

U. S. NUCLEAR REGULATORY COMMISSION
NRC MANUAL

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

ADM

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

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

THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

8006020519

- 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.

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.

- (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.

Approved: January 25, 1978

- 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.

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.

NRC Appendix 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

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

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-2101.
- 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

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. Catton

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

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

1. 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: _____

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.

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

Prepared for
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
Under Interagency Agreement DOE 40-550-75
NRC FIN No. A12347
INTERIM REPORT

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.

	<u>Element</u>	<u>Page Number</u>	<u>Right or Left Hand Page</u>
Front Matter	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

	<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
Back Matter	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 than 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.

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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

1. 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

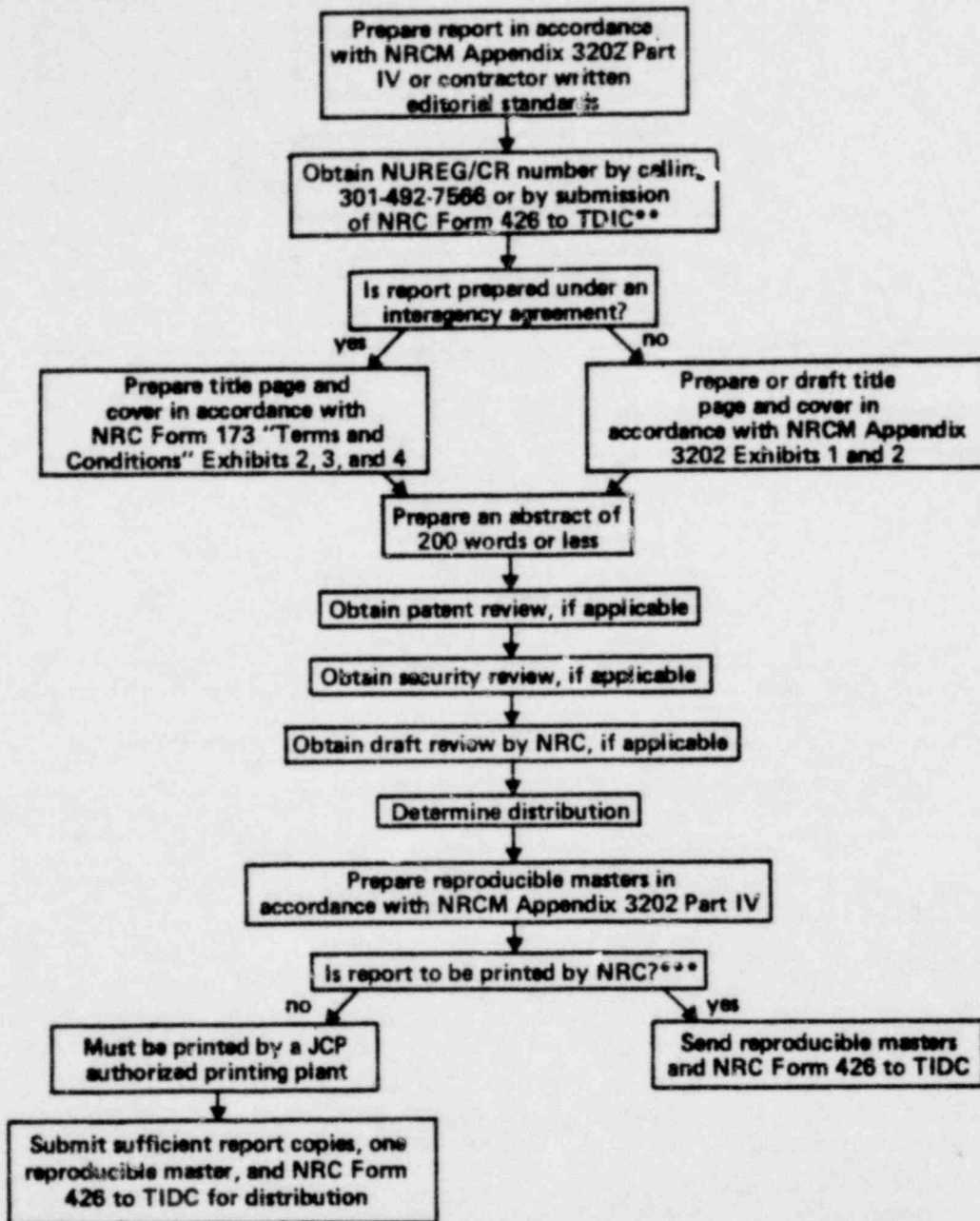
J. J. Jacobs, "Programming Language I for the Varian PLCU," Master's Thesis, p. 70, North Carolina University, 1971.

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*



*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.

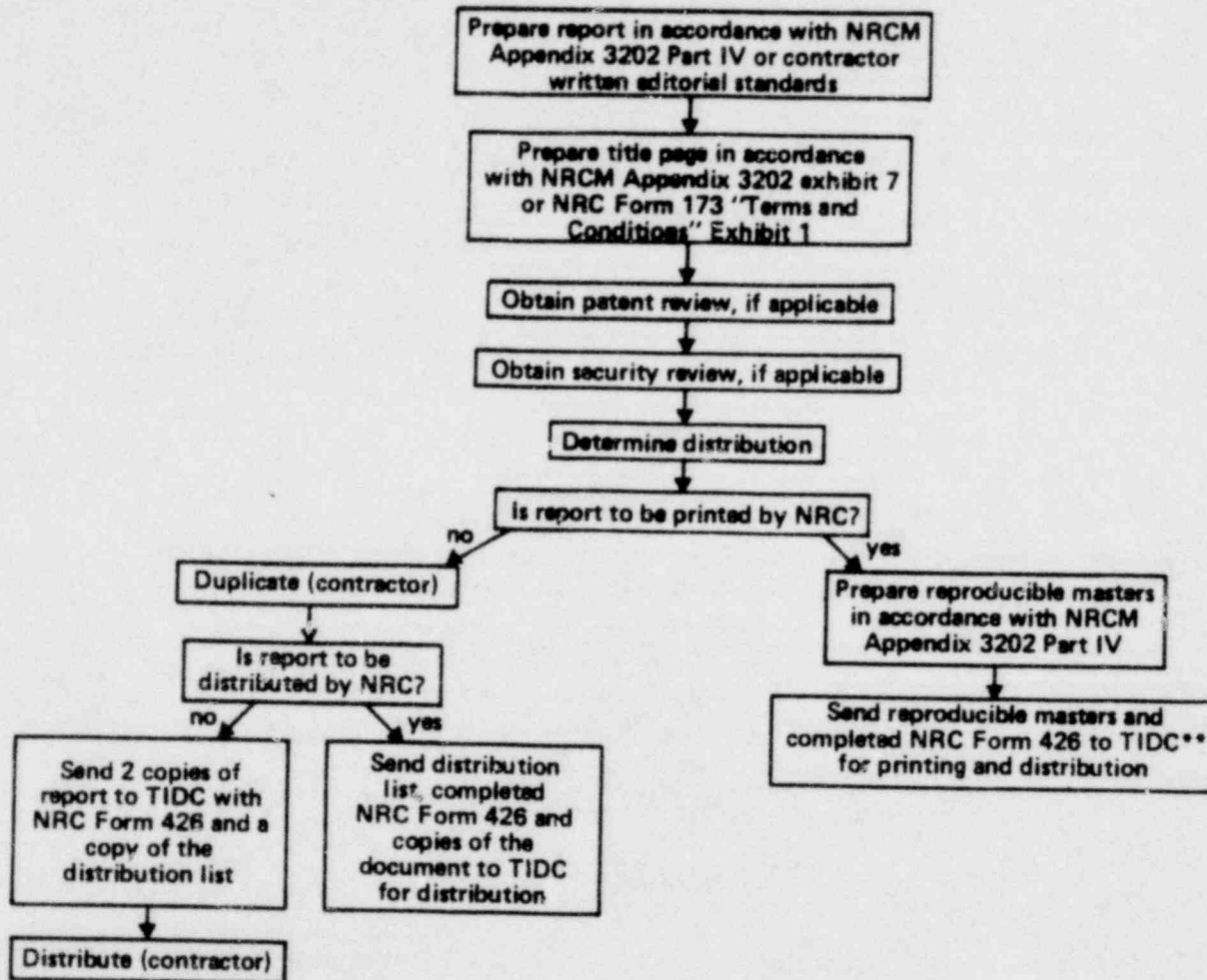
**Division of Technical Information and Document Control, Landow 212, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555.

***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.

APPENDIX A - GENERAL PROVISIONS

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APPENDIX A
U. S. NUCLEAR REGULATORY COMMISSION
GENERAL PROVISIONS FOR COST-TYPE CONTRACTS

Contracts with Concerns Other Than Educational Institutions

1. DEFINITIONS (1-7.102-1 and 9-7.5005-4)

As used throughout this contract, the following terms shall have the meaning set forth below:

(a) The term, "head of the agency" or "Secretary" as used herein means the Secretary, the Under Secretary, and Assistant Secretary, or any other head or assistant head of the executive or military department or other Federal agency; and the term "his duly authorized representative" means any person or persons or board (other than the Contracting Officer) authorized to act for the head of the agency or the secretary.

(b) The term "Commission" means the United States Nuclear Regulatory Commission or any duly authorized representative thereof, including the Contracting Officer except for the purpose of deciding an appeal under the article entitled "Disputes."

(c) The term "Contracting Officer" means the person executing this contract on behalf of the Government, and any other officer or civilian employee who is a properly designated Contracting Officer; and the term includes, except as otherwise provided in this contract, the authorized representative of a Contracting Officer acting within the limits of his authority.

(d) Except as otherwise provided in this contract, the term "subcontracts" includes purchase orders under this contract.

2. CHANGES (1-7.404-5)

(a) The Contracting Officer may at any time, by a written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

- (i) Drawings, designs, or specifications;
- (ii) Method of shipment or packing; and
- (iii) Place of inspection, delivery, or acceptance.

(b) If any such change causes an increase or decrease in the estimated cost of, or the time required for the performance of any part of the work under this contract, whether changed or not changed by any such order, or otherwise affects any other provision of this contract, an equitable adjustment shall be made:

- (i) In the estimated cost or delivery schedule, or both;

(ii) In the amount of any fixed fee to be paid to the Contractor; and

(iii) In such other provisions of the contract as may be affected, and the contract shall be modified in writing accordingly.

Any claim by the Contractor for adjustment under this clause must be asserted within thirty (30) days from the date of receipt by the Contractor of the notification of change; Provided, however, That the Contracting Officer, if he decides that the facts justify such action, may receive and act upon any such claim asserted at any time prior to final payment under this contract. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes." However, except as provided in paragraph (c) below, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

(c) Notwithstanding the provisions of paragraphs (a) and (b) above, the estimated cost of this contract and, if this contract is incrementally funded, the funds allotted for the performance thereof, shall not be increased or deemed to be increased except by specific written modification of the contract indicating the new contract estimated cost and, if this contract is incrementally funded, the new amount allotted to the contract. Until such modification is made, the Contractor shall not be obligated to continue performance or incur costs beyond the point established in the clause of this contract entitled "Limitation of Cost" or "Limitation of Funds."

3. LIMITATION OF FUNDS (1-7.202-3(b) and 1-7.402-2(c))

(Applicable to Contracts which are incrementally funded)

(a) It is estimated that the cost to the Government for the performance of this contract will not exceed the estimated cost set forth in the Schedule, and the Contractor agrees to use his best efforts to perform the work specified in the Schedule and all obligations under this contract within such estimated cost.

(b) The amount presently available for payment and allotted to this contract, the items covered thereby, the period of performance which it is estimated the allotted amount will cover, are specified in the Schedule. It is contemplated that from time to time additional funds will be allotted to this contract up to the full estimated cost set forth in the Schedule, exclusive of any fee. The Contractor agrees to perform or have performed work on this contract up to the point at which the total amount paid and payable by the Government pursuant to the terms of this contract approximates but does not exceed the total amount actually allotted to the contract.

(c) If at any time the Contractor has reason to believe that the costs which he expects to incur in the performance of this contract in the next succeeding 60 days, when added to all costs previously incurred, will exceed

75 percent of the total amount then allotted to the contract, the Contractor shall notify the Contracting Officer in writing to that effect. The notice shall state the estimated amount of additional funds required to continue performance for the period set forth in the Schedule. Sixty days prior to the end of the period specified in the Schedule the Contractor will advise the Contracting Officer in writing as to the estimated amount of additional funds, if any, that will be required for the timely performance of the work under the contract or for such further period as may be specified in the Schedule or otherwise agreed to by the parties. If, after such notification, additional funds are not allotted by the end of the period set forth in the Schedule or an agreed date substituted therefor, the Contracting Officer will, upon written request by the Contractor, terminate this contract pursuant to the provisions of the Termination clause on such date. If the Contractor, in the exercise of his reasonable judgment, estimates that the funds available will allow him to continue to discharge his obligations hereunder for a period extending beyond such date, he shall specify the later date in this request and the Contracting Officer, in his discretion, may terminate this contract on that later date.

