adherence to the Government Printing and Binding Regulations and the Privacy Act (Title 5, U.S.C.).

033 Directors, Offices and Divisions:

- a. establish the contract or Standard Order for Work\* provisions, including those required by this chapter and its appendix; Chapter NRC-3203, Distribution of Unclassified NRC Staff- and Contractor-Generated Documents and its appendix; Chapter NRC-0260, Printing and Related Activities and its appendix; and NRC Bulletin 1102-6, Procedure for Placement of Work with DOE (to be issued). In those provisions:
  - (1) specify what documents will be reviewed for policy, management, regulatory and legal issues by NRC staff in draft prior to printing and distribution. If the document is to be reviewed by NRC staff, give the conditions under which the contractor may publish documents in the event of unresolvable differences relative to the draft, including the type of disclaimer to be used in addition to the standard government disclaimer (see Exhibit 6).

\*In the case of DOE work, this is NRC Form 173, Standard Order for DOE Work.

- (2) provide for the reviews necessary to insure that the national security, patent rights, copyrights, and commercial proprietary rights are not compromised by the release or dissemination of documents. If the contractor is to be authorized to make the review, designate the contractor officials who are authorized to sign NRC Form 426 prior to NRC distribution of documents.
  - (3) specify that all formal documents carry NUREG numbers as the prime identification, as illustrated in the appendix, and that interim documents include the title page indicated in the appendix.
  - (4) specify whether formal documents shall be printed by NRC or the contractor if the contractor has a JCP authorized federal printing plant (see appendix, part III).
  - (5) specify that all formal documents required by NRC shall be distributed by NRC.
  - (6) establish the number of copies the contractor may retain or request for internal and external distribution and charge against NRC. Written justification must be provided to the NRC JCP representative when the number exceeds the 50 copies authorized by JCP.
- b. assure adherence to instructions and authorizations regarding the reproduction and distribution of documents.
  - c. recommend standard distribution category(ies) and provide standard and incidental distribution lists for contractor documents to the contractor and the Division of Technical Information and Document Control.
  - d. provide changes to the official standard and incidental distribution lists to the contractor and the Division of Technical Information and Document Control.

034 Director, Office of the Executive Legal Director, provides legal review and advice to NRC staff on questions regarding inventions, patents, and use of copyrighted material.

035 Director, Division of Security, provides review of documents to assure that national security interests are not compromised by the release.

036 Director, Division of Contracts:

- a. coordinates the flow of all documents to and from contractors where such documents may result in alterations in the terms and conditions of applicable contracts as they pertain to document production and distribution.

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- b. advises the contractor as to the source and method for obtaining documents required from the government for performance of the contract.
- c. provides contractor with copies of NRC Manual Chapters 3202, 3203 and 0260, when appropriate.
- d. determines that requests for proposals and invitations for bids and subsequent contracts awarded require contractor compliance with Chapter NRC-3202 and the Government Printing and Binding Regulations, when appropriate.

## 3202-04 DEFINITIONS\*

041 camera-ready copy - copy ready for printing. This is a colloquial term of long standing that is used even though the printing process may not involve the so-called copy camera (see also reproducible masters).

042 central document control system - means for developing and maintaining the policies, procedures and guides needed to identify and produce regulatory and technical documents and to assure adherence to requirements and standards for documentation, formatting, printing and distribution.

043 commercial proprietary right - trade secrets and commercial or financial information obtained from a person and privileged or confidential.

044 contractor document - a document prepared in accordance with the provisions of a contract or under or pursuant to an interagency agreement\*.

045 copyright - "the exclusive, legally secured right to reproduce (as by writing or printing), publish and sell the matter and form of literary, musical or artistic work..." (Webster's Third International Dictionary). Copyrighted material may not be reproduced without the permission of the author or publisher.

046 disseminate - to announce the publication of documents and make them available for free distribution, sale or copying.

047 distribute - to dispense documents to specific organizations and individuals to assure participation in the regulatory process and support of research and technological investigations. Such distribution may be accomplished by the use of standard distribution data banks established and maintained by the Division of Technical Information and

\*Words underscored in definitions are also defined in list.

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Document Control based on the requests of the originating Office or Division.

048 document - a printed record or copy thereof (see also report).

049 documentation - includes classification and associated required markings, the NRC document number unique to the document, title (and subtitle, if any), author or correspondent (if any), organization identification and contract number (or interagency agreement number), date and availability.

0410 formal contractor documents - regulatory and technical documents that record the results of contractor or interagency agreement work at principal points in the program. Such documents may include, but are not limited to, quarterly and annual progress reports and final reports. Prior to publication, these documents shall have received the reviews and approvals required by NRC. Such reviews and approvals shall include, but not necessarily be limited to, patent review (if applicable) and security review (if applicable). These reports will carry NUREG designations as the prime identification.

0411 interim contractor documents - regulatory and technical documents prepared in accordance with contract or interagency agreement requirements for recording plans and results during the course of the work. Such documents may include, but are not limited to, informal progress reports, quick-look reports, data reports, status summary reports, project descriptions, pre-test predictions, model verifications, experiment safety analyses, experiment operating procedures, facility certification reports, and test result reports.

0412 NRC program or project sponsor - the NRC individual responsible for the performance of a consultant or a contractor and his subcontractor or work performed under or pursuant to an interagency agreement.

0413 patent review - review by legal staff to assure protection rights in inventions.

0414 publicly available documents - documents which are available in the NRC Public Document Room (PDR) for public inspection and copying.

0415 regulatory and technical documents - documents that have been prepared in support of regulatory investigations and are to become publicly available records. Such documents shall carry unique identification.

0416 report - a regulatory or technical document that is to be printed and disseminated which carries the bibliographic documentation required for storage and retrieval.

0417 reproducible masters - camera-ready copy which includes (1) originals of line drawings (or prints that can be copied), (2) glossy

prints of black and white photographs (colored photographs cannot be reproduced), (3) original typed or printed text, tables, cover, title page, contents and abstract, or (4) other forms of the materials listed in (1), (2) and (3) that are acceptable to a printer who will guarantee to prepare reproducible copy therefrom (see appendix, part IV, for guidelines).

0418 unique identification - NRC identification used on a document and its attachments, revisions, and supplements that is not used on any other document.

### 3202-05 BASIC REQUIREMENTS

051 Applicability. The provisions of this chapter and its appendix apply to NRC consultants and to NRC contractors and subcontractors, including those working under interagency agreements, whose contracts require the preparation of regulatory and technical documents. Because of the unique requirements of NRC boards, panels and advisory committees which report directly to the Commission, the handling of reports prepared by consultants and contractors to them are governed by the Board or Panel Chairman and, in the case of advisory committees, by the Advisory Committee Management Officer.

052 Forms. NRC Form 426, "Publication Release for Unclassified Formal NRC Staff, Consultant and Contractor Reports " (Exhibit 5) shall be used as provided in the appendix.

053 Appendix 3202. Standards, procedures and methods for managing the production and dissemination of contractor documents are contained in the appendix to this chapter.

#### 054 Preparation Requirements.

- a. Documents to be Printed by NRC. All contractor documents to be printed by NRC shall be prepared according to Appendix 3202. The reproducible masters for the requisite distribution shall be transmitted to the Division of Technical Information and Document Control by the NRC program or project sponsor or the authorized contractor official.
- b. Documents Printed by Authorized Federal Printing Plants or Duplicated by a Contractor. All contractor documents to be printed or duplicated by the contractor (as specified by the contract, agreement, or standard order for work) shall be prepared according to Appendix 3202, and a reproducible master and sufficient copies for standard and incidental distribution shall be supplied to the Division of Technical Information and Document Control accompanied by completed NRC Form 426 signed by the NRC program or project sponsor or the authorized contractor official.