(d) Except as required by other provisions of this contract specifically citing and stated to be an exception from this clause, the Government shall not be obligated to reimburse the Contractor for costs incurred in excess of the total amount from time to time allotted to the contract and the Contractor shall not be obligated to continue performance under the contract (including actions under the Termination clause) or otherwise to incur costs in excess of the amount allotted to the contract, unless and until the Contracting Officer has notified the Contractor in writing that such allotted amount has been increased and has specified in such notice an increased amount constituting the total amount then allotted to the contract. To the extent the amount allotted exceeds the estimated cost set forth in the Schedule, such estimated cost shall be correspondingly increased. No notice, communication, or representation in any other form or from any person other than the Contracting Officer shall affect the amount allotted to this contract. In the absence of the specified notice, the Government shall not be obligated to reimburse the Contractor for any costs in excess of the total amount then allotted to the contract, whether those excess costs were incurred during the course of the contract or as a result of termination. When and to the extent that the amount allotted to the contract has been increased, any costs incurred by the Contractor in excess of the amount previously allotted shall be allowable to the same extent as if such costs had been incurred after such increase in the amount allotted; unless the Contracting Officer issues a termination or other notice and directs that the increase is solely for the purpose of covering termination or other specified expenses.

(e) Change orders issued pursuant to the Changes clause of this contract shall not be considered an authorization to the Contractor to exceed the amount allotted in the Schedule in the absence of a statement in the change order, or other contract modification, increasing the amount allotted.

(f) Nothing in this clause shall affect the right of the Government to terminate this contract. In the event this contract is terminated, the Government and the Contractor shall negotiate an equitable distribution of all property produced or purchased under the contract based upon the share of costs incurred by each.

(g) In the event that sufficient funds are not allotted to this contract to allow completion of the work contemplated by this contract, the Contractor shall be entitled to that percentage of the fee set forth in the Schedule equivalent to the percentage of completion of the work contemplated by this contract.

4. LIMITATION OF COST (1-7.202-3(a) and 1-7.402-2(a))

(Applicable to Contracts which are fully funded only)

(a) It is estimated that the total cost to the Government for the performance of this contract, exclusive of any fee, will not exceed the estimated cost set forth in the Schedule, and the Contractor agrees to use his best efforts to perform the work specified in the Schedule and all obligations under this contract within such estimated cost. If, at any time, the Contractor has reason to believe that the costs which he expects to incur in the performance of this contract in the next succeeding 60 days, when added to all costs previously incurred, will exceed 75 percent of the estimated cost then set forth in the Schedule, or if, at any time, the Contractor has reason to believe that the total cost of the Government for the performance of this contract, exclusive of any fee, will be greater or substantially less than the then estimated cost hereof, the Contractor shall notify the Contracting Officer in writing to that effect, giving the revised estimate of such total cost for the performance of this contract.

(b) Except as required by other provisions of this contract specifically citing and stated to be an exception from this clause, the Government shall not be obligated to reimburse the Contractor for costs incurred in excess of the estimated cost set forth in the Schedule, and the Contractor shall not be obligated to continue performance under the contract (including actions under the Termination clause) or otherwise to incur costs in excess of the estimated cost set forth in the Schedule, unless and until the Contracting Officer shall have notified the Contractor in writing that such estimated cost has been increased and shall have specified in such notice a revised estimated cost which shall thereupon constitute the estimated cost of performance of this contract. No notice, communication, or representation in any other form or from any person other than the Contracting Officer shall affect the estimated cost of this contract. In the absence of the specified notice, the Government shall not be obligated to reimburse the Contractor for any costs in excess of the estimated cost set forth in the Schedule, whether those excess costs were incurred during the course of the contract or as a result of termination. When and to the extent that the estimated cost set forth in the Schedule has been increased, any costs incurred by the Contractor in excess of the estimated cost prior to such increase shall be allowable to the same extent as if such costs had been incurred after the increase; unless the Contracting Officer issues a termination or other notice and directs that the increase is solely for the purpose of covering termination or other specified expenses.

(c) Change orders issued pursuant to the Changes clause of this contract shall not be considered an authorization to the Contractor to exceed the estimated cost set forth in the Schedule in the absence of a statement in the change order, or other contract modification, increasing the estimated cost.

(d) In the event that this contract is terminated or the estimated cost not increased, the Government and the Contractor shall negotiate and equitable distribution of all property produced or purchased under the contract based upon the share of costs incurred by each.

5. ALLOWABLE COST, FIXED-FEE AND PAYMENT. (1-7.202-4) and (1-7.402-3)

(a) For the performance of this contract, the Government shall pay to the Contractor:

(1) The cost thereof (hereinafter referred to as "allowable cost") determined by the Contracting Officer to be allowable in accordance with:

(i) Subpart 1.15.2 of the Federal Procurement Regulations (41 CFR 1-15.2), as in effect on the date of this contract; and

(ii) The terms of this contract; and

(2) Such fixed-fee, if any, as may be provided for in the Schedule.

(b) Payments shall be made to the Contractor when requested as work progresses, but not more frequently than bi-weekly, in amounts approved by the Contracting Officer. The Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as such representative may require, an invoice or public voucher supported by a statement of cost for the performance of this contract and claimed to constitute allowable cost. For this purpose, except as provided herein with respect to pension contributions, the term "costs" shall include only those recorded costs which result, at the time of the request for reimbursement, from payment by cash, check, or other form of actual payment for items or services purchased directly for the contract, together with (when the Contractor is not delinquent in payment of costs of contract performance in the ordinary course of business) costs incurred, but not necessarily paid, for materials which have been issued from the Contractor's stores inventory and placed in the production process for use on the contract, for direct labor, for direct travel, for other direct inhouse costs, and for properly allocable and allowable indirect costs, as is shown by records maintained by the Contractor for purposes of obtaining reimbursements under Government contracts plus the amount of progress payments which have been paid to the Contractor's subcontractors under similar cost standards. In addition, when pension contributions are paid by the Contractor to the retirement fund less frequently than quarterly, accrued costs therefore shall be excluded from indirect costs therefore for payment purposes until such costs are paid. If pension contributions are paid on a quarterly or more frequent basis, accruals therefor may be included in indirect costs for payment purposes provided that they are paid to the fund within 30 days after the close of the period covered. If payments are not made to the fund within such 30-day period, pension contribution costs shall be excluded from indirect cost for payment purposes until payment has been made. The restriction on payment more frequently than bi-weekly and the requirement of prior payment for items or services purchased directly for the contract shall not apply when the Contractor is a small business concern.

(c) Promptly after receipt of each invoice or voucher and statement of cost, the Government shall, except as otherwise provided in this contract

subject to the provisions of (d), below, make payment thereon as approved by the Contracting Officer. Payment of the fixed-fee, if any, shall be made to the Contractor as specified in the Schedule: Provided, however, That after payment of 35 percent of the fixed-fee set forth in the Schedule, the Contracting Officer may withhold further payment of fee until a reserve shall have been set aside in an amount which he considers necessary to protect the interests of the Government, but such reserve shall not exceed 15 percent of the total fixed-fee, or \$100,000, whichever is less.

(d) At any time or times prior to final payment under this contract the Contracting Officer may have the invoices or vouchers and statements of cost audited. Each payment theretofore made shall be subject to reduction for amounts included in the related invoice or voucher which are found by the Contracting Officer, on the basis of such audit, not to constitute allowable cost. Any payment may be reduced for overpayments, or increased for underpayments, on preceding invoices or vouchers.

(e) On receipt and approval of the invoice or voucher designated by the Contractor as the "completion invoice" or "completion voucher" and upon compliance by the Contractor with all the provisions of this contract (including without limitation, the provisions relating to patents and the provisions of (f), below), the Government shall promptly pay to the Contractor any balance of allowable cost, and any part of the fixed-fee, which has been withheld pursuant to (c), above, or otherwise not paid to the Contractor. The completion invoice or voucher shall be submitted by the Contractor promptly following completion of the work under this contract but in no event later than 1 year (or such longer periods as the Contracting Officer may in his discretion approved in writing) from the date of such completion.

(f) The Contractor agrees that any refunds, rebates, credits, or other amounts (including any interest thereon) accruing to or received by the Contractor or any assignee under this contract shall be paid by the Contractor to the Government, to the extent that they are properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract. Reasonable expenses incurred by the Contractor for the purpose of securing such refunds, rebates, credits, or other amounts shall be allowable costs hereunder when approved by the Contracting Officer. Prior to final payment under this contract, the Contractor and each assignee under this contract whose assignment is in effect at the time of final payment under this contract shall execute and deliver:

(1) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including any interest thereon), properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(2) A release discharging the Government its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, subject only to the following exceptions:

(i) Specified claims in stated amounts or in estimated amounts where the amounts are not susceptible of exact statement by the Contractor;

(ii) Claims, together with reasonable expenses incidental thereto, based upon liabilities of the Contractor to third parties arising out of the performance of this contract: provided, however, that such claims are not known to the Contractor on the date of the execution of the release; and provided further, that the Contractor gives notice of such claims in writing to the Contracting Officer not more than 6 years after the date of the release or the date of any notice to the Contractor that the Government is prepared to make final payment, whichever is earlier; and

(iii) Claims for reimbursement of costs (other than expenses of the Contractor by reason of its indemnification of the Government against patent liability), including reasonable expenses incidental thereto, incurred by the Contractor under the provisions of this contract relating to patents.

(g) Any costs incurred by the Contractor under the terms of this contract which would constitute allowable cost under the provisions of this clause shall be included in determining the amount payable under this contract, notwithstanding any provisions contained in the specifications or other documents incorporated in the contract by reference, designating services to be performed or materials to be furnished by the Contractor at his expense or without cost to the Government.

6. STANDARDS OF WORK (1-7.402-4)

The Contractor agrees that the performance of work and services pursuant to the requirements of this contract shall conform to high professional standards.

7. INSPECTION AND CORRECTION OF DEFECTS (1-7.402-5)

(a) All work under this contract shall be subject to inspection and test by the Government (to the extent practicable) at all times (including the period of performance) and places, and in any event prior to acceptance. The Contractor shall provide and maintain an inspection system acceptable to the Government covering the work hereunder. The Government, through any authorized representative, may inspect the plant or plants of the Contractor or of any of his subcontractors engaged in the performance of this contract. If any inspection or test is made by the Government on the premises of the Contractor or a subcontractor the Contractor shall provide and shall require subcontractors to provide all reasonable facilities and assistance for the safety and convenience of the Government inspectors in the performance of their duties. All inspections and tests by the Government shall be performed in such a manner as will not unduly delay the work. Except as otherwise provided in this contract, final inspection and acceptance shall be made at the place of delivery as promptly as practicable after delivery and shall be deemed to have been made no later than 90 days after the date of such delivery, if acceptance has not been made earlier within such period.

(b) At any time during performance of this contract, but not later than 6 months (or such other time as may be provided in the Schedule) after acceptance of all of the end items (other than designs, drawings, or reports) to be delivered under this contract, the Government may require the Contractor to remedy by correction or replacement, as directed by the Contracting Officer, any failure by the Contractor to comply with the requirements of this contract. Any time devoted to such correction or replacement shall not be included in the computation of the period of time specified in the preceding sentence, except as provided in (d), below, except as otherwise provided in paragraph (c), below, the allowability of the cost of any such replacement or correction shall be determined as provided in the clause of this contract entitled "Allowable Cost, Fixed Fee, and Payment," but no additional fee shall be payable with respect thereto. Corrected articles shall not be tendered again for acceptance unless the former tender and the requirement of correction is disclosed. If the Contractor fails to proceed with reasonable promptness to perform such replacement or correction, the Government (1) may by contract or otherwise perform such replacement or correction and charge to the Contractor any increased cost occasioned the Government thereby..or may reduce any fixed fee payable under the contract (or require repayment of any fixed fee theretofore paid) in such amount as may be equitable under the circumstances, or (2) in the case of articles not delivered, may require the delivery of such articles, and shall have the right to reduce any fixed fee payable under this contract (or to require repayment of any fixed fee theretofore paid) in such amount as may be equitable under the circumstances, or (3) may terminate this contract for default. Failure to agree to the amount of any such increased cost to be charged to the Contractor or to such reduction in, or repayment of, the fixed fee, shall be deemed to be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes."

(c) Notwithstanding the provisions of paragraph (b), above, the Government may at any time require the Contractor to remedy by correction or replacement, without cost to the Government, any failure by the Contractor to comply with the requirements of this contract, if such failure is due to fraud, lack of good faith, or willful misconduct on the part of any of the Contractor's directors or officers, or on the part of any of his managers, superintendents, or other equivalent representatives, who has supervision or direction of (1) all or substantially all of the Contractor's business, or (2) all or substantially all of the Contractor's operations at any one plant or separate location in which this contract is being performed, or (3) a separate and complete major industrial operation in connection with the performance of this contract. The Government may at any time also require the Contractor to remedy by correction or replacement, without cost to the Government, any such failure caused by one or more individual employees selected or retained by the Contractor after any such supervisory personnel has reasonable grounds to believe that any employee is habitually careless or otherwise unqualified.

(d) The provisions of paragraph (b), above, shall apply to any corrected or replacement and item or component until 6 months after its acceptance.

(e) The Contractor shall make his records of all inspection work available to the Government during the performance of this contract and for such longer period as may be specified in this contract.

(f) Except as provided in this clause and as may be provided in the Schedule, the Contractor shall have no obligation or liability to correct or replace articles which at the time of delivery are defective in material or workmanship or otherwise not in conformity with the requirements of this contract.

(g) Except as otherwise provided in the Schedule, the Contractor's obligation to correct or replace Government-furnished property (which is property in the possession of or acquired directly by the Government and delivered or otherwise made available to the Contractor) shall be governed by the provisions of the clause of this contract entitled "Government Property."

8. ASSIGNMENT (9-7.5006-46)

Neither this contract nor an interest therein nor claim thereunder shall be assigned or transferred by the contractor except as expressly authorized in writing by the Contracting Officer.

9. EXAMINATION OF RECORDS BY COMPTROLLER GENERAL (1-7. 103-3 and 9-7.5004-10)

(a) This clause is applicable if the amount of this contract exceeds \$10,000 and was entered into by means of negotiation, including small business restricted advertising, but is not applicable if this contract was entered into by means of formal advertising.

(b) The contractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of 3 years after final payment under this contract unless the Commission authorizes their prior disposition, have access to and the right to examine any directly pertinent books, documents, papers, and records of the contractor involving transactions related to this contract.

(c) The contractor further agrees to include in all his subcontracts hereunder a provision to the effect that the subcontractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of 3 years after final payment under the subcontract unless the Commission authorizes their prior disposition, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor, involving transactions related to the subcontract. The term "subcontract" as used in this clause excludes (1) purchase orders not exceeding \$10,000 and (2) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

(d) The periods of access and examination described in (b) and (c), above, for records which relate to (1) appeals under the "Disputes" clause of this contract, (2) litigation or the settlement of claims arising out of the performance of this contract, or (3) costs and expenses of this contract as to which exception has been taken by the Comptroller General or any of his duly authorized representatives, shall continue until such appeals, litigation, claims, or exceptions have been disposed of.

(e) Nothing in this contract shall be deemed to preclude an audit by the General Accounting Office of any transaction under this contract.

10. SUBCONTRACTS (1-7.402-8)

(a) The Contractor shall notify the Contracting Officer reasonably in advance of entering into any subcontract which (1) is cost-reimbursement type, time and materials, or labor-hour, or (2) is fixed-price type and exceeds in dollar amount either \$25,000 or 5 percent of the total estimated cost of this contract, or (3) provides for the fabrication, purchase, rental, installation, or other acquisition of special test equipment having a value in excess of \$1,000 or of any items of industrial facilities, or (4) has experimental, developmental or research work as one of its purposes.

(b) In the case of a proposed subcontract which is (1) cost-reimbursement type, time and materials, or labor-hour which would involve an estimated amount in excess of \$10,000, including any fee, (2) is proposed to exceed \$100,000, or (3) is one of a number of subcontracts under this contract with a single subcontractor for the same or related supplies or services which, in the aggregate are expected to exceed \$100,000, the advance notification required by (a), above, shall include:

(1) A description of the supplies or services to be called for by the subcontract;

(2) Identification of the proposed subcontractor and an explanation of why and how the proposed subcontractor was selected, including the degree of competition obtained;

(3) The proposed subcontract price, together with the Contractor's cost or price analysis thereof;

(4) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data when such data and certificate are required by other provisions of this contract to be obtained from the subcontractor;

(5) Identification of the type of subcontract to be used;

(6) A memorandum of negotiation which sets forth the principal elements of the subcontract price negotiations. A copy of this memorandum shall be retained in the Contractor's file for the use of Government reviewing authorities. The memorandum shall be in sufficient detail to reflect the most significant considerations controlling the establishment of initial or revised prices. The memorandum should include an explanation of why cost or pricing data was, or was not required, and, if it was not required in the case of any price negotiation in excess of \$100,000, a statement of the basis for determining that the price resulted from or was based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. If cost or pricing data was submitted and a certificate of cost or pricing data was required, the memorandum shall reflect the extent to which reliance was not placed upon the factual cost or pricing data submitted and the extent to which this data was not used by the Contractor in determining the total price objective and in negotiating the final price. The memorandum shall also reflect the extent to which it was recognized in the negotiation that any cost or pricing data submitted by the subcontractor was not accurate, complete, or current; the action taken by the Contractor and the subcontractor as a result; and the effect, if any, of such defective data on the total price negotiated. Where the total price negotiated differs significantly from the Contractor's total price objective, the memorandum shall explain this difference;

(7) When incentives are used, the memorandum of negotiation shall contain an explanation of the incentive fee/profit plan identifying each critical performance element, management decisions used to quantify each incentive element, reasons for incentives on particular performance characteristics, and a brief summary of trade-off possibilities considered as to cost, performance, and time; and

(8) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract to be obtained from the subcontractor.

(c) The Contractor shall obtain the written consent of the Contracting Officer prior to placing any subcontract for which advance notification is required under (a) above. The Contracting Officer may, in his discretion, ratify in writing any such subcontract; such action shall constitute the consent of the Contracting Officer as required by this paragraph (c).

(d) The Contractor agrees that no subcontract placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis.

(e) The Contracting Officer may, in his discretion, specifically approve in writing any of the provisions of a subcontract. However, such approval or the consent of the Contracting Officer obtained as required by this clause shall not

be construed to constitute a determination of the allowability of any cost under this contract, unless such approval specifically provides that it constitutes a determination of the allowability of such cost.

(f) The Contractor shall give the Contracting Officer immediate notice in writing of any action or suit filed, and prompt notice of any claim made against the Contractor by any subcontractor or vendor which in the opinion of the Contractor, may result in litigation, related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(g) Notwithstanding (c) above, the Contractor may enter into subcontracts within (i) or (ii) of (a) above, without the consent of the Contracting Officer, if the Contracting Officer has approved in writing the Contractor's procurement system and the subcontract is within the scope of such approval. (This subparagraph (g) however, shall not be applicable to those subcontracts subject to paragraph (j) below, if any.)

(h) To facilitate small business participation in subcontracting under this contract, the Contractor agrees to provide progress payments on the fixed-price types of subcontracts of those subcontractors which are small business concerns, in conformity with the standards for customary progress payments stated in the Federal Procurement Regulations, Subpart 1-30.5, as in effect on the date of this contract. The Contractor further agrees that the need for such progress payments will not be considered as a handicap or adverse factor in the award of subcontracts.

(i) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum extent consistent with the objectives and requirements of this Contract.

11. UTILIZATION OF SMALL BUSINESS CONCERNS (1-1.710-3(a))

(Applicable to contracts exceeding \$10,000)

(a) It is the policy of the Government as declared by the Congress that a fair proportion of the purchases and contracts for supplies and services for the Government be placed with small business concerns.

(b) The contractor agrees to accomplish the maximum amount of subcontracting to small business concerns that the contractor finds to be consistent with the efficient performance of this contract.

12. TERMINATION FOR DEFAULT OR FOR CONVENIENCE OF THE GOVERNMENT (1-8.702)

(a) The performance of work under the contract may be terminated by the Government in accordance with this clause in whole, or from time to time in part:

(1) Whenever the contractor shall default in performance of this contract in accordance with its terms (including in the term "default" any such failure by the contractor to make progress in the prosecution of the work hereunder as endangers such performance), and shall fail to cure such default within a period of ten days (or such longer period as the Contracting Officer may allow) after receipt from the Contracting Officer of a notice specifying the default; or

(2) Whenever for any reason the Contracting Officer shall determine that such termination is in the best interest of the Government.

Any such termination shall be effected by delivery to the contractor of a Notice of Termination specifying whether termination is for the default of the contractor or for the convenience of the Government, the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective. If, after notice of termination of this contract for default under (1) above, it is determined for any reason that the contractor was not in default pursuant to (1), or that the contractor's failure to perform or to make progress in performance is due to causes beyond the control and without the fault or negligence of the contractor pursuant to the provisions of the clause of this contract relating to excusable delays, the Notice of Termination shall be deemed to have been issued under (2) above, and the rights and obligations of the parties hereto shall in such event be governed accordingly.

(b) After receipt of a Notice of Termination and except as otherwise directed by the Contracting Officer, the contractor shall:

(1) Stop work under the contract on the date and to the extent specified in the Notice of Termination;

(2) Place no further orders or subcontracts for materials, services, or facilities, except as may be necessary for completion of such portion of the work under the contract as is not terminated;

(3) Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the Notice of Termination;

(4) Assign to the Government, in the manner and to the extent directed by the Contracting Officer, all of the right, title, and interest of the contractor under the orders or subcontracts so terminated, in which case the Government shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

(5) With the approval or ratification of the Contracting Officer, to the extent he may require, which approval or ratification shall be final and conclusive for all purposes of this clause, settle all outstanding liabilities

and all claims arising out of such termination of orders and subcontracts, the cost of which would be reimbursable in whole or in part, in accordance with the provisions of this contract;

(6) Transfer title to the Government (to the extent that title has not already been transferred) and deliver in the manner, at the times and to the extent directed by the Contracting Officer, (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in respect of the performance of, the work terminated by the Notice of Termination; (ii) the completed or partially completed plans, drawings, information, and other property which, if the contract had been completed, would be required to be furnished to the Government; and (iii) the jigs, dies, and fixtures, and other special tools and tooling acquired or manufactured for the performance of this contract for the cost of which the contractor has been or will be reimbursed under this contract;

(7) Use his best efforts to sell; in the manner, at the times, to the extent, and at the price or prices directed or authorized by the Contracting Officer, any property of the types referred to in (6) above: Provided, however, That the contractor (i) shall not be required to extend credit to any purchaser, and (ii) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Contracting Officer: And provided further, That the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the Government to the contractor under this contract or shall otherwise be credited to the price or cost of the work covered by this contract or paid in such other manner as the Contracting Officer may direct;

(8) Complete performance of such part of the work as shall not have been terminated by the Notice of Termination; and

(9) Take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to this contract which is in the possession of the contractor and in which the Government has or may acquire an interest.

The contractor shall proceed immediately with the performance of the above obligations notwithstanding any delay in determining or adjusting the amount of the fee, or any item of reimbursable cost, under this clause. At any time after expiration of the plant clearance period, as defined in Subpart 1-8.1 of the Federal Procurement Regulations (41 CFR 1-8.1), as the definition may be amended from time to time, the contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Contracting Officer, and may request the Government to remove such items or enter into a storage agreement covering them. Not later than fifteen (15) days thereafter, the Government will accept such items and remove them or enter into a storage agreement covering the same: Provided, That the list submitted shall be subject to verification by the Contracting Officer upon removal of

the items or, if the items are stored, within forty-five (45) days from the date of submission of the list, and any necessary adjustment to correct the list as submitted shall be made prior to final settlement.

(c) After receipt of a Notice of Termination, the contractor shall submit to the Contracting Officer his termination claim in the form and with the certification prescribed by the Contracting Officer. Such claim shall be submitted promptly but in no event later than one year from the effective date of termination, unless one or more extensions in writing are granted by the Contracting Officer upon request of the contractor made in writing within such one-year period or authorized extension thereof. However, if the Contracting Officer determines that the facts justify such action, he may receive and act upon any such termination claim at any time after such one-year period or any extension thereof. Upon failure of the contractor to submit his termination claim within the time allowed, the Contracting Officer may, subject to any review required by the contracting agency's procedures in effect as of the date of execution of this contract, determine, on the basis of information available to him, the amount, if any, due to the contractor by reason of the termination and shall thereupon pay to the contractor the amount so determined.

(d) Subject to the provisions of paragraph (c), and subject to any review required by the contracting agency's procedures in effect as of the date of execution of this contract, the contractor and the Contracting Officer may agree upon the whole or any part of the amount or amounts to be paid (including an allowance for the fee) to the contractor by reason of the total or partial termination of work pursuant to this clause. The contract shall be amended accordingly, and the contractor shall be paid the agreed amount.