055 References. The NRC manual chapters referenced are available from the Division of Technical Information and Document Control. The other citations are available from the Government Printing Office.

- a. Chapter NRC 0260, "Printing and Related Activities."
- b. Chapter NRC 2101, "NRC Security Program."
- c. NRC Appendix 2101, Part III, "Control of Classified Information and Documents."
- d. NRC Appendix 2101, Part VIII, "Physical Protection of Classified NRC Facilities and Matter."
- e. Chapter NRC 3203, "Distribution of Unclassified NRC Staff- and Contractor-Generated Documents."
- f. NRC Bulletin 1102-6, "Procedure for Placement of Work with DOE" (to be issued).
- g. Title 44, U.S. Code, "Public Printing and Documents."
- h. Government Printing and Binding Regulations of the Joint Committee on Printing, Congress of the United States, No. 24, April 1977 (JCP Regulations).
- i. Title 5, U.S. Code.

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This appendix provides standards and procedures for the documentation, production and dissemination of regulatory and technical documents that are to be made publicly available and are prepared by contractors or other government agencies in accordance with contract requirements or interagency agreements. It is presented in four parts: Part I - Formal Contractor Documents to be Printed by NRC, Part II - Interim Contractor Documents to be Printed by NRC or Duplicated by Contractor, Part III - Formal Documents to be Printed Under or Pursuant to Interagency Agreements by Agencies with JCP Authorized Federal Printing Plants, and Part IV - Guidelines for Preparation of Manuscripts and Reproducible Copy to be Printed by NRC.

## PART I

### FORMAL CONTRACTOR DOCUMENTS TO BE PRINTED BY NRC

#### A. DOCUMENTATION

##### 1. Applicability

- a. The requirements of this part apply to contractor and interagency agreement documents that are to be printed by NRC. Contractors, other than DOE laboratories with authorized federal printing plants, may not print reports prepared for NRC.
- b. With respect to classified documents and documents "For Official Use Only," the requirements set forth in this part shall be used in conjunction with Chapter NRC-210I.
- c. The requirements of this part do not apply to consultants and contractors of the NRC boards, panels, and advisory committees which report directly to the Commission.

##### 2. Front Cover and Title Page

- a. Separate covers and title pages are required (see Exhibits 1 and 2 for contractor reports and Exhibits 3 and 4 for reports prepared under or pursuant to interagency agreements).\*

\*Reproducible copy of the cover of the performing organization may be submitted; however, the data elements shown in Exhibit 1 must be included.

- b. The items shown in Exhibits 1 through 4 and discussed below shall appear on the title page and cover, as appropriate.\*

- (1) NRC Document Number. Each document shall be identified by an NRC-controlled alphanumeric number as the prime number unique to that document. The centralized document control system for unique identification is maintained by the Division of Technical Information and Document Control. Numbers may be obtained by calling Division of Technical Information and Document Control or submitting a copy of NRC Form 426 (Exhibit 5) with a request for a number.

The NRC identification number will have the form:

NUREG/CR-1234

The contractor's report number, if any, may be inserted below the NUREG number on the title page and cover, as shown in Exhibits 1 through 4.

When a document consists of more than one volume or binding or is issued in more than one edition, an appropriate volume, supplement, part or revision designation shall appear immediately below the report number.

- (2) Title and Subtitle
- (a) Use a brief title that indicates clearly the subject matter covered in the document.
  - (b) When a document is prepared in more than one volume, repeat the primary title on each volume.
  - (c) If appropriate, show the type of document (e.g., annual report, final report, thesis, etc.) and the period covered as part of the subtitle.
- (3) Personal Author(s)' Name(s). Authors' names should be given on the title page and cover unless this is impractical, as in the case of annual reports which have many contributors. If authors' contributions are as editors, compilers, etc., so indicate on title

\*These requirements meet the specifications of American National Standard ANSI Z39.18-1974, Guidelines for Format and Production of Scientific and Technical Reports, and ANSI Z39.23-1974, Technical Report Numbers.



page following the names. In addition, list affiliation of each author only if affiliated with an organization other than the organization generating the document.

(4) Organization Identification. On the title page and cover, provide information of the type illustrated in Exhibits 1 through 4.

(5) Basis for Report Date(s)

(a) The basis for dating may be shown along with the date on the title page. Various bases for dating are possible; e.g., date document completed, date reviews completed, date published, date distributed, etc.

(b) More than one date, with the basis for each, may be shown where this is necessary.

3. Availability Information

All formal documents will be made available for sale by NRC and by the National Technical Information Service (NTIS). The following statements will be inserted on the inside of the front cover (Exhibit 6) by the Division of Technical Information and Document Control:

Available from  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Available from  
National Technical Information Service (NTIS)  
Springfield, Virginia 22161

4. Disclaimer

The following notice will be added during the printing step on the inside front cover (Exhibit 6): "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, or any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for any third party's use, or the results of such use, of any information, apparatus, product or process disclosed in this report, or represents that its use by such third party would not infringe privately owned rights." The following additional statement, "The views expressed in this report are not necessarily those of the U.S. Nuclear Regulatory Commission" will be printed below the standard disclaimer, if appropriate.

5. Abstract

An abstract of 200 words or less shall be prepared for each formal document. If the abstract is included in the document, it should appear on a separate page between the table of contents and the text.\*

## B. PATENT AND SECURITY REVIEWS

1. Patent Review

Patent implications shall be considered prior to approval of reports for public release so that disclosure will not adversely affect the patent rights of NRC or the contractor. If the work being reported is contractually managed through another government agency (e.g., DOE laboratories), that government agency should be requested by the contractor to perform the patent review. The result of such review shall be reported on NRC Form 426 in item II (Exhibit 5).

If NRC directly administers the contract or the contractor is unable to obtain a patent clearance from the government agency administering the contract, the responsible NRC contracting officer shall be consulted, and the responsible NRC program or project sponsor shall consider the patent implications. If there is no need for patent review because of the certainty that the document contains no description of novel technical developments which may be of an inventive nature, NRC Form 426 may be completed with the statement "not applicable" or "N/A" in the space for the Patent Counsel's signature. If there is a possibility that there is disclosure of developments of an inventive nature, the contracting officer shall request assistance from the NRC Patent Counsel, Office of the Executive Legal Director.

2. Security Review

In most cases, contractor reports will be unclassified. Should a report of classified work be required, however, the NRC program or project sponsor must work with the NRC Division of Security to establish the appropriate classification procedures and inform the contractor of such procedures through the contracting officer.

\*This preferred positioning of the abstract in the document need not be followed if the style manual of the originating organization requires a different location.

C. PROCEDURES FOR PRINTING OR DUPLICATING AND  
DISTRIBUTING

1. Printing or Duplicating

Reproducible masters prepared in accordance with this appendix\* shall be transmitted to the Division of Technical Information and Document Control, accompanied by completed NRC Form 426 (Exhibit 5). NRC Form 426 must be signed by the NRC program or project sponsor or the authorized contractor official. The Division of Technical Information and Document Control will review the masters for adherence to the standards set forth in this chapter and appendix and will arrange for printing and distributing the document. Unsatisfactory masters will be reported to the program or project sponsor for appropriate contractual action by the contracting officer or, in the case of government agency or interagency agreement work, the publications manager of the performing organization.

2. Reprinting or Reduplicating

Requests for reprinting or reduplicating any document subsequent to the initial printing or duplication require approval of the Division of Technical Information and Document Control. Each request shall include a written justification for the reprinting or reduplicating and a list of recipients and their complete addresses.

3. Distribution of Documents

All copies of formal contractor documents will be distributed by the Division of Technical Information and Document Control in accordance with instructions on NRC Form 426 (Exhibit 5).

If any distribution is to be made other than, or in addition to, the standard distribution established for the document, written justification for printing or duplicating additional copies shall accompany the reproducible masters when submitted to the Division of Technical Information and Document Control.