(e) In the event of the failure of the contractor and the Contracting Officer to agree in whole or in part, as provided in paragraph (d), as to the amounts with respect to costs and fee, or as to the amount of the fee, to be paid to the contractor in connection with the termination of work pursuant to this clause, the Contracting Officer shall, subject to any review required by the contracting agency's procedures in effect as of the date of execution of this contract, determine, on the basis of information available to him, the amount, if any, due to the contractor by reason of the termination and shall pay to the contractor the amount determined as follows:

(1) If the settlement includes cost and fee--

(1) There shall be included therein all costs and expenses reimbursable in accordance with this contract, not previously paid to the contractor for the performance of this contract prior to the effective date of the Notice of Termination, and such of these costs and may continue for a reasonable time thereafter with the approval of or as directed by the Contracting Officer: Provided, however, That the contractor shall proceed as rapidly as practicable to discontinue such costs;

(ii) There shall be included therein so far as not included under (i) above, the cost of settling and paying claims arising out of the termination of work under subcontracts or orders, as provided in paragraph (b)(5) above, which are properly chargeable to the terminated portion of the contract;

(iii) There shall be included therein the reasonable costs of settlement, including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the contract and for the termination and settlement of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of termination inventory: Provided, however, That if the termination is for default of the contractor there shall not be included any amounts for the preparation of the contractor's settlement proposal; and

(iv) There shall be included therein a portion of the fee payable under the contract determined as follows--

(A) In the event of the termination of this contract for the convenience of the Government and not for the default of the contractor, there shall be paid a percentage of the fees equivalent to the percentage of the completion of work contemplated by the contract, but exclusive of subcontract effort included in subcontractors' termination claims, less fee payments previously made hereunder; or

(B) In the event of the termination of this contract for the default of the contractor, the total fee payable shall be such proportionate part of the fee (or, if this contract calls for articles of different types, of such part of the fee as is reasonably allocable to the type of article under consideration) as the total number of articles delivered to and accepted by the Government bears to the total number of articles of a like kind called for by this contract.

If the amount determined under this subparagraph (1) is less than the total payment theretofore made to the contractor, the contractor shall repay to the Government the excess amount.

(2) If the settlement includes only the fee, the amount thereof will be determined in accordance with subparagraph (1)(iv) above.

(f) Costs claimed, agreed to, or determined pursuant to paragraphs (c), (d), and (e) of this clause shall be in accordance with the contract cost principles and procedures in FPR 1-15.2.

(g) The contractor shall have the right of appeal, under the clause of this contract entitled "Disputes," from any determination made by the Contracting Officer under paragraph (c) or (e) above, except that, if the contractor has failed

to submit his claim within the time provided in paragraph (c) above and has failed to request extension of such time, he shall have no such right of appeal. In any case where the Contracting Officer has made a determination of the amount due under paragraph (c) or (e) above, the Government shall pay to the contractor the following: (1) If there is no right of appeal hereunder or if no timely appeal has been taken, the amount so determined by the Contracting Officer, or (2) if an appeal has been taken, the amount finally determined on such appeal.

(h) In arriving at the amount due the contractor under this clause there shall be deducted (1) all unliquidated advance or other payments theretofore made to the contractor, applicable to the terminated portion of this contract, (2) any claim which the Government may have against the contractor in connection with this contract, and (3) the agreed price for, or the proceeds for sale of, any materials, supplies, or other things acquired by the contractor or sold pursuant to the provisions of this clause and not otherwise recovered by or credited to the Government.

(i) In the event of a partial termination, the portion of the fee which is payable with respect to the work under the continued portion of the contract shall be equitably adjusted by agreement between the contractor and Contracting Officer and such adjustment shall be evidenced by an amendment of this contract.

(j) The Government may from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against costs incurred by the contractor in connection with the terminated portion of the contract whenever in the opinion of the Contracting Officer the aggregate of such payments shall be within the amount to which the contractor will be entitled hereunder. If the total of such payments is in excess of the amount finally determined to be due under this clause, such excess shall be payable by the contractor to the Government upon demand, together with interest computed at the rate of 6 percent per annum, for the period from the date such excess payment is received by the contractor to the date on which excess is repaid to the Government: Provided, however, That no interest shall be charged with respect to any such excess payment attributable to a reduction in the contractor's claim by reason of retention or other disposition of termination inventory until 10 days after the date of such retention or disposition, or such later date as determined by the Contracting Officer by reason of the circumstances.

(k) The provisions of this clause relating to the fee shall be inapplicable if this contract does not provide for payment for a fee.

13. DISPUTES (1-7.102-12)

(a) Except as otherwise provided in this contract, any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Contracting Officer, who shall reduce his

decision to writing and mail or otherwise furnish a copy thereof to the contractor. The decision of the Contracting Officer shall be final and conclusive unless within 30 days from the date of receipt of such copy, the contractor mails or otherwise furnishes to the Contracting Officer a written appeal addressed to the Commission. The decision of the Commission or its duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this clause, the contractor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal. Pending final decision of a dispute hereunder, the contractor shall proceed diligently with the performance of the contract and in accordance with the Contracting Officer's decision.

(b) This "Disputes" clause does not preclude consideration of law questions in connection with decisions provided for in paragraph (a) above: Provided, That nothing in this contract shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

14. BUY AMERICAN ACT (1-6.104-5) (9-7.5004-16)

(a) In acquiring end products, the Buy American Act (41 U.S. Code 10a-10d) provides that the Government give preference to domestic source end products. For the purpose of this clause:

(i) "Components" means those articles, materials, and supplies which are directly incorporated in the end products;

(ii) "End products" means those articles, materials, and supplies which are to be acquired under this contract for public use; and

(iii) A "domestic source end product" means (A) an unmanufactured end product which has been mined or produced in the United States and (B) an end product manufactured in the United States if the cost of the components thereof which are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. For the purposes of this (a) (iii) (B), components of foreign origin of the same type of kind as the products referred to in (b) (i) or (ii) of this clause shall be treated as components mined, produced, or manufactured in the United States.

(b) The Contractor agrees that there will be used under this contract (by the Contractor, subcontractor, materialmen and suppliers) only domestic source end products, except end products:

(i) Which are for use outside the United States;

(ii) Which the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality;

(iii) As to which the Commission determines the domestic preference to be inconsistent with the public interest; or

(iv) As to which the Commission determines the cost to the Government to be unreasonable.

15. CONVICT LABOR (1-12.204)

In connection with the performance of work under this contract the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, September 10, 1965 (18 U.S.C. 4082(c) (2)) and Executive Order 11755, December 29, 1973.

16. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION (1-12.303)

This contract, to the extent that it is of a character specified in the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333), is subject to the following provisions and to all other applicable provisions and exceptions of such act and the regulations of the Secretary of Labor thereunder.

(a) Overtime Requirement. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, apprentices, trainees, watchmen, and guards shall require or permit any laborer, mechanic, apprentice, trainee, watchman, or guard in any workweek in which he is employed on such work to work in excess of 8 hours in any calendar day or in excess of 40 hours in such workweek on work subject to the provisions of the Contract Work Hours and Safety Standards Act unless such laborer, mechanic, apprentice, trainee, watchman, or guard receives compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of 8 hours in any calendar day or in excess of 40 hours in such workweek, whichever is the greater number of overtime hours.

(b) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions of paragraph (a), the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, apprentice, trainee, watchman, or guard employed in violation of the provisions of paragraph (a) in the sum of \$10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of 8 hours or in excess of his standard workweek of 40 hours without payment of the overtime wages required by paragraph (a).

(c) Withholdings for unpaid wages and liquidated damages. The Contracting Officer may withhold from the Government Prime Contractor, from any moneys payable on account of work performed by the Contractor or subcontractor, such sums as may

administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph (b).

(d) Subcontracts. The Contractor shall insert paragraphs (a) through (d) of this clause in all subcontracts, and shall require their inclusion in all subcontracts of any tier.

(e) Records. The Contractor shall maintain payroll records containing the information specified in 29 CFR 516.2(a). Such records shall be preserved for 3 years from the completion of the contract.

17. EQUAL OPPORTUNITY (1-12.803-2).

(The following clause is applicable unless this contract is exempt under the rules, regulations, and relevant orders of the Secretary of Labor (41 CFR, ch. 60)).

During the performance of this contract, the contractor agrees as follows:

(a) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this Equal Opportunity clause.

(b) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

(c) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency Contracting Officer, advising the labor union or workers' representative of the contractor's commitments under this Equal Opportunity clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) The contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(e) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In the event of the contractor's noncompliance with the Equal Opportunity clause of this contract or with any of the said rules, regulations, or orders, this contract may be cancelled, terminated, or suspended, in whole or in part, and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(g) The contractor will include the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

18. OFFICIALS NOT TO BENEFIT (1-7.202-17)

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom; but this provisions shall not be construed to extend to this contract if made with a corporation for its general benefit.

19. COVENANT AGAINST CONTINGENT FEES (1-1.503) (9-7.5004-2)

(a) Warranty--Termination or deduction for breach.

The contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the contractor for the purpose of securing business. For breach or violation of this warranty the Government shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

(b) Subcontracts and purchase orders.

Unless otherwise authorized by the Contracting Officer in writing, the contractor shall cause provisions similar to the foregoing to be inserted in all subcontracts and purchase orders entered into under this contract.

20. NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
(1-7.103-4) (Applicable to Contracts exceeding \$10,000)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government, on account of any alleged patent or copyright infringement arising out of the performance of this Contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

21. PATENTS (1-9.107-5(a))

(a) Definitions.

(1) "Subject Invention" means any invention or discovery of the Contractor conceived or first actually reduced to practice in the course of or under this contract, and includes any art, method, process, machine, manufacture, design, or composition of matter, or any new and useful improvements thereof, or any variety of plant, which is or may be patentable under the Patent Laws of the United States of America or any foreign country.

(2) "Contract" means any contract, agreement, grant, or other arrangement, or subcontract entered into with or for the benefit of the Government where a purpose of the contract is the conduct of experimental, development, or research work.

(3) "States and domestic municipal governments" means the States of the United States, the District of Columbia, Puerto Rico, the Virgin Islands, American Samoa, Guam, the Trust Territory of the Pacific Islands, and any political subdivision and agencies thereof.

(4) "Government agency" includes an executive department, independent commission, board, office, agency, administration, authority, Government corporation, or other Government establishment of the executive branch of the

Government of the United States of America and for the purpose of this contract the U.S. Nuclear Regulatory Commission.

(5) "To the point of practical application" means to manufacture in the case of a composition of product, to practice in the case of a process, or to operate in the case of a machine and under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.

(b) Allocation of principal rights.

(1) Assignment to the Government. The Contractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each Subject Invention, except to the extent that rights are retained by the Contractor under paragraphs (b)(2) and (d) of this clause.

(2) Greater rights determinations. The Contractor or the employee-inventor with authorization of the Contractor may retain greater rights than the nonexclusive license provided in paragraph (d) of this clause in accordance with the procedure and criteria of 41 CFR 1-9.109-6. A request for determination whether the Contractor or the employee-inventor is entitled to retain such greater rights must be submitted to the Contracting Officer at the time of the first disclosure of the invention pursuant to paragraph (e) (2) (1) of this clause, or not later than 3 months thereafter, or such longer period as may be authorized by the Contracting Officer for good cause shown in writing by the Contractor. The information to be submitted for a greater rights determination is specified in 41 CFR 1-9.109-6. Each determination of greater rights under this contract normally shall be subject to paragraph (c) of this clause and to the reservations and conditions deemed to be appropriate by the agency.

(c) Minimum rights acquired by the Government. With respect to each Subject Invention to which the Contractor retains principal or exclusive rights, the Contractor:

(1) Hereby, grants to the Government a nonexclusive, nontransferable, paid-up license to make, use, and sell each Subject Invention throughout the world by or on behalf of the Government of the United States (including any Government agency) and States and domestic municipal governments;

(2) Agrees to grant to responsible applicants, upon request of the Government, a license on terms that are reasonable under the circumstances:

(i) Unless the Contractor, his license, or his assignee demonstrates to the Government that effective steps have been taken within 3 years after a patent issues on such invention to bring the invention to the point of practical application, or that the invention has been made available for licensing

royalty-free or on terms that are reasonable in the circumstances, or can show cause why the principal or exclusive rights should be retained for a further period of time; or

(ii) To the extent that the invention is required for public use by governmental regulations or as may be necessary to fulfill public health, safety or welfare needs, or for other public purposes stipulated in this contract;

(3) Shall submit written reports at reasonable intervals upon request of the Commission during the term of the patent on the Subject Invention regarding:

(.) The Commercial use that is being made or is intended to be made of the invention; and

(1.) The steps taken by the Contractor or his transferee to bring the invention to the point of practical application or to make the invention available for licensing;

(4) Agrees to refund any amounts received as royalty charges on any Subject Invention in procurements for or on behalf of the Government and to provide for that refund in any instrument transferring rights to any party in the invention; and

(5) Agrees to provide for the Government's paid-up license pursuant to paragraph (c) (1) of this clause in any instrument transferring rights in a Subject Invention and to provide for the granting of licenses as required by (2) of this clause, and for the reporting of utilization information to the Commission as required by paragraph (c) (3) of this clause whenever the instrument transfers principal or exclusive rights in any Subject Invention. Nothing contained in this paragraph (c) shall be deemed to grant to the Government any rights with respect to any invention other than a Subject Invention.

(d) Minimum rights to the Contractor.

(1) The Contractor reserves a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a Subject Invention and any resulting patent in which the Government acquires title. The license shall extend to the Contractor's domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a part and shall include the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license shall be transferable only with approval of the Commission except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(2) The Contractor's nonexclusive domestic license retained pursuant to paragraph (d)(1) of this clause may be revoked or modified by the Commission to the extent necessary to achieve expeditious practical application of the Subject Invention under 41 CFR 101-4.103-3 pursuant to an application for exclusive license submitted in accordance with 41 CFR 101-4.104-3. This license shall not be revoked in that field of use and/or the geographical areas in which the Contractor has brought the invention to the point of practical application and continues to make the benefits of the invention reasonable accessible to the public. The Contractor's nonexclusive license in any foreign country reserved pursuant to paragraph (d)(1) of this clause may be revoked or modified at the discretion of the Commission to the extent the Contractor or his domestic subsidiaries or affiliates have failed to achieve the practical application of the invention in that foreign country.

(3) Before the modification or revocation of the license, pursuant to paragraph (d)(2) of this clause, the Commission shall furnish the Contractor a written notice of its intention to modify or revoke the license and the Contractor shall be allowed 30 days (or such longer period as may be authorized by the Commission for good cause shown in writing by the Contractor) after the notice to show cause why the license should not be modified or revoked. The Contractor shall have the right to appeal, in accordance with procedures prescribed by the Commission any decision concerning the modification or revocation of his license.

(e) Invention, identification, disclosures, and reports.

(1) The Contractor shall establish and maintain active and effective procedures to ensure that Subject Inventions are promptly identified and timely disclosed. These procedures shall include the maintenance of laboratory notebooks or equivalent records and any other records that are reasonably necessary to document the conception and/or the first actual reduction to practice of Subject Inventions, and records which show that the procedures for identifying and disclosing the inventions are followed. Upon request, the Contractor shall furnish the Contracting Officer a description of these procedures so that he may evaluate and determine their effectiveness.

(2) The Contractor shall furnish the Contracting Officer:

(1) A complete technical disclosure for each Subject Invention within 6 months after conception or first actual reduction to practice whichever occurs first in the course of or under the contract, but in any event prior to any on sale, public use, or publication of such invention known to the Contractor. The disclosure shall identify the contract and inventor and shall be sufficiently complete in technical detail and appropriately illustrated by sketch or diagram to convey to one skilled in the art to which the invention pertains a clear understanding of the nature, purpose, operation, and, to the extent known, the physical, chemical, biological, or electrical characteristics of the invention;

(ii) Interim reports at least every 12 months from the date of the contract listing Subject Inventions for that period and certifying that:

(A) The Contractor's procedures for identifying and disclosing Subject Inventions as required by this paragraph (e) have been followed throughout the reporting period; and

(B) All Subject Inventions have been disclosed or that there are no such inventions; and

(iii) A final report within 3 months after completion of the contract work, listing all Subject Inventions or certifying that there were no such inventions.

(3) The Contractor shall obtain patent agreements to effectuate the provisions of this clause from all persons in his employ who perform any part of the work under this contract except nontechnical personnel, such as clerical employees and manual laborers.

(4) The Contractor agrees that the Commission may duplicate and disclose Subject Invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause.

(5) In order to protect the patent interest of the Government or the Contractor, the Contractor shall obtain the written approval of the Contracting Officer prior to the release or publication of the information in any Subject Invention disclosure by the Contractor or other parties acting on his behalf.

(f) Forfeiture of rights in unreported Subject Inventions.

(1) The Contractor shall forfeit to the Government all rights in any Subject Invention which he fails to disclose to the Contracting Officer within 6 months after the time he:

(i) Files or causes to be filed a United States or foreign application thereon; or

(ii) Submits the final report required by paragraph (e)(2)(iii) of this clause, whichever is later.

(2) However, the Contractor shall not forfeit rights in a Subject Invention if, within the time specified in (1)(i) or (1)(ii) of this paragraph (f), the Contractor:

(i) Prepared a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract; or

(ii) Contending that the invention is not a Subject Invention, he nevertheless discloses the invention and all facts pertinent to his contention to the Contracting Officer; or

(iii) Establishes that the failure to disclose did not result from his fault or negligence.

(3) Pending written assignment of the patent applications and patents on a Subject Invention determined by the Contracting Officer to be forfeited (such determination to be a final decision under the Disputes Clause), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Commission. The forfeiture provision of this paragraph (f) shall be in addition to and shall not supersede other rights and remedies which the Government may have with respect to Subject Inventions.

(g) Examination of records relating to inventions.

(1) The Contracting Officer or his authorized representative until the expiration of 3 years after final payment under this contract shall have the right to examine any books (including laboratory notebooks), records, documents, and other supporting data of the Contractor which the Contracting Officer reasonably deems pertinent to the discovery or identification of Subject Inventions or to determine compliance with the requirements of this clause.

(2) The Contracting Officer shall have the right to review all books (including laboratory notebooks), records and documents of the Contractor relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this contract to determine whether any such inventions are Subject Inventions if the Contractor refuses or fails to:

(i) Establish the procedures of paragraph (e)(1) of this clause; or

(ii) Maintain and follow such procedures; or

(iii) Correct or eliminate any material deficiency in the procedures within thirty (30) days after the Contracting Officer notifies the Contractor of such a deficiency.

(h) Withholding of payment (Not applicable to Subcontracts).

(1) Any time before final payment of the amount of this contract, the Contracting Officer may, if he deems such action warranted, withhold payment until a reserve not exceeding \$50,000 or 5 percent of the amount of this contract, whichever is less, shall have been set aside if in his opinion the Contractor fails to:

(i) Establish, maintain, and follow effective procedures for identifying and disclosing Subject Inventions pursuant to paragraph (e)(1) of this clause; or

(ii) Disclose any Subject Invention pursuant to paragraph (e)(2)(i) of this clause; or

(iii) Deliver acceptable interim reports pursuant to paragraph (e)(2)(ii) of this clause; or

(iv) Provide the information regarding subcontracts pursuant to paragraph (i)(5) of this clause.

The reserve or balance shall be withheld until the Contracting Officer has determined that the Contractor has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this clause.

(2) Final payment under this contract shall not be made before the Contractor delivers to the Contracting Officer all disclosures of Subject Inventions required by paragraph (e)(2)(i) of this clause, and an acceptable final report pursuant to (e)(2)(iii) of this clause.

(3) The Contracting Officer may, in his discretion, decrease or increase the sums withheld up to the maximum authorized above. If the Contractor is a nonprofit organization the maximum amount that may be withheld under this paragraph shall not exceed \$50,000 or 1 percent of the amount of this contract whichever is less. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions of the contract. The withholding of any amount or subsequent payment thereof shall not be construed as a waiver of any rights accruing to the Government under this contract.

(1) Subcontracts

(1) For the purpose of this paragraph the term "Contractor" means the party awarding a subcontract and the term "Subcontractor" means the party being awarded a subcontract, regardless of tier.

(2) Unless otherwise authorized or directed by the Commission Contracting Officer, the Contractor shall include this Patent Rights clause modified to identify the parties in any subcontract hereunder if a purpose of the subcontract is the conduct of experimental, developmental, or research work. In the event of refusal by a Subcontractor to accept this clause, or if in the opinion of the Contractor this clause is inconsistent with the policy set forth in 41 CFR 1-9.107-3, the Contractor:

(i) Shall promptly submit a written notice to the Commission Contracting Officer setting forth reasons for the Subcontractor's refusal and other pertinent information which may expedite disposition of the matter; and

(ii) Shall not proceed with the subcontract without the written authorization of the Commission Contracting Officer.

(3) The Contractor shall not, in any subcontract or by using a subcontract as consideration therefor, acquire any rights in his Subcontractor's Subject Invention for his own use (as distinguished from such rights as may be required solely to fulfill his contract obligations to the Government in the performance of his contract).

(4) All invention disclosures, reports, instruments, and other information required to be furnished by the Subcontractor to the Commission Contracting Officer under the provisions of a Patent Rights clause in any subcontract hereunder may, in the discretion of the Commission Contracting Officer, be furnished to the Contractor for transmission to the Commission Contracting Officer.

(5) The Contractor shall promptly notify the Commission Contracting Officer in writing upon the award of any subcontract containing a Patent Rights clause by identifying the Subcontractor, the work to be performed under the subcontract and the dates of award and estimated completion. Upon request of the Commission Contracting Officer, the Contractor shall furnish a copy of the subcontract. If there are no subcontracts containing Patent Rights Clauses, a negative report shall be included in the final report submitted pursuant to paragraph (e)(2)(iii) of this clause.

(6) The Contractor shall identify all Subject Inventions of the Subcontractor of which he acquires knowledge in the performance of this contract and shall notify the Commission Contracting Officer promptly upon the identification of the inventions.

(7) It is understood that the Commission is a third party beneficiary of any subcontract clause granting rights to the Government in Subject Inventions, and the Contractor hereby assigns to the Commission all rights that he would have to enforce the Subcontractor's obligations for the benefit of the Commission with respect to Subject Inventions. The Contractor shall not be obligated to enforce the agreements of any Subcontractor hereunder relating to the obligations of the Subcontractor to the Commission in regard to Subject Inventions.

(j) Reserved

(k) Reserved

(l) No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1954 as amended shall be asserted by the Contractor or its employees with respect to any invention or discovery made or conceived in the course of or under this contract.

(m) With respect to any U.S. Patent Application filed by the Contractor on any contract invention or discovery made or conceived in the course of the contract, the Contractor will incorporate in the first paragraph of the U.S. Patent Application the following statement:

"The invention described herein was made in the course of, or under a contract (if desired may substitute contract with identifying number) with the U.S. Nuclear Regulatory Commission."

22. GOVERNMENT PROPERTY (1-7.203-21)

(a) The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the property in the Schedule or specifications, together with such related data and information as the Contractor may request and as may reasonably be required for the intended use of such property (hereinafter referred to as "Government-furnished Property"). The delivery or performance dates for the supplies or services to be furnished by the Contractor under this contract are based upon the expectation that Government-furnished property suitable for use will be delivered to the Contractor at the times stated in the Schedule or, if not so stated, in sufficient time to enable the Contractor to meet such delivery or performance dates. In the event that Government-furnished property is not delivered to the Contractor by such time or times, the Contracting Officer shall, upon timely written request made by the Contractor make a determination of the delay, if any, occasioned the Contractor and shall equitably adjust the estimated cost, fixed fee, or delivery or performance dates, or all of them, and any other contractual provisions affected by any such delay in accordance with the procedures provided for in the clause of this contract entitled "Changes." In the event that Government-furnished property is received by the Contractor in a condition not suitable for the intended use, the Contractor shall, upon receipt thereof notify the contracting officer of such fact and, as directed by the Contracting Officer, either (1) return such property at the Government's expense or otherwise dispose of the property, or (2) effect repairs or modifications. Upon completion of (1) or (2), above, the Contracting Officer upon written request of the Contractor shall equitably adjust the estimated cost, fixed fee, or delivery or performance dates, or all of them, and any other contractual provision affected by the return or disposition, or the repair or modification in accordance with the procedures provided for in the clause of this contract entitled "Changes." The foregoing provisions for adjustment are exclusive and the Government shall not be liable to suit for breach of contract by reason of any delay in delivery of Government-furnished property or delivery of such property in a condition not suitable for its intended use.

(b) (1) By notice in writing the Contracting Officer may (i) decrease the property furnished or to be furnished by the Government under this contract, or (ii) substitute other Government-owned property for property to be furnished by the Government, or to be acquired by the Contractor for the Government under this contract. The Contractor shall promptly take such action as the Contracting Officer may direct with respect to the removal and shipping of property covered by such notice.

(2) In the event of any decrease in or substitution of property pursuant to paragraph (1), above, or any withdrawal of authority to use property provided under any contract or lease, which property the Government had agreed in the Schedule to make available for the performance of this contract, the Contracting Officer, upon the written request of the contractor (or, if the substitution of property causes a decrease in the cost of performance, on his own initiative), shall equitably adjust such contractual provisions as may be affected by the decrease, substitution, or withdrawal, in accordance with the procedures provided for in the "Changes" clause of this contract.

(c) Title to all property furnished by the Government shall remain in the Government. Title to all property purchased by the Contractor, for the cost of which the Contractor is entitled to be reimbursed as a direct item of cost under this contract, shall pass to and vest in the Government upon delivery of such property by the vendor. Title to other property, the cost of which is reimbursable to the Contractor under the contract, shall pass to and vest in the Government upon (1) issuance for use of such property in the performance of this contract, or (2) commencement of processing or use of such property in the performance of this contract, or (3) reimbursement of the cost thereof by the Government in whole or in part, whichever first occurs. All Government-furnished property, together with all property acquired by the Contractor title to which vests in the Government under this paragraph, are subject to the provisions of this clause and are hereinafter collectively referred to as "Government property." Title to the Government property shall not be affected by the incorporation or attachment thereof to any property not owned by the Government, nor shall such Government property, or any part thereof, be or become a fixture or lose its identity as personality by reason of affixation to any realty.