The final pages of the reproducible masters shall be the distribution list.

---

\*For guidelines, see part III.

EXHIBIT 1

SAMPLE COVER FOR UNCLASSIFIED FORMAL CONTRACTOR-PREPARED  
DOCUMENTS, EXCLUDING THOSE PREPARED UNDER OR PURSUANT TO  
INTERAGENCY AGREEMENTS

NRC Report No.  
Contractor Report No. (if any)  
Vol., Part, Rev., etc. (if any)

NUREG/CR-0012  
UCLA-ENG-7761

Title

**LMFBR FUEL ANALYSIS  
TASK B: POST-ACCIDENT HEAT REMOVAL**

Subtitle and Type of Report  
(Annual, Topical, etc.)

Final Report  
October 1, 1976 - September 30, 1977

Author(s)

J. Castle                      N. C. Ostrander  
J. M. McDonough          I. Catton

Contractor

University of California, Los Angeles

NRC

Prepared for  
U. S. Nuclear Regulatory Commission

Approved: January 25, 1978

EXHIBIT 2

SAMPLE TITLE PAGE FOR UNCLASSIFIED FORMAL CONTRACTOR-  
PREPARED DOCUMENTS, EXCLUDING THOSE PREPARED UNDER OR  
PURSUANT TO INTERAGENCY AGREEMENTS

NRC Report No.  
Contractor Report No. (if any)  
Vol., Part, Rev., etc. (if any)  
Distribution Category No. (if any)

NUREG/CR 0012  
UCLA ENG 7761

Title

**LMFBR FUEL ANALYSIS**  
**TASK B: POST-ACCIDENT HEAT REMOVAL**

Subtitle and Type of Report  
(Annual, Topical, etc.)

Final Report  
October 1, 1976 - September 30, 1977

Author(s), Editor(s),  
Compiler(s), etc.

J. Castle                      N. C. Ostrander  
J. M. McDonough          I. Carlton

Report Dates and Bases

Manuscript Completed: October 1977  
Date Published: January 1978

Contractor Name  
and Address

School of Engineering and Applied Science  
University of California  
Los Angeles, CA 90024

NRC Sponsorship

Prepared for  
Division of Project Management  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Under Contract No. NRC-03-77-001

NRC Contract No.

EXHIBIT 3

SAMPLE COVER FOR UNCLASSIFIED FORMAL REPORTS PREPARED  
UNDER OR PURSUANT TO INTERAGENCY AGREEMENTS

NRC Report No.  
Contractor Report No. (if any)  
Vol., Part, Rev., etc. (if any)

NUREG/CR-1234  
ORNL-6789  
Vol. 3, Rev. 2

Title

**A CRITICAL EVALUATION OF THE  
NONRADIOLOGICAL ENVIRONMENTAL  
TECHNICAL SPECIFICATIONS**

Subtitle

**Volume 3  
Peach Bottom Atomic Power Station  
Units 2 and 3**

Author(s)

S. M. Adams  
P. A. Cunningham  
D. D. Gray  
K. D. Kumar  
A. J. Witten

Contractor Names

Oak Ridge National Laboratory

NRC Sponsorship

Prepared for  
U. S. Nuclear Regulatory Commission



EXHIBIT 4

SAMPLE TITLE PAGE FOR UNCLASSIFIED FORMAL REPORTS PREPARED  
UNDER OR PURSUANT TO INTERAGENCY AGREEMENTS

NRC Report No.  
Contractor Report No. (if any)  
Vol., Part, Rev., etc. (if any)  
Distribution Category No. (if any)

NUREG CR 1234  
ORNL 6789  
Vol. 3, Rev. 2  
R2

Title

**A CRITICAL EVALUATION OF THE  
NONRADIOLOGICAL ENVIRONMENTAL  
TECHNICAL SPECIFICATIONS**

Subtitle

**Volume 3  
Peach Bottom Atomic Power Station  
Units 2 and 3**

Author(s)

S. M. Adams  
P. A. Cunningham  
D. D. Gray  
K. D. Kumar  
A. J. Witten

Report Dates and Bases

Manuscript Submitted: August 10, 1976  
Date Published: April 1977

Contractor Names  
and Addresses

Oak Ridge National Laboratory  
Oak Ridge, TN 37830  
operated by  
Union-Carbide Corporation  
for the  
U. S. Department of Energy

NRC Sponsorship

Prepared for  
Division of Safeguards, Fuel Cycle and Environmental Research  
Office of Nuclear Regulatory Research  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555  
Under Interagency Agreement DOE 40-550-75  
NRC FIN No. A12347

Interagency Agreement No.  
NRC FIN No. or  
Contract No.

## EXHIBIT 5

1. REPORT NUMBER	Obtain in advance from Division of Technical Information and Document Control	NRC FORM 426 (12-77) NRCM 3201	U.S. NUCLEAR REGULATORY COMMISSION
2. DISTRIBUTION CATEGORY NO.	Insert appropriate number from the NRC Distribution Category List	PUBLICATIONS RELEASE FOR UNCLASSIFIED FORMAL NRC STAFF, CONSULTANT, AND CONTRACTOR REPORTS	
3. TITLE AND SUBTITLE (State in full as shown on document.)			
4. AUTHORS (If more than three, name first author followed by "and others.")			
5. ORGANIZATIONAL UNIT (If contract, give program (project) unit of author to whom inquiries may be addressed.)			
OFFICE DIVISION		BRANCH UNIT	TELEPHONE NO.
6. REPORT DATE (S)		BASIS FOR EACH DATE (e.g. date manuscript submitted, date manuscript published.)	
7. CONTRACT NUMBER		8. NAME OF NRC PROGRAM SPONSOR FOR CONTRACT	TELEPHONE NO.
9. TYPE OF DOCUMENT ("X" one)			
<input type="checkbox"/> I. REGULATORY REPORT (e.g. Environmental Impact Statement, Safety Evaluation Report, etc.) <input type="checkbox"/> II. TECHNICAL REPORT <input type="checkbox"/> III. CONFERENCE PAPER (1) TITLE OF CONFERENCE _____ (2) DATE(S) OF CONFERENCE _____ (3) LOCATION OF CONFERENCE _____ <input type="checkbox"/> IV. OTHER (Indicate type of work, e.g. thesis, translation, etc., etc.) _____			
10. RECOMMENDED DISTRIBUTION ("X" one) (If reproduced by Contractor, send all copies to the Division of Technical Information and Document Control for distribution.)			
<input type="checkbox"/> I. STANDARD DISTRIBUTION AND NTIS SALE (Document may be distributed to Distribution Category identified in item 2, above, and to the NTIS for sale to the public.) <input type="checkbox"/> II. OTHER (Specify special instructions such as: "Make available only as specifically approved by program office." "Send to attached addressees in addition to standard distribution," etc. Such request must be justified. Continue on reverse or separate sheet if necessary.)			
11. ADDITIONAL INFORMATION AND REMARKS (Use this space if necessary to expand on answers given above. Continue on reverse or separate sheet.)			
12. CLEARED		13. SUBMITTED BY	
Forward completed, signed NRC Form 426 together with the related document for review.		a. NAME OF HEAD OF ORGANIZATIONAL UNIT (Type or print)	
TO: Patent Counsel Office of Executive Legal Director		b. ORGANIZATIONAL UNIT	
<input type="checkbox"/> a. PATENT CLEARANCE GRANTED <input type="checkbox"/> b. PATENT CLEARANCE NOT GRANTED		c. DIVISION	
d. PATENT COUNSEL SIGNATURE		e. SIGNATURE (NRC responsible staff members or authorized contractor official)	
f. DATE		g. DATE	
NRC FORM 426 (12-77) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE EXISTING STOCK MAY BE USED			

Approved: January 25, 1978

10

EXHIBIT 6

DISCLAIMER AND AVAILABILITY STATEMENTS  
(BACK OF COVER)

NOTICE

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, or any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for any third party's use, or the results of such use, of any information, apparatus, product or process disclosed in this report, or represents that its use by such third party would not infringe privately owned rights.

The views expressed in this report are not necessarily those of the U.S. Nuclear Regulatory Commission.

Available from:  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Available from:  
National Technical Information Service  
Springfield, Virginia 22161

## PART II

### INTERIM CONTRACTOR DOCUMENTS TO BE PRINTED BY NRC OR AN AUTHORIZED FEDERAL PRINTING PLANT OR DUPLICATED BY A CONTRACTOR

#### A. DOCUMENTATION

##### 1. Applicability

- a. The requirements of this part apply to contractor documents that are to be printed by NRC or an authorized Federal printing plant or duplicated by a contractor.
- b. With respect to classified documents and documents "For Official Use Only," these requirements shall be used in conjunction with Chapter NRC-2101.
- c. The requirements of this part do not apply to consultants and contractors to the NRC boards, panels, and advisory committees which report directly to the Commission.

##### 2. Title Page

- a. A title page is required for each document. This page may be typed on plain bond and attached to the document.
- b. The items shown in Exhibit 7 and discussed below shall appear on the title page. While the layouts and typefaces need not be exactly the same as in Exhibit 7, the items shall appear in approximately the locations indicated.
  - (1) NRC Accession Number. Each document to be made publicly available will be given a number unique to that document by the Division of Technical Information and Document Control.
  - (2) The other title page items are self-explanatory or are explained in Exhibit 7.
- c. The title page shall be marked "Interim."

#### B. PATENT AND SECURITY REVIEWS

##### 1. Patent Review

Patent implications shall be considered prior to approval of reports for public release so that disclosure will not adversely

affect the patent rights of NRC. If the work being reported is contractually managed through another government agency (e.g., DOE laboratories), that government agency should be requested by the contractor to perform the patent review. The result of such review shall be reported on NRC Form 426 in item II (Exhibit 5).

If NRC directly administers the contract or the contractor is unable to obtain a patent clearance from the government agency administering the contract, the responsible NRC contracting officer shall be consulted, and the responsible NRC program or project sponsor shall consider the patent implications. If there is no need for patent review because of the certainty that the document contains no description of novel technical developments of an inventive nature, NRC Form 426 may be completed with the statement "not applicable" or "N/A" in the space for the Patent Counsel's signature. If there is a possibility that there is disclosure of developments of an inventive nature, the NRC contracting officer shall request assistance from the NRC Patent Counsel, Office of the Executive Legal Director.

## 2. Security Review

In most cases, contractor reports will be unclassified. Should a report of classified work be required, however, the program or project sponsor must work with the Division of Security to establish the appropriate classification procedures and inform the contractor of such procedures.

## C. PROCEDURES FOR PRINTING OR DUPLICATING AND DISTRIBUTING

- I. Printing or Duplicating. Interim documents may be printed by NRC or an authorized Federal printing plant or duplicated (as defined by the Joint Committee on Printing, JCP, U.S. Congress)\* by the contractor. If to be printed by NRC, the

\*duplicating - as defined by JCP, means that material produced by use of single-unit duplicating equipment with an image area not larger than 11 by 17 inches and which has a maximum image of 10-3/4 by 14 inches: provided that work exceeding 5,000 production units of any one page, and work exceeding 25,000 production units in the aggregate of multiple pages, shall not be done without authority of JCP. Any work exceeding the limits stated above and requiring equipment other than that listed as duplicating equipment in the Government Printing and Binding Regulations must be approved by JCP or requisitioned by the Division of Technical Information and Document Control.

reproducible masters of the document, accompanied by a completed NRC Form 426, must be sent to the Division of Technical Information and Document Control.

2. Distribution of Documents Printed by NRC. The masters of documents to be printed by NRC shall include a list of those to whom the document is to be distributed, complete with organization address and Zip code, or a standard distribution list shall be specified if an applicable one exists.
3. Distribution of Documents Duplicated by Contractor. Interim documents duplicated by the contractor shall be distributed by the contractor or the Division of Technical Information and Document Control. If to be distributed by NRC, the necessary copies and a list of those to whom the document is to be distributed, complete with organization address and Zip code, and a completed NRC Form 426 shall accompany the documents when sent to the Division of Technical Information and Document Control; a standard distribution list may be specified if an applicable one exists.

If distributed by the contractor, two copies of the document shall be sent to the Division of Technical Information and Document Control, along with a list of those to whom copies were distributed and a completed NRC Form 426. An accession number will be assigned before the document is sent to the NRC Public Document Room. A copy of the NRC Form 426 will be returned to the contractor with the accession number assigned.



EXHIBIT 7

SAMPLE TITLE PAGE FOR INTERIM CONTRACTOR DOCUMENTS  
TO BE MADE PUBLICLY AVAILABLE

Accession No.  
(Will be added by NRC)  
Contractor Report No.

Title of Program for Which  
Contract Written  
Limited Subject of  
This Document  
Type of Document: Status  
Report, Quick-Look  
Report, etc.

Individual

Contractor and Address

Interagency Agreement  
or Contract No.

INTERIM REPORT	
	Accession No. _____
Contract Program or Project Title	
Subject of this Document:	
Type of Document:	
Author(s)	
Date of Document:	
Responsible NRC Individual and NRC Office or Division	
<div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%;"> <p>This document was prepared primarily for preliminary or internal use. It has not received full review and approval. Since there may be substantive changes, this document should not be considered final.</p> </div>	
<p>Oak Ridge National Laboratory Oak Ridge, Tennessee 37830 operated by Union Carbide Corporation for the U.S. Department of Energy</p> <p>Prepared for U.S. Nuclear Regulatory Commission Washington, D.C. 20555 Under Interagency Agreement DOE 40-550-75 NRC FIN No. A12347</p> <p>INTERIM REPORT</p>	

### PART III

#### FORMAL DOCUMENTS TO BE PRINTED UNDER OR PURSUANT TO INTERAGENCY AGREEMENTS BY AGENCIES WITH JCP AUTHORIZED FEDERAL PRINTING PLANTS

##### A. DOCUMENTATION

###### 1. Applicability

- a. The requirements of this part apply to NRC staff who are responsible for agreements with other agencies and their contractors who print regulatory and technical documents required by agreements with NRC.
- b. With respect to classified documents and documents "For Official Use Only " the requirements set forth in this part shall be used in conjunction with Chapter NRC-2101.
- c. The requirements of this part do not apply to consultants and contractors to the NRC boards and advisory committees which report directly to the Commission.

###### 2. Front Cover and Title Page

- a. Separate covers (of different paper than that of the text) and title pages are required.\*
- b. Items such as those shown in Exhibits 3 and 4 and discussed below shall appear on the front cover and title page, as appropriate.\*\* While layouts and typefaces need not be exactly the same as in Exhibits 3 and 4, the items shall appear in approximately the locations indicated and with the same relative prominence.

- (1) NRC Document Number. Each document shall be identified by an NRC-controlled alphanumeric number as the prime number unique to that document. The centralized document control system for unique

---

\*The cover stock of the performing organization may be used; however, it must include the data elements shown in Exhibit 3.

\*\*These requirements meet the specifications of American National Standard ANSI Z39.18-1974, Guidelines for Format and Production of Scientific and Technical Reports, and ANSI Z39.23-1974, Technical Report Numbers.

identification is maintained by the Division of Technical Information and Document Control. Numbers may be obtained by calling the Division of Technical Information and Document Control or submitting a copy of NRC Form 426 (Exhibit 5) with a request for a number.

The NRC identification number will have the form:

NUREG/CR-1234

The contractor's report number, if any, may be inserted below the NUREG number on the title page and cover, as shown in Exhibits 3 and 4.