(d) The Contractor shall be directly responsible for and accountable for all Government property provided under this contract. The contractor shall establish and maintain a system to control, protect, preserve, and maintain all Government property. This system shall, upon request by the Contracting Officer, be submitted for review and, if satisfactory, approved in writing by the Contracting Officer. The Contractor shall maintain and make available such records as are required by the approved system and must account for all Government property until relieved of responsibility therefor in accordance with the written instructions of the Contracting Officer. To the extent directed by the Contracting Officer, the Contractor shall identify Government property by marking, tagging, or segregating in such manner as to clearly indicate its ownership by the Government.

(e) The Government property shall, unless otherwise provided herein or approved by the Contracting Officer, be used only for the performance of this contract.

(f) The Contractor shall maintain and administer, in accordance with sound industrial practice, a program for the utilization, maintenance, repair, protection, and preservation of Government property so as to assure its full availability and usefulness for the performance of this contract. The Contractor shall take all reasonable steps to comply with all appropriate directions or instructions which the Contracting Officer may prescribe as reasonably necessary for the protection of Government property.

(g) (1) The Contractor shall not be liable for any loss of or damage to the Government property, or for expenses incidental to such loss or damage, except that the Contractor shall be responsible for any such loss or damage (including expenses incidental thereto):

(i) Which results from willful misconduct or lack of good faith on the part of any one of the Contractor's directors or officers, or on the part of any of his managers, superintendents, or other equivalent representatives, who has supervision or direction of:

(A) All or substantially all of the Contractor's business;

or

(B) All or substantially all of the Contractor's operations at any one plant or separate location in which this contract is being performed;

or

(C) A separate and complete major industrial operation in connection with the performance of this contract.

(ii) Which results from a failure on the part of the Contractor, due to the willful misconduct or lack of good faith on the part of any of his directors, officers, or other representatives mentioned in subparagraph (i), above:

(A) To maintain and administer, in accordance with sound industrial practice, the program for utilization, maintenance, repair, protection, and preservation of Government property as required by paragraph (f) hereof, or to take all reasonable steps to comply with any appropriate written direction of the Contracting Officer under paragraph (f) hereof; or

(B) To establish, maintain, and administer in accordance with paragraph (d) hereof a system for control of Government property.

(iii) For which the Contractor is otherwise responsible under the express terms of the clause or clauses designated in the Schedule;

(iv) Which results from a risk expressly required to be insured under this contract, but only to the extent of the insurance so required to be procured and maintained, or to the extent of insurance actually procured and maintained, whichever is greater; or

(v) Which results from a risk which is in fact covered by insurance or for which the Contractor is otherwise reimbursed, but only to the extent of such insurance or reimbursement.

Any failure of the Contractor to act, as provided in subparagraph (ii), above, shall be conclusively presumed to be a failure resulting from willful misconduct, or lack of good faith on the part of such directors, officers, or other representatives mentioned in subparagraph (i), above, if the Contractor is notified by the Contracting Officer by registered or certified mail addressed to one of such directors, officers, or other representatives, of the Government's disapproval, withdrawal of approval, or nonacceptance of the Contractor's program or system. In such event it shall be presumed that any loss or damage to Government property resulted from such failure. The Contractor shall be liable for such loss or damage unless he can establish by clear and convincing evidence that such loss or damage did not result from his failure to maintain an approved program or system, or occurred during such time as an approved program or system for control of Government property was maintained.

If more than one of the above exceptions shall be applicable in any case, the Contractor's liability under any one exception shall not be limited by any other exception. If the Contractor transfers Government property to the possession and control of a subcontractor, the transfer shall not affect the liability of the Contractor for loss or destruction of or damage to the property as set forth above. However, the Contractor shall require the subcontractor to assume the risk of, and be responsible for, any loss or destruction of or damage to the property while in the latter's possession or control, except to the extent that the subcontract, with the prior approval of the Contracting Officer, provides for the relief of the subcontractor from such liability. In the absence of such approval, the subcontract shall contain appropriate provisions requiring the return of all Government property in as good condition as when received, except for reasonable wear and tear or for the utilization of the property in accordance with the provisions of the prime contract.

(2) The Contractor shall not be reimbursed for, and shall not include as an item of overhead, the cost of insurance, or any provisions for a reserve, covering the risk of loss of or damage to the Government property, except to the extent that the Government may have required the Contractor to carry such insurance under any other provisions of this contract.

(3) Upon the happening of loss or destruction of or damage to the Government property, the Contractor shall notify the Contracting Officer thereof,

and shall communicate with the loss and salvage organization, if any, now or hereafter designated by the Contracting Officer, and with the assistance of the loss and salvage organizations so designated (unless the Contracting Officer has designated that no such organization be employed), shall take all reasonable steps to protect the Government property from further damage, separate the damaged and undamaged Government property, put all the Government property in the best possible order, and furnish to the Contracting Officer a statement of:

- (i) The lost, destroyed, and damaged Government property;
- (ii) The time and origin of the loss, destruction, or damage;
- (iii) All known interests in commingled property of which the Government property is a part; and
- (iv) The insurance, if any, covering any part of or interest in such commingled property.

The Contractor shall make repairs and renovations of the damaged Government property or take such other action as the Contracting Officer directs.

(4) In the event the Contractor is indemnified, reimbursed, or otherwise compensated for any loss or destruction of or damage to the Government property, he shall use the proceeds to repair, renovate, or replace the Government property involved, or shall credit such proceeds against the cost of the work covered by the contract, or shall otherwise reimburse the Government, as directed by the Contracting Officer. The Contractor shall do nothing to prejudice the Government's right to recover against third parties for any such loss, destruction, or damage and, upon the request of the Contracting Officer, shall, at the Government's expense, furnish to the Government all reasonable assistance and cooperation (including the prosecution of suit and the execution of instruments of assignment in favor of the Government) in obtaining recovery. In addition, where the subcontractor has not been relieved from liability for any loss or destruction of or damage to Government property, the Contractor shall enforce the liability of the subcontractor for such loss or destruction of or damage to the Government property for the benefit of the Government.

(h) The Commission, and any persons designated by it, shall at all reasonable times have access to the premises where any of the Government property is located, for the purpose of inspecting the Government property.

(i) Upon the completion of this contract, or at such earlier dates as may be fixed by the Contracting Officer, the Contractor shall submit to the Contracting Officer in a form acceptable to him, inventory schedules covering all items of the Government property not consumed in the performance of this contract, or not theretofore delivered to the Government, and shall deliver or make such other disposal of such Government property as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the

cost of the work covered by the contract or shall be paid in such manner as the Contracting Officer may direct. The foregoing provisions shall apply to scrap from Government property: Provided, however, That the Contracting Officer may authorize or direct the Contractor to omit from such inventory schedules any scrap consisting of faulty castings or forgings, or cutting and processing waste, such as chips, cuttings, borings, turnings, short ends, circles, trimmings, clippings, and remnants, and to dispose of such scrap in accordance with the Contractor's established accounting procedures.

(j) Unless otherwise provided herein, the Government:

(i) May abandon any Government property in place, and thereupon all obligations of the Government regarding such abandoned property shall cease; and

(ii) Has no obligation to the Contractor with regard to restoration or rehabilitation of the Contractor's premises, neither in case of abandonment (paragraph (j) (i), above), disposition on completion of need or of the contract (paragraph (i), above), nor otherwise, except for restoration or rehabilitation costs caused by removal of Government property pursuant to paragraph (b), above.

(k) All communications issued pursuant to this clause shall be in writing.

23. NUCLEAR HAZARDS INDEMNITY - PRODUCT LIABILITY (9-7.5004-25)

(a) This article is incorporated into this contract pursuant to the authority contained in section 170d of the Atomic Energy Act of 1954, as amended (hereinafter called the Act).

(1) The definitions set out in the Act shall apply to this article.

(2) The term "product delivered under the contract" means any material; equipment; device; drawing; specification or technical data made, proposed, or acquired by the contractor in the course of performance of the contract and delivered to the Commission or to any other person as directed or approved by the Commission.

(b) Except as hereafter permitted or required in writing by the Commission, the contractor will not be required to provide or maintain, and will not provide or maintain at Government expense, any form of financial protection to cover public liability. The Commission may at any time require in writing that the contractor provide and maintain financial protection of such a type and in such amount as the Commission shall determine to be appropriate to cover public liability against which the contractor is indemnified hereunder: Provided, That the costs of such financial protection will be reimbursed to the contractor by the Commission.

(c) (1) To the extent that the contractor and other persons indemnified are not compensated by any financial protection permitted or required by the Commission, the Commission will indemnify the contractor, and other persons indemnified, against (i) claims for public liability as described in subparagraph (2) of this paragraph (c); and (ii) the reasonable costs of investigating and settling claims, and defending suits for damages for such public liability, provided that the Commission's liability, including such reasonable costs, under all indemnity agreements entered into by the Commission under section 170 of the Act, including this contract, shall not exceed \$500 million in the aggregate for each nuclear incident occurring within the United States or \$100 million in the aggregate for each nuclear incident occurring outside the United States, irrespective of the number of persons indemnified in connection with this contract.

(2) The public liability referred to in subparagraph (1) of this section is public liability which (i) arises out of or in connection with the contractual activity; and (ii) arises out of or results from a product delivered under the contract; but does not include liability for a nuclear incident which is covered by any other indemnity agreement entered into by the Commission pursuant to section 170 of the Act.

(d) The Contractor shall give immediate written notice to the Commission of any known action or claim filed or made against the Contractor or other person indemnified for public liability as defined in paragraph (2) of section (c). Except as otherwise directed by the Commission, the Contractor shall furnish promptly to the Commission copies of all pertinent papers received by the Contractor or filed with respect to such actions or claims. When the Commission shall determine that the Government will probably be required to make indemnity payments under the provisions of section (c) above, the Commission shall have the right to, and shall, collaborate with the Contractor and any other person indemnified in the settlement or defense of any action or claim and shall have the right (1) to require the prior approval of the Commission for the payment of any claim that the Commission may be required to indemnify hereunder, and (2) to appear through the Attorney General on behalf of the Contractor or other person indemnified in any action brought upon any claim that the Commission may be required to indemnify hereunder, take charge of such action, and settle or defend any such action. If the settlement or defense of any such action or claim is undertaken by the Commission, the Contractor or other person indemnified shall furnish all reasonable assistance in effecting a settlement or asserting a defense.

(e) The obligations of the Commission under this article shall not be affected by any failure on the part of the contractor to fulfill its obligation under this contract, and shall be unaffected by the death, disability or termination of existence of the contractor or by the completion, termination, or expiration of this contract.

(f) The parties to this contract enter into this article upon the condition that this article may be amended at any time by the mutual written agreement of

the Commission and the contractor and that such amendment may, by its express terms, provide that it will apply to any nuclear incidents which occur thereafter.

(g) The provisions of this article shall not be limited in any way by, and shall be interpreted without reference to, any other article of this contract [, including Article 12, Disputes]: Provided, however, That the following provisions of this contract: Article 18, Covenant Against Contingent Fees; Article 17, Officials Not to Benefit; Article 7, Assignment; and Article 8, Examination of Records by the Comptroller General; and any provisions later added to this contract which, under applicable Federal law, including statutes, executive orders, and regulations, are required to be included in agreements of this type contained in this article, shall apply to this article.

(h) [The following section will be included in those contracts containing indemnity agreements executed under the general contract authority of the NRC.]

To the extent that the contractor is compensated by any financial protection, or is indemnified pursuant to this article, or is effectively relieved of public liability by an order or orders limiting same pursuant to section 170e of the Atomic Energy Act of 1954, as amended, the provisions of Article _____ (General Authority Indemnity) shall not apply.

24. UTILIZATION OF CONCERNS IN LABOR SURPLUS AREAS (1-1.805-3(a))

(The following clause is applicable if this contract exceeds \$10,000.)

(a) It is the policy of the Government to award contracts to labor surplus areas concerns that (1) have been certified by the Secretary of Labor (hereafter referred to as certified-eligible concerns with first or second preferences) regarding the employment of a proportionate number of disadvantaged individuals and have agreed to perform substantially (i) in or near sections of concentrated unemployment or underemployment or in persistent or substantial labor surplus areas or (ii) in other areas of the United States, respectively, or (2) are noncertified concerns which have agreed to perform substantially in persistent or substantial labor surplus areas, where this can be done consistent with the efficient performance of the contract and at prices no higher than are obtainable elsewhere. The contractor agrees to use his best efforts to place his subcontracts in accordance with this policy.

(b) In complying with paragraph (a) of this clause and with paragraph (b) of the clause of this contract entitled "Utilization of Small Business Concerns" the contractor in placing his subcontracts shall observe the following order of preference: (1) certified eligible concerns with a first preference which are also small business concerns; (2) other certified-eligible concerns with a first preference; (3) certified-eligible concerns with a second preference which are also small business concerns; (4) other certified-eligible concerns with a second preference; (5) persistent or substantial labor surplus area concerns which

are also small business concerns; (6) other persistent or substantial labor surplus area concerns; and (7) small business concerns which are not labor surplus area concerns.

25. AUDIT AND RECORDS (1-3.814-2(a)) (9-7.5006.1)

(a) General. The Contracting Officer or his representatives shall have the audit and inspection rights described in the applicable paragraphs (b), (c) and (d) below.

(b) Examination of costs. If this is a negotiated fixed-price type, cost-reimbursement type, incentive, time and materials, labor hour, or price redeterminable contract, or any combination thereof, the Contractor shall maintain, and the Contracting Officer or his representatives shall have the right to examine books, records, documents, and other evidence and accounting procedures and practices, sufficient to reflect properly all direct and indirect costs of whatever nature claimed to have been incurred and anticipated to be incurred for the performance of this contract. Such right of examination shall include inspection at all reasonable times of the Contractor's plants, or such parts thereof, as may be engaged in the performance of this contract.

(c) Cost or pricing data. If the Contractor submitted cost or pricing data in connection with the pricing of this contract or any change or modification thereto, unless such pricing was based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation, the Contracting Officer or his representatives who are employees of the United States Government shall have the right to examine all books, records, documents and other data of the Contractor related to the negotiation, pricing or performance of such contract, change or modification, for the purpose of evaluating the accuracy, completeness and currency of the cost or pricing data submitted. Additionally, in the case of pricing any change or modification exceeding \$100,000 to formally advertised contracts, the Comptroller General of the United States or his representatives who are employees of the United States Government shall have such rights. The right of examination shall extend to all documents necessary to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used therein.

(d) Availability. The materials described in (b) and (c) above, shall be made available at the office of the Contractor, at all reasonable times, for inspection, audit or reproduction, until the expiration of 3 years from the date of final payment under this contract or such lesser time specified in Part 1-20 of the Federal Procurement Regulations (41 CFR Part 1-20) and for such longer period, if any, as is required by applicable statute, or by other clauses of this contract, or by (1) and (2) below:

(1) If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for a period of 3 years from the date of any resulting final settlement.

(2) Records which relate to appeals under the "Disputes" clause of this contract, or litigation or the settlement of claims arising out of the performance of this contract, shall be made available until such appeals, litigation, or claims have been disposed of.

(e) The Contractor shall insert a clause containing all the provisions of this clause, including this paragraph (a), in all subcontracts hereunder except altered as necessary for proper identification of the contracting parties and the Contracting Officer under the Government prime contract.

(f) Reports. The Contractor shall furnish such progress reports and schedules, financial and cost reports and other reports concerning the work under this contract as the contracting officer may from time to time require.

26. PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA (1-3.814-1(a))

If any price, including profit or fee, negotiated in connection with this contract or any cost reimbursable under this contract was increased by any significant sums because:

(a) The Contractor furnished cost or pricing data which was not accurate, complete and current as certified in the Contractor's Certificate of Current Cost or Pricing Data;

(b) A subcontractor, pursuant to the clause of this contract entitled "Subcontractor Cost or Pricing Data" or "Subcontractor Cost or Pricing Data—Price Adjustments" or any subcontract clause therein required, furnished cost or pricing data which was not accurate, complete and current as certified in the subcontractor's Certificate of Current Cost or Pricing Data;

(c) A subcontractor or prospective subcontractor furnished cost or pricing data which was required to be accurate, complete and current and to be submitted to support a subcontract cost estimate furnished by the Contractor but which was not accurate, complete and current as of the date certified in the Contractor's Certificate of Current Cost or Pricing Data; or

(d) The Contractor or a subcontractor or prospective subcontractor furnished any data, not within (a), (b) or (c) above, which was not accurate as submitted; the price or cost shall be reduced accordingly and the contract shall be modified in writing as may be necessary to reflect such reduction. However, any reduction in the contract price due to defective subcontract data of a prospective subcontractor when the subcontract was not subsequently awarded to such subcontractor, will be limited to the amount (plus applicable overhead and profit markup) by which the actual subcontract, or actual cost to the Contractor if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor: Provided, The actual subcontract price was not affected by defective cost or pricing data.

(Note: Since the contract is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with certain subcontracts, it is expected that the Contractor may wish to include a clause in each such subcontract requiring the subcontractor to appropriately indemnify the Contractor. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by his low tier subcontractors.)

27. PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA - PRICE ADJUSTMENTS
(1-3.814-1(b))

(a) This clause shall become operative only with respect to any modification of this contract which involves aggregate increases and/or decreases in costs plus applicable profits in excess of \$100,000 unless the modification is priced on the basis of adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. The right to price reduction under this clause is limited to defects in data relating to such modification.

(b) If any price, including profit, or fee, negotiated in connection with any price adjustment under this contract was increased by any significant sums because:

(1) The Contractor furnished cost or pricing data which was not accurate, complete and current as certified in the Contractor's Certificate of Current Cost or Pricing Data;

(2) A subcontractor, pursuant to the clause of this contract entitled "Subcontractor Cost or Pricing Data" or "Subcontractor Cost or Pricing Data--Price Adjustments" or any subcontract clause therein required, furnished cost or pricing data which was not accurate, complete and current as certified in the subcontractor's Certificate of Current Cost or Pricing Data;

(3) A subcontractor or prospective subcontractor furnished cost or pricing data which was required to be accurate, complete and current and to be submitted to support a subcontract cost estimate furnished by the Contractor but which was not accurate, complete and current as of the date certified in the Contractor's Certificate of Current Cost or Pricing Data; or

(4) The Contractor or a subcontractor or prospective subcontractor furnished any data, not within (1), (2) or (3) above, which was not accurate, as submitted; the price shall be reduced accordingly and the contract shall be modified in writing as may be necessary to reflect such reduction. However, any reduction in the contract price due to defective subcontract data of a prospective subcontractor, when the subcontract was not subsequently awarded to such subcontractor, will be limited to the amount-(plus applicable overhead and profit markup) by

which the actual subcontract, or actual cost to the Contractor if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor: Provided the actual subcontract price was not affected by defective cost or pricing data.

(Note: Since the contract is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with certain subcontracts, it is expected that the Contractor may wish to include a clause in each such subcontract requiring the subcontractor to appropriately indemnify the Contractor. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by his lower tier subcontractors.)

(c) Failure to agree on a reduction shall be a dispute concerning a question of fact within the meaning of the "Disputes" clause of this contract.

28. SUBCONTRACTOR COST AND PRICING DATA (1-3.814-3(a))

(a) The Contractor shall require subcontractors hereunder to submit, actually or by specific identification in writing, cost or pricing data under the following circumstances:

(1) Prior to the award of any subcontract the amount of which is expected to exceed \$100,000 when entered into;

(2) Prior to the pricing of any subcontract modification which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed \$100,000; except where the price is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

(b) The Contractor shall require subcontractors to certify, in substantially the same form as that used in the certificate by the Prime Contractor to the Government, that to the best of their knowledge and belief, the cost and pricing data submitted under (a) above is accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract change or modification.

(c) The Contractor shall insert the substance of this clause including this paragraph (c) in each subcontract hereunder which exceeds \$100,000 when entered into except where the price thereof is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. In each such expected subcontract hereunder in excess of \$100,000, the Contractor shall insert the substance of the following clause:

SUBCONTRACTOR COST OR PRICING DATA-
PRICE ADJUSTMENTS

(a) Paragraphs (b) and (c) of this clause shall become operative only with respect to any modification made pursuant to one or more provisions of this contract which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed \$100,000. The requirements of this clause shall be limited to such contract modifications,

(b) The Contractor shall require subcontractors hereunder to submit, actually or by specific identification in writing, cost or pricing data under the following circumstances:

(1) Prior to award of any subcontract, the amount of which is expected to exceed \$100,000 when entered into;

(2) Prior to the pricing of any subcontract modification which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed \$100,000; except where the price is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

(c) The Contractor shall require subcontractors to certify, in substantially the same form as that used in the certificate by the Prime Contractor to the Government, that to the best of their knowledge and belief the cost and pricing data submitted under (b) above is accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract change or modification.

(d) The Contractor shall insert the substance of this clause including this paragraph (d) in each subcontract hereunder which exceeds \$100,000 when entered into.

29. UTILIZATION OF MINORITY BUSINESS ENTERPRISES (1-1.1310-2(a))
(Applicable to Contracts exceeding \$10,000)

(a) It is the policy of the Government that minority business enterprises shall have the maximum practicable opportunity to participate in the performance of Government contracts.

(b) The contractor agrees to use his best efforts to carry out this policy in the award of his subcontracts to the fullest extent consistent with the efficient performance of this contract. As used in this contract, the term "minority business enterprise" means a business, at least 50 percent of which is owned by minority group members or, in case of publicly owned businesses, at least 51 percent of the stock of which is owned by minority group members. For the purposes of this definition, minority group members are Negroes, Spanish-speaking American

persons, American Orientals, American Indians, American Eskimos, and American Aleuts. Contractors may rely on written representations by subcontractors regarding their status as minority business enterprises in lieu of an independent investigation.

(c) The Contractor agrees to submit to the Contracting Officer in response to a Request for Proposal, Invitation for Bid, or Solicitation; the representation contained in FPR 1-1.1303.

(d) The Contractor further agrees to report all Minority Business Enterprise subcontract awards to the Contracting Officer using Optional Form 61 (see FPR 1-16.902-OF61). The Contractor may modify the Optional Form 61 to delete reference to "Small Business" for the purpose of this report. Optional Form 61 may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

30. LISTING OF EMPLOYMENT OPENINGS (FPR Temp. Reg. 39)
(Applicable To Contracts Involving \$10,000 or More)

DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA

(a) The contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran or veteran of the Vietnam era in regard to any position for which the employee or applicant for employment is qualified. The contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans status in all employment practices such as the following: employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

(b) The contractor agrees that all suitable employment openings of the contractor which exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract and including those occurring at an establishment of the contractor other than the one wherein the contract is being performed but excluding those of independently operated corporate affiliates, shall be listed at an appropriate local office of the State employment service system wherein the opening occurs. The contractor further agrees to provide such reports to such local office regarding employment openings and hires as may be required.

State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their suitable openings with the appropriate office of the State employment service, but are not required to provide those reports set forth in paragraphs (d) and (e).

(c) Listing of employment openings with the employment service system pursuant to this clause shall be made at least concurrently with the use of any other recruitment source of effort and shall involve the normal obligations

which attach to the placing of a bona fide job order, including the acceptance of referrals of veterans and nonveterans. The listing of employment openings does not require the hiring of any particular job applicant or from any particular group of job applicants, and nothing herein is intended to relieve the contractor from any requirements in Executive orders or regulations regarding nondiscrimination in employment.

(d) The reports required by paragraph (b) of this clause shall include, but not be limited to, periodic reports which shall be filed at least quarterly with the appropriate local office or, where the contractor has more than one hiring location in a State, with the central office of that State employment service. Such reports shall indicate for each hiring location (1) the number of individuals hired during the reporting period, (2) the number of nondisabled veterans of the Vietnam era hired, (3) the number of disabled veterans of the Vietnam era hired, and (4) the total number of disabled veterans hired. The reports should include covered veterans hired for on-the-job training under 38 U.S.C. 1787. The contractor shall submit a report within 30 days after the end of each reporting period wherein any performance is made on this contract identifying data for each hiring location. The contractor shall maintain at each hiring location copies of the reports submitted until the expiration of one year after final payment under the contract, during which time these reports and related documentation shall be made available, upon request, for examination by any authorized representatives of the contracting officer or of the Secretary of Labor. Documentation would include personnel records respecting job openings, recruitment, and placement.

(e) Whenever the contractor becomes contractually bound to the listing provisions of this clause, it shall advise the employment service system in each State where it has establishments of the name and location of each hiring location in the State. As long as the contractor is contractually bound to these provisions and has so advised the State system, there is no need to advise the State system of subsequent contracts. The contractor may advise the State system when it is no longer bound by this contract clause.

(f) This clause does not apply to the listing of employment openings which occur and are filled outside the 50 States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

(g) The provisions of paragraphs (b), (c), (d), and (e) of this clause do not apply to openings which the contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement. This exclusion does not apply to a particular opening once an employer decides to consider applicants outside of his own organization or employer-union arrangement for that opening.

(h) As used in this clause: (1) "All suitable employment openings" includes, but is not limited to, openings which occur in the following job categories: production and non-production; plant and office; laborers and mechanics; supervisory and nonsupervisory; technical; and executive, administrative, and professional openings that are compensated on a salary basis of less than \$25,000 per year. This term includes full-time employment, temporary employment of more than 3 days' duration, and part-time employment. It does

not include openings which the contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement nor openings in an educational institution which are restricted to students of that institution. Under the most compelling circumstances an employment opening may not be suitable for listing, including such situations where the needs of the Government cannot reasonably be otherwise supplied, where listing would be contrary to national security, or where the requirement of listing would otherwise not be for the best interest of the Government.

(2) "Appropriate office of the State employment service system" means the local office of the Federal/State national system of public employment offices with assigned responsibility for serving the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

(3) "Openings which the contractor proposes to fill from within his own organization" means employment openings for which no consideration will be given to persons outside the contractor's own organization (including any affiliates, subsidiaries, and parent companies), and includes any openings which the contractor proposes to fill from regularly established "recall" lists.