When a document consists of more than one volume or binding or is issued in more than one edition, an appropriate volume, supplement, part, or revision designation shall appear immediately below the report number(s). NRC document numbers on covers and title pages shall be shown entirely on one line to facilitate computer processing.

(2) Title and Subtitle

- (a) Use a brief title, which indicates clearly the subject matter covered in the document.
- (b) When a document is prepared in more than one volume, repeat the primary title on each volume.
- (c) If appropriate, show the type of document (e.g., annual report, final report, thesis, etc.) and the period covered as part of the subtitle.

(3) Personal Author(s)' Name(s)

- (a) Authors' names should be given on the title page and cover unless this is impractical, as in the case of annual reports which have many contributors. If authors' contributions are as editors, compilers, etc., so indicate on title page and cover following the names. In addition, list affiliation of each author only if affiliated with an organization other than the organization generating the document.
- (b) Authors may be identified on backstrips (spines) of bound volumes.

(4) Organization Identification

- (a) On cover, provide the name of the contractor responsible for preparing the document, followed by "Prepared for the U.S. Nuclear Regulatory Commission."
- (b) On the title page, provide information of the type illustrated in Exhibit 4.

(5) Basis for Report Date(s)

- (a) The basis for dating may be shown along with the date on the title page. Various bases for dating are possible; e.g., date document completed, date reviews completed, date published, date distributed, etc.
- (b) More than one date, with the basis for each, may be shown where this is necessary.

3. Availability and Price Information

All formal documents will be made available for sale by NRC and NTIS. The following statement is required on the inside of the front cover (Exhibit 6):

Available from  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Available from  
National Technical Information Service (NTIS)  
Springfield, Virginia 22161

4. Disclaimer

The following notice shall be added during the printing step on the inside front cover (Exhibit 6): "This report was prepared as an account of work sponsored by the United States Government. Neither the United States Government nor any agency thereof, or any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for any third party's use, or the results of such use, of any information, apparatus, product or process disclosed, or represents that its use by such third party would not infringe privately owned rights." The following additional statement, "The views expressed in this report are not necessarily those of the U.S. Nuclear Regulatory Commission" will be printed below the standard disclaimer, if appropriate.

5. Abstract

An abstract of 200 words or less shall be prepared for each formal document. Within the document, the abstract shall appear on a separate page between the table of contents and the text.\*

## B. PATENT AND SECURITY REVIEWS

1. Patent Review

Patent implications shall be considered prior to approval of reports for public release so that disclosure will not adversely affect the patent rights of NRC or the contractor. The government agency responsible for the interagency agreement with NRC should perform the patent review. The results of such review shall be reported by the agency on NRC Form 426 in item II (Exhibit 5).

2. Security Review

In most cases, consultant, contractor, and subcontractor reports will be unclassified. Should a report of classified work be required, however, the NRC program or project sponsor must work with the Division of Security to establish the appropriate classification procedures and inform the contractor.

## C. PROCEDURES FOR PRINTING AND DISTRIBUTING

1. Printing

Contractor documents may be printed only by a JCP authorized printing plant. Documents printed by the contractor and one reproducible master shall be submitted by the NRC program or project sponsor or the authorized contractor official to the Division of Technical Information and Document Control, with completed NRC Form 426. The number of copies specified by the agreement or contract for standard and incidental distribution shall be provided. The appropriate identifying number (NUREG/CR-\_\_\_\_) may be obtained as discussed in section A.2.b.(1).

2. Reprinting

Requests for reprinting of any document at NRC expense subsequent to the initial printing require approval of the Division of Technical Information and Document Control. The

\*This preferred positioning of the abstract in the document need not be followed if the style manual of the originating organization requires a different location.

request shall include a written justification for the reprinting and a list of recipients and their complete addresses.

3. Distribution of Documents

Each document transmitted to the Division of Technical Information and Document Control shall be accompanied by a recommendation for distribution on NRC Form 426 (Exhibit 5) and sufficient copies for standard and incidental distribution.



## PART IV

### GUIDELINES FOR PREPARATION OF MANUSCRIPTS AND REPRODUCIBLE MASTERS TO BE PRINTED BY NRC

#### A. INTRODUCTION

These guidelines provide instructions to U.S. Nuclear Regulatory Commission contractors for the preparation of reproducible masters (camera-ready copy) of reports submitted to NRC for printing or duplicating. They are intended for the use of NRC contractors that do not have written editorial standards for manuscript preparation. Organizations with established report preparation staffs and style manuals should use their own procedures and guidelines; this particularly applies to the DOE laboratories.

Adherence to these or similar established guidelines will insure the professional quality and timely publication of NRC contractor reports. Manuscripts submitted which do not adhere to these or similar professional guidelines will be reported to the program or project sponsor for appropriate contractual action by the contracting officer or, in the case of government agency or interagency agreement work, the publications manager of the performing organization.

Questions about the implementation of these guidelines should be addressed to NRC's Division of Technical Information and Document Control, Washington, D.C. 20555; (301) 492-7566.

#### B. ORDER OF ELEMENTS IN A REPORT

Organize the manuscript according to the following order of elements before submitting it to NRC.

Front Matter	<u>Element</u>	<u>Page Number</u>	<u>Right or Left Hand Page</u>
	Title page	none	Right
	Back of title page	none	Left
	Abstract	iii	Right
	Back of Abstract page	none	Left
	Table of Contents	v	Right
	List of Figures	Small Roman (odd or even)	Right or Left
	List of Tables	Small Roman (odd or even)	Right or Left
	Preface	Small Roman (odd)	Right
	Acknowledgments	Small Roman (odd)	Right
	Abbreviations and Symbols	Small Roman (odd)	Right

Back Matter	<u>Element</u>	<u>Page Number</u>	<u>Right or Left Hand Page</u>
	Introduction	Unnumbered, but considered Arabic 1	Right
	Text	Numbered consecutively throughout in Arabic numerals	Right
	References	Numbered consecutively throughout in Arabic numerals	Right
	Bibliography	Numbered consecutively throughout in Arabic numerals	Right or Left
	First Appendix	Numbered consecutively throughout in Arabic numerals	Right
	Glossary	Numbered consecutively throughout in Arabic numerals	Right or Left
	Distribution Lists	Numbered consecutively throughout in Arabic numerals	Right

When an element ends on a right-hand page and the next element is to start on a right-hand page, leave a blank unnumbered page and skip a number so that the right-hand page starts on an odd page. Right-hand pages are always assigned odd numbers, left-hand pages are always assigned even numbers.

### C. FRONT MATTER

#### 1. Cover, Title Page and Disclaimer

The appropriate cover and title page with the information specified in Part I of this Appendix shall accompany each reproducible master.

#### 2. Abstract

An abstract of 200 words or less shall appear in each report. The abstract shall summarize the major points of the report, including what investigations the report covers, and any findings, conclusions, and recommendations. For progress reports, concentrate on status of work to date. The preferred

location for the abstract is between the title page and the table of contents.

For conference proceedings, each paper shall include an abstract of 200 words or less. The abstract shall appear on the first text page of each paper between the title and the text.

3. Guides for Preparing an Abstract

The abstract is a condensed version of the document and should summarize or highlight the major points. It should never exceed one paragraph or 200 words, and should provide a review of the contents of the work in abbreviated form.

The abstract should state what was investigated and give any conclusions reached. A review of the major and minor headings of the report and, in particular, the introduction and conclusion section can be useful in deciding what information to include. The first sentence of the abstract should state the subject of the report.

The writing should be concise; that is, words and ideas that are either repetitious or unnecessary should not be used. Care should be taken, however, to include the article (a, an, the) and transitional words (and, however, but) that are important to readability. The language should be concise, but the abstract should not read like a telegram.

4. Summary

Contractor reports (other than short summary reports) should include a 500- to 1,000-word summary of major findings conclusions and recommendations (if any) of the report. The summary should state the purpose and nature of the investigation, as well as provide a brief account of the procedures used. It should provide a concise overview for persons in management positions. Though more complete than an abstract, the summary should not contain a detailed description of the work on which the findings, conclusions and recommendations were based.

The summary may appear as a separate section between the abstract and the table of contents. It may also be the final section of the text. When it appears between the abstract and table of contents, it is treated as front matter. When it appears as the final section of text, it should be listed in the table of contents and treated as text matter.

5. Table of Contents and Page Numbers

A table of contents shall be provided if the report contains more that 25 pages of text. The table of contents shall list all

major sections of the text, including the front matter. It shall include chapter or section numbers, as well as the title of and page number for each. (See Exhibits 8 and 9 for sample tables of contents.) In reports made up of chapters or papers by different authors, the table of contents shall list the name of each author with the title of the chapter or the paper (see Exhibit 10, for example).

When proofreading the table of contents, insure that the page numbers and wording of chapter and section titles are identical with those in the text.

6. List of Figures

A separate page listing figures shall be included when there are five or more figures in the report. The figure numbers and captions shall correspond to those in the text. Such a list is unnecessary for conference proceedings or symposium compilations.

7. List of Tables

A separate page listing tables shall be included if there are five or more tables in the report. The table numbers and titles shall correspond to those in the text. Such a list is unnecessary for conference proceedings or symposium compilations.

8. Preface (Optional)

The preface is the author's statement about the purpose, background, or scope of the work. It can also contain acknowledgments of help received during the course of the work, if the acknowledgments do not run over several paragraphs. The preface can also cite permission obtained for use of previously published work. The author's name shall appear at the end of the preface with his title, affiliation, and the date.

9. Acknowledgments

Unless they are more than one page long, acknowledgments shall appear in the preface.

Acknowledgments, if extensive, shall follow the preface on a separate page and carry a small Roman page number.

10. Previous Reports in Series

If the report under preparation is one in an ongoing series, list all previous reports in the series. Include report number and issuance dates.

Exhibit 8

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II. Abbreviations and Symbols

When the abbreviations and symbols used in the report are numerous, and when there is a possibility they will not be understood by the intended audience, include a separate section for them. The list, labeled as such, shall appear as the last item of the front matter on a new right-hand page.

## D. TEXT

1. Title of Report

The title of the report shall be repeated on the first page of text. It shall be centered at the top of the page, like a chapter or section title.

2. Introduction (Optional)

Not every report needs an introduction. Where background information essential to an understanding of the text is necessary, include an introduction. Otherwise, background information shall be included in the preface.

The introduction follows the preface (or acknowledgments), beginning on a new page. As the first text page, it shall be unnumbered but considered as page number 1. If there is no introduction, begin the report with the first major text heading, after repeating the report title.

3. Paper

Plain, white, bond paper shall be used. Company letterhead is not acceptable.

4. Typing Instructions

Paragraphs shall be single spaced and typed flush left in block style (no paragraph indentations). Double space between paragraphs, triple space before headings, and double space after headings.

5. Image Area

The image areas for typing shall be 6 x 8-1/2 in.

6. Page Numbering

Pages shall be numbered consecutively throughout, with small Roman numerals for all front matter and Arabic numerals for all text and back matter. The report will be printed on both sides of the paper; therefore, all left-hand pages must carry even numbers, and all right-hand pages, odd numbers.

New chapters may begin on a new page; either a left- or right-hand page. Page numbers shall be centered one-half inch above the bottom of the typing guide. Guidelines for numbering pages containing figures or tables are found in a later section on Graphic and Tabular Matter.

7. Photocopied Text

Pages reproduced by photocopying machines are not acceptable as camera-ready material. Photographically reproduced pages (using photographic print paper) are acceptable.

8. Footnotes

Footnotes in the body of the report shall be used only for explanatory material not extensive enough to comprise an appendix.

Notes citing references to literature used in the preparation of the report shall appear as part of the references (see item G, below).

Footnotes shall appear at the bottom of the text page between the last line of text and the page number; that is, the last line of the footnote shall be on the bottom line of the 6 x 8-1/2 in. typing guide. A double space shall appear between the last line of text and the first line of the footnote. A 20-space line shall appear above the first footnote.

Single, double or triple asterisks or daggers shall be used to mark footnotes in the text and at the bottom of the page.

E. BACK MATTER

I. References

- a. Format. Citations of source documents in technical and research reports shall be numbered consecutively in the order in which they appear in the text and collected in a reference section. For short reports (20 pages or less), the reference section shall appear at the end of the report directly following the text. For long reports, reference sections shall appear at the end of each chapter or major section. In either case, reference sections are labeled as such and may begin at the end of the text or on a new page. For reports with more than one reference section, if a citation appears in separate chapters or sections, it shall be repeated in each appropriate reference section.

Multiple line citations shall be typed single space, with double spacing between citations.

The second and subsequent lines of an entry shall be typed flush with the same margin as the first line so that the reference number stands out. (See item G for guidelines on how to cite specific references.)

- b. Availability Requirement. The provisions of 10 CFR 2.740 and 10 CFR 9.4 require that written, reproducible material used as source material in NRC regulatory and technical documents produced by its contractors and subcontractors be readily available for inspection and copying or be documents ordinarily available from a public library. Accordingly, reference citations must be presented in a format recognizable by a librarian. Citations to information not available in the open literature shall state where the document can be purchased or copied. Give purchase price, if known (see item G for guidelines).
- c. Proprietary and Classified Documents. When nonproprietary or unclassified (or declassifiable) information contained in proprietary or classified documents must be used as source material, it should be (1) inserted in the body of the text or as a footnote to the text, (2) copied and placed in an appendix, or (3) abstracted and made available for inspection and copying for a fee at the NRC Public Document Room. If alternative (3) is chosen, the abstract should be referenced in the reference list in the appropriate sequence.

In some instances, reference to classified or proprietary documents cannot be avoided because those documents are the only source for the material. The documents are required, however, to be withheld from the public. Nevertheless the public must be made aware that such documents served as the bases for the material presented. Accordingly, proprietary documents and classified documents (omit the title if the title is classified) may be referenced when necessary. This type of reference should include a statement such as the following: This document is not publicly available because it contains proprietary (or national security) information.

## 2. Bibliography

Citations of other documents pertinent to the subject but not referenced in the text shall be listed in a bibliography. Bibliographic entries shall be arranged alphabetically by personal or corporate author name.

The bibliography, labeled as such, shall follow the last reference section in the text and begin on a new page, either right or left.

3. Appendix

The appendix shall comprise information supplemental to the report. The types of material to be placed in the appendix are (a) explanations too long for footnotes but helpful to the reader seeking further assistance or clarification, (b) passages from documents or laws that support or illustrate the text, or (c) long charts or tables.

The first appendix shall appear on the first right-hand page directly after the reference section or bibliography. Each additional appendix shall begin on a new page, either right or left. Each appendix shall be identified by a title and heading centered above the text.

4. Glossary

A glossary shall be included if the report contains many terms that will be unfamiliar to the intended audience. Terms shall be arranged alphabetically, with each new entry beginning on a new line. Definitions shall follow the term on the same line, dictionary style.

The glossary, labeled as such, shall appear directly after the appendix, beginning on a new page, either right or left.

5. Distribution List

The distribution list shall cite the NRC distribution category and any supplemental distribution the report is to receive. The supplemental recipients shall be listed by title and complete address, including Zip Code. It shall begin on a right-hand page.

F. GRAPHIC AND TABULAR MATTER

1. Tables

Each table shall have a number, in Arabic numerals, and a title. The table number and title shall be centered above the table. Tables shall be numbered sequentially throughout the text or double-numbered by chapter, such as 1.4, 5.6, etc.

Tables shall be referred to in the text by number rather than by direction ("Table 4" rather than "the above table"). When a table must be continued from one page to the next, the table number ("Table 3, Continued") and the column headings shall be repeated at the head of the new page.

Pages containing full-page tables shall be numbered in the same manner as regular text pages.

## 2. Figures

Each figure shall have a number, in Arabic numerals, and a title. The figure number and title shall be placed below the figure. Figures shall be numbered sequentially throughout the text or doubled-numbered by chapter, such as 1.4, 5.6, etc.

Figures shall be referred to in the text by number rather than by direction ("Figure 3" rather than "the figure below").

Pages containing full-page figures shall be numbered in the same manner as regular text pages.

## 3. Photographs

Only continuous-tone glossy black and white prints are acceptable. The following types are not acceptable: color prints and prescreened or half-tone prints or plates. All photographs shall be mounted and the title, number, and page number placed on the page. Photographs shall be considered as figures with respect to numbers and title.

## 4. Special Graphics

Special graphics include oversized engineering drawings and foldouts. Instructions for handling special graphics shall be provided for each document, where appropriate.

# G. EXAMPLES OF REFERENCE CITATIONS

## 1. Correspondence

Letter from D. B. Blackman, Georgetown Municipal Utility, to R. A. Gilbert, NRC, Subject: Answers to NRC Questions on Docket 50-825, dated January 31, 1975. Available in NRC PDR for inspection and copying for a fee.

## 2. Internal Papers

Internal papers, such as technical notes and minutes of meetings should not be referenced unless they are already available in the NRC Public Document Room (PDR) or will be made available in the PDR prior to issuance of the report. For a technical note, list author (if any), title, and date, and state that it is "available in the NRC PDR for inspection and copying for a fee." The same format is applicable to minutes of meetings. Calculations and working papers should not be referenced. If the information in them is pertinent to the text of the report, it should be made part of the report as text, footnote, or appendix.



3. Personal Communications, Private Communications, Notes  
Regarding Visits

References of the following type should not be used:

J. G. Facer, ERDA Grand Junction Office, personal communication to M. B. Sears, Oak Ridge National Laboratory, December 16, 1975.

Staff visit to the Exxon mine waste dump, Converse County Wyoming, April 12, 1972.

In both instances place these remarks directly in the text, since they do not represent any retrievable information.

4. Procedures Manuals

Procedures manuals should not be referred to unless they are normally available. The citation should give sufficient information to indicate where they can be obtained. If specific procedures are pertinent, they can be reiterated in the text without reference to documents.

5. Government Agency Printed Documents and Drafts that Have  
Been Made Available to the Public for Comment

For draft reports:

U.S. Nuclear Regulatory Commission, "Draft Generic Environmental Statement on the Use of Recycle Plutonium in Mixed Oxide Fuel in Light Water Cooled Reactors," USNRC Report NUREG-0002, Vols. 1-5, April 1976. Available in NRC PDR for inspection and copying for a fee.

If specific pages are being referenced, insert volume and page numbers following the title; e.g., Vol. 4, pp. 10-20, 500-730.

For final reports:

U.S. Nuclear Regulatory Commission, "Final Generic Environmental Statement on the Use of Recycle Plutonium in Mixed Oxide Fuel in Light Water Cooled Reactors," USNRC Report NUREG-0002, Vols. 1-5, August 1976. Available for purchase from National Technical Information Service, Springfield, Virginia 22161.

R. O. Meyer, "The Analysis of Fuel Densification," USNRC Report NUREG-0085, p. 48, July 1976. Available for purchase from National Technical Information Service, Springfield, Virginia 22161.



6. NRC Contractor Reports and Reports Prepared on Interagency Agreements

M.A.M. Shinaishin, University of Arizona, "Dynamic Simulation of a Sodium-Cooled Fast Reactor Power Plant," p. 196, USNRC Report NUREG-0110, September 1976. Available for purchase from National Technical Information Service, Springfield, Virginia 22161.

G. L. Bordner and others, "Pretest Analysis SLSF In-Reactor Experiment 62," USNRC Accession No. 771090001, prepared for NRC by Argonne National Laboratory, October 1976. Available in NRC PDR for inspection and copying for a fee.

7. NRC Applicant Document

Exxon Nuclear Company, "Preliminary Safety Analysis Report," Vol. 3, p. 5.4-3, Nuclear Fuel Recovery and Recycling Center, Docket 50-564, April 1976. Available in NRC PDR for inspection and copying for a fee.

8. Project Documents

The format given in item G.7 for applicant documents may be used for project documents, with the docket number replaced by the project number.

9. Licensee Documents

The format given in item G.7 for applicant documents may be used for licensee documents, with the docket number or the license number.

10. Books

S. Glasstone, Sourcebook on Atomic Energy, p. 155, D. Van Nostrand Co., Inc. New York, 1974.

II. Conference Papers

Unpublished conference papers should not be referenced. The information being used should be stated in the text and credit to the originator given in text or footnote. If the originator can supply a paper, it may be placed in an appendix and mentioned in the text.

Published conference papers should be referenced as follows:

J. L. Russell, "Potential Environmental Advantages from Partitioning of Radioactive Waste," p. 83 in Proceedings of

the Conference on the Management of Radioactive Waste: Waste Partitioning as an Alternative, USNRC Conference Report CONF-001, June 1976. Available for purchase from National Technical Information Service, Springfield, Virginia 22161.

12. Journal Articles, Magazine Articles, Newspaper Articles

S. D. Shearer and C. W. Still, "Evaluation of Atmospheric Radon in the Vicinity of Uranium Mill Tailings," Health Physics 17, 77-88 (1976). Available in public technical libraries.

"Why the Nuclear Power Race Worries the U.S.," p. 68, Business Week, August 23, 1976. Available in public libraries.

"Argentina Says It Has Atom Fuel To Triple Its Electrical Capacity," p. 53, The New York Times, August 31, 1976. Available in public libraries.

13. University Theses

J. J. Jacobs, "Programming Language I for the Varian PLCU," Master's Thesis, p. 70, North Carolina University, 1971.

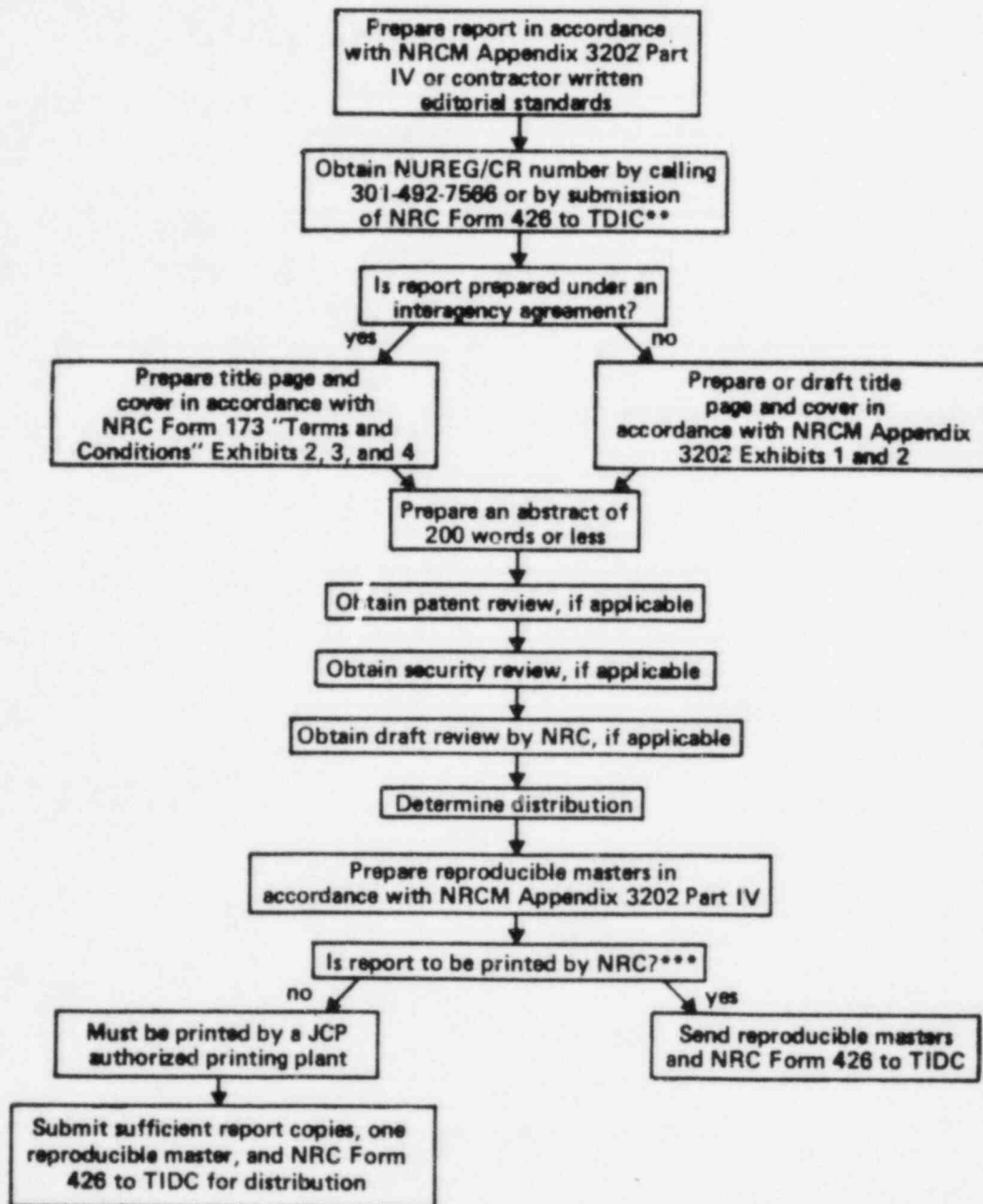
14. Codes and Standards

"American National Standard Requirements for Collection, Storage and Maintenance of Quality Assurance Records for Nuclear Power Plants," ANSI N45.2.9 1974. Available from American National Standards Institute, 1430 Broadway, New York, N.Y. 10018, Copyrighted.

"Draft American National Standard Requirements for Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants," ANSI N45.2.9, Rev. 1, Draft 1, February 1976. Available from The American Society of Mechanical Engineers, 345 East 47th Street, New York, N.Y. 10017.

Exhibit 11  
U. S. Nuclear Regulatory Commission  
PROCEDURES FOR PUBLICATION OF  
FORMAL CONTRACTOR DOCUMENTS\*

NRC Appendix 3202



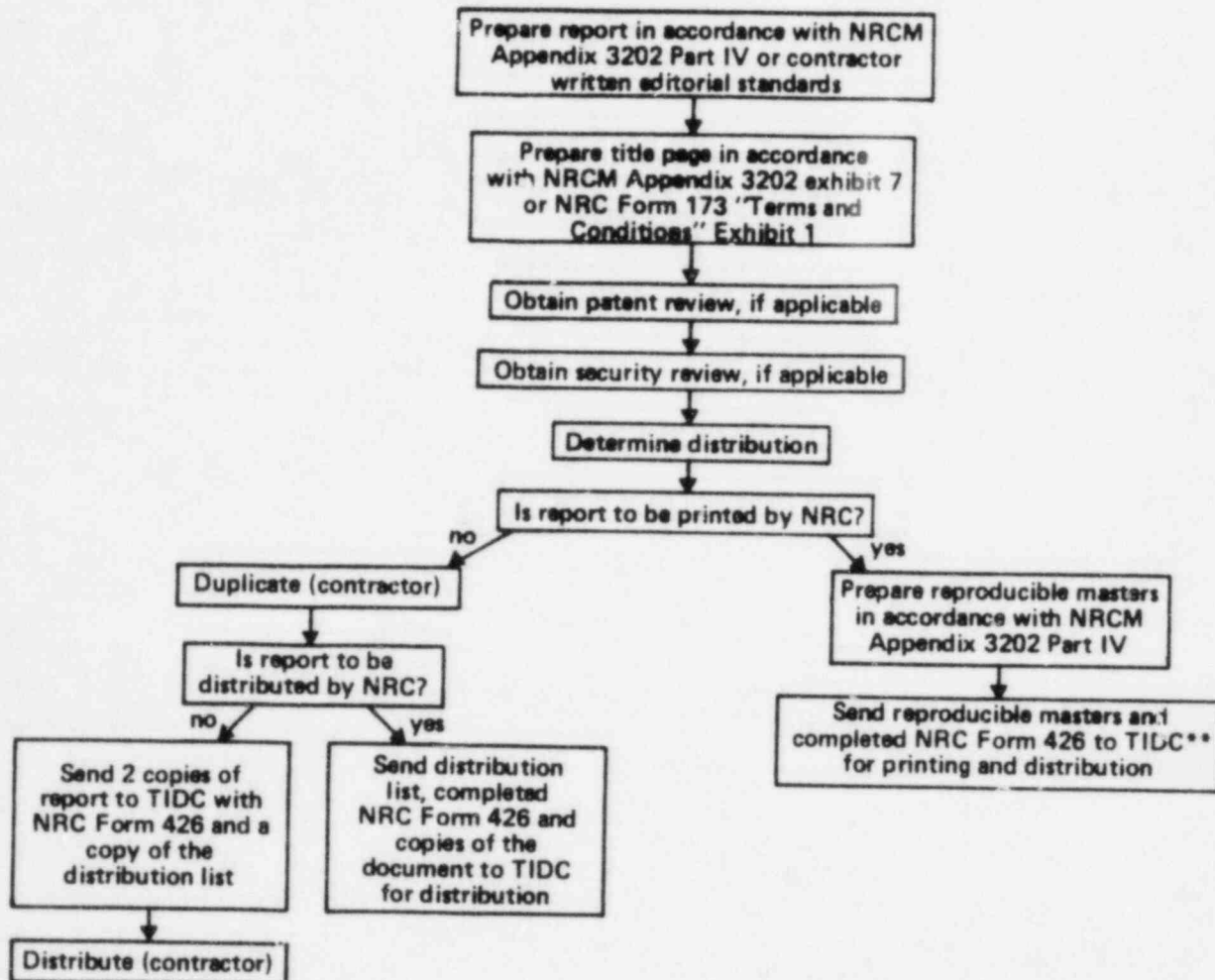
\*See NRCM 3202 or NRC Form 173 "Terms and Conditions," item 12, for definition. Complete procedures (NRCM 3202) and forms may be obtained by calling 301-492-7566.

\*\*Division of Technical Information and Document Control, Landow 212, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555.

\*\*\*If DOE contractor, see NRC Form 173 "Terms and Conditions," item 12, for printing authorizations. If not DOE contractor or other government agency, printing must be done by NRC.

Contact: 1. NRC Technical Monitor for contract or Standard Order for Work.

2. Division of Technical Information and Document Control, Telephone 301-492-7566.

U. S. Nuclear Regulatory Commission  
PROCEDURES FOR ISSUANCE OF  
INTERIM CONTRACTOR REPORTS\*

\*Send NRCM 3202 or NRC Form 173 "Terms and Conditions," item 12, for definition. Complete procedures (NRCM 3202) and forms may be obtained by calling 301-492-7566.

\*\*Division of Technical Information and Document Control, Landow 212, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555.

Contact: 1. NRC Technical Monitor for contract or Standard Order for Work.

2. Division of Technical Information and Document Control, Telephone 301-492-7566.