(4) "Openings which the contractor proposes to fill pursuant to a customary and traditional employer-union hiring arrangement" means employment openings which the contractor proposes to fill from union halls, which is part of the customary and traditional hiring relationship which exists between the contractor and representatives of his employees.

(i) The contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(j) In the event of the contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(k) The contractor agrees to post in conspicuous places available to employees and applicants for employment notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notice shall state the contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era for employment, and the rights of applicants and employees.

(l) The contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding that the contractor is bound by terms of the Vietnam Era Veteran's Readjustment Assistance Act and is committed to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era.

(m) The contractor will include the provisions of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to the Act, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

31. PAYMENT OF INTEREST ON CONTRACTOR'S CLAIMS (1-1.322)

(a) If an appeal is filed by the contractor from a final decision of the Contracting Officer under the Disputes clause of this contract, denying a claim arising under the contract, simple interest on the amount of the claim finally determined owed by the Government shall be payable to the Contractor. Such interest shall be at the rate determined by the Secretary of the Treasury pursuant to Public Law 92-41, 85 Stat. 97, from the date the contractor furnishes to the Contracting Officer his written appeal under the Disputes clause of this contract, to the date of (1) a final judgment by a court of competent jurisdiction, or (2) mailing to the contractor of a supplemental agreement for execution either confirming completed negotiations between the parties or carrying out a decision of a board of contract appeals.

(b) Notwithstanding (a), above, (1) interest shall be applied only from the date payment was due, if such date is later than the filing of appeal, and (2) interest shall not be paid for any period of time that the Contracting Officer determines the contractor has unduly delayed in pursuing his remedies before a board of contract appeals or a court of competent jurisdiction.

32. EMPLOYMENT OF THE HANDICAPPED (FPR Temp. Reg. 38)

(a) The contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

(b) The contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Rehabilitation Act of 1973, as amended.

(c) In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to the Act.

(d) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, Office of Federal Contract Compliance Programs, Department of Labor, provided by or through the Contracting Officer. Such notices shall state the contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.

(e) The Contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding that the contractor is bound by the terms of section

503 of the Act, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.

(f) The Contractor will include the provisions of this clause in every subcontract or purchase order of \$2,500 or more unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 503 of the Act, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

33. CLEAN AIR AND WATER (1-1.2302)

(Applicable only if the contract exceeds \$100,000, or the Contracting Officer has determined that orders under an indefinite quantity contract in any one year will exceed \$100,000, or a facility to be used has been the subject of a conviction under the Clean Air Act (42 U.S.C. 1957c-8(c) (1)) or the Federal Water Pollution Control Act (33 U.S.C. 1311(a)) and is listed by EPA, or the contract is not otherwise exempt.)

(a) The Contractor agrees as follows:

(1) To comply with all the requirements of section 114 of the Clean Air Act, as amended (42 U.S.C. 1857, et seq., as amended by Pub. L. 91-604) and section 308 of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq., as amended by Pub. L. 95-500), respectively, relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in section 114 and section 308 of the Air Act and the Water Act, respectively, and all regulations and guidelines issued thereunder before the award of the contract.

(2) That no portion of the work required by this prime contract will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities on the date when this contract was awarded unless and until the EPA eliminates the name of such facility or facilities from such listing.

(3) To use his best efforts to comply with clean air standards and clean water standards at the facility in which the contract is being performed.

(4) To insert the substance of the provisions of this clause into any nonexempt subcontract, including this paragraph (a)(4).

(b) The terms used in this clause have the following meaning:

(1) The term "Air-Act" means the Clean Air Act, as amended (42 U.S.C. 1857 et. seq., as amended by Pub. L. 91-604).

(2) The term "Water Act" means Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., as amended by Pub. L. 92-500).

(3) The term "clean air standards" means any enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, or other requirements which are contained in, issued under, or otherwise adopted pursuant to the Air Act or Executive Order 11738, an applicable implementation plan as described in section 110(d) of the Clean Air Act (42 U.S.C. 1857c-5(d)), an approved implementation procedure or plan under section 111(c) or section 111(d), respectively, of the Air Act (42 U.S.C. 1857(c) or (d)), or an approved implementation procedure under section 112(d) of the Air Act (42 U.S.C. 1857c-7(d)).

(4) The term "clean water standards" means any enforceable limitation, control, condition, prohibition, standard, or other requirement which is promulgated pursuant to the Water Act or contained in a permit issued to a discharger by the Environmental Protection Agency or by a State under an approved program, as authorized by section 402 of the Water Act (33 U.S.C. 1342), or by local government to ensure compliance with pretreatment regulations as required by section 307 of the Water Act (33 U.S.C. 1317).

(5) The term "compliance" means compliance with clean air or water standards. Compliance shall also mean compliance with a schedule or plan ordered or approved by a court of competent jurisdiction, the Environmental Protection Agency or an air or water pollution control agency in accordance with the requirements of the Air Act or Water Act and regulations issued pursuant thereto.

(6) The term "facility" means any building, plant, installation, structure, mine, vessel or other floating craft, location, or site of operations, owned, leased, or supervised by a contractor or subcontractor, to be utilized in the performance of a contract or subcontract. Where a location or site of operations contains or includes more than one building, plant, installation, or structure, the entire location or site shall be deemed to be a facility except where the Director, Office of Federal Activities, Environmental Protection Agency, determines that independent facilities are collocated in one geographical area.

34. NEGOTIATED OVERHEAD RATES (1-3.704-1)

(a) Notwithstanding the provisions of the clause of this contract entitled "Allowable Cost, Fixed Fee, and Payment," the allowable indirect costs under this contract shall be obtained by applying negotiated overhead rates to bases agreed upon by the parties, as specified below.

(b) The Contractor, as soon as possible but not later than ninety (90) days after the expiration of his fiscal year, or such other period as may be specified in the contract, shall submit to the Contracting Officer, with a copy to the cognizant audit activity, a proposed final overhead rate or rates for that period based on the Contractor's actual cost experience during that period, together with supporting cost data. Negotiation of overhead rates by the Contractor and the Contracting Officer shall be undertaken as promptly as practicable after receipt of the Contractor's proposal.

(c) Allowability of costs and acceptability of cost allocation methods shall be determined in accordance with contract Appendix A Cost Principles and Procedures as in effect on the date of this contract.

(d) The results of each negotiation shall be set forth in a modification to this contract, which shall specify (1) the agreed final rates, (2) the bases to which the rates apply, and (3) the periods for which the rates apply.

(e) Pending establishment of final overhead rates for any period, the Contractor shall be reimbursed either at negotiated provisional rates as provided in the contract, or at billing rates acceptable to the Contracting Officer, subject to appropriate adjustment when the final rates for that period are established. To prevent substantial over or under payment, and to apply either retroactively or prospectively: (1) Provisional rates may, at the request of either party, be revised by mutual agreement, and (2) billing rates may be adjusted at any time by the Contracting Officer. Any such revision of negotiated provisional rates provided in the contract shall be set forth in a modification to this contract.

(f) Any failure by the parties to agree on any final rates under this clause shall be considered a dispute concerning a question of fact for decision by the Contracting Officer within the meaning of the "Disputes" clause of this contract.

35. NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (1-7.203-3)

(a) Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice thereof, including all relevant information with respect thereto, to the Contracting Officer.

(b) The Contractor agrees to insert the substance of this clause, including this paragraph (b), in any subcontract hereunder as to which a labor dispute may delay the timely performance of this contract; except that each such subcontract shall provide that in the event its timely

performance is delayed or threatened by delay by an actual or potential labor dispute, the subcontractor shall immediately notify his next higher tier subcontractor, or the Prime Contractor, as the case may be, of all relevant information with respect to such disputes.

36. REQUIRED SOURCE OF JEWEL BEARING (1-1.319)

(a) For the purpose of this clause:

(1) "Jewel bearing" means a piece of synthetic sapphire or ruby of any shape, except a phonograph needle, which has one or more polished surfaces and which is suitable for use in an instrument, mechanism, subassembly, or part without any additional processing. A jewel bearing may be either unmounted or mounted into a ring or bushing. Examples of jewel bearings are: Watch holes--olive, watch holes--straight, pallet stones, roller jewels (jewel pins), end stones (caps), vee (cone) jewels, instrument rings, cups, double cups, and orifice jewels. As used herein, the term "jewel bearings" includes "related items."

(2) "Related items" means other synthetic sapphire or ruby components. Examples of related items are pivots, knife edges, insulators, spacers, windows, and striking surfaces other than pallet stones.

(3) "Price list" means the official U.S. Government Jewel Bearing Price List for jewel bearings produced by the William Langer Jewel Bearing Plant. This list is issued periodically by the General Services Administration.

(4) "Plant" means the Government-owned William Langer Jewel Bearing Plant, Rolla, N. Dak.

(5) "Military Standard Jewel Bearing" means a jewel bearing conforming to Military Specification No. MIL-B-27497 (latest revision) entitled "Bearings, Jewel, Sapphire or Ruby, Synthetic."

(b) Jewel bearings required in the performance of this contract shall be procured from the Plant at prices established in the price list dated (date to be filled in by Contracting Officer). Each purchase order issued to the Plant under this contract shall include the prime contract number and date of the price list cited above. The Contractor agrees that the quantities, types, and sizes (including tolerances) of jewel bearings so ordered will be those required for the performance of this contract. Within 90 calendar days after the effective date of this contract the Contractor shall furnish to the Contracting Officer a certification that the required jewel bearings were ordered pursuant to this clause. The Contractor agrees to notify the Contracting Officer promptly of the rejection of his (or any subcontractor's) purchase order in whole

or in part by the Plant. The requirement for purchase and use of jewel bearings from the Plant will be waived to the extent of orders rejected because of the Plant's inability to deliver. If such a waiver is granted, an equitable adjustment shall be made in the contract price or delivery schedule, or both, in accordance with the "Changes" clause of this contract. Further, the requirement for use (but not the requirement for purchase from the Plant) of jewel bearings may be waived by the Contracting Officer when such waiver is determined by him to be consistent with established policy.

(c) The Contractor agrees to use to Langer-made jewel bearings in the production of subassemblies or end items under this contract or in his commercial production.

(d) Whenever it is necessary for the Contractor or any subcontractor to redesign or reengineer jeweled items in order to satisfy specific performance requirements, the Contractor or subcontractor shall provide in such redesign for the use of military standard jewel bearings. This requirement does not apply when the dimensional tolerances or configurations of military standard jewel bearings are such that their use in the product would prevent attainment of the required level of performance specified for the item. However, when one or more nonstandard bearings must be used to satisfy performance requirements of the jeweled item but military standard jewel bearings will function satisfactorily for other applications within the same item, the item will be required to be redesigned to provide for the use of military standard jewel bearings in such "other" applications. The Contractor or subcontractor is not required to redesign a jeweled item solely for the purpose of converting from the use of nonstandard to military standard jewel bearings. Nothing in this contract shall prevent any Contractor or subcontractor from voluntarily redesigning a jeweled item solely to accommodate the use of military standard jewel bearings.

(e) If at the end of this contract period, the total quantity of end items actually ordered under this contract is less than the total estimated quantity, and the Contractor, pursuant to paragraph (b) of this clause, has purchased a larger quantity of Langer-made jewel bearings than used in deliveries made under this contract, an equitable adjustment shall be made (if requested by the Contractor within 90 days after the end of the contract period) to reimburse the Contractor for any additional costs resulting from such excess purchase but in no event shall such additional costs cover more jewel bearings than necessary to deliver the total estimated quantity of end items. Such excess jewel bearings shall be disposed of as directed by the Contracting Officer. However, such excess jewel bearings may be used in partial satisfaction of the requirements to purchase Langer-made jewel bearings pursuant to paragraph (b) of this clause where a subsequent contract to furnish similar end items to the

Government is entered into with the same Contractor. In this situation the requirement to purchase and use jewel bearings from the Plant will be waived up to the amount of such excess jewel bearings in Contractor's possession upon submission of a written request by the Contractor. Such request shall contain documented evidence in support of the waiver of purchase and nonuse of such excess jewel bearings. If such waiver is granted, an equitable adjustment to the extent of differences in price lists shall be made in the contract price in accordance with the "Changes" clause of this contract.

(f) The Contractor agrees to retain for 3 years from the date of final payment under this contract and upon request of the Contracting Officer to make available during that period records showing compliance with this clause.

(g) The Contractor agrees to insert this clause, including this paragraph (g), in every subcontract and purchase order issued in performance of this contract unless he knows that the subassembly, component, or part being purchased does not contain jewel bearings.

37. COST ACCOUNTING STANDARDS (1-3.1204)
(CONTRACTS EXCEEDING \$100,000)

(a) Unless the Cost Accounting Standards Board, or the General Services Administration in the case of nondefense contracts, has prescribed rules or regulations exempting the Contractor or this contract from standards, rules, and regulations promulgated pursuant to 50 U.S.C. App. 2168 (P.L. 91-379, August 15, 1970), or other statutory authority, the Contractor, in connection with this contract shall:

(1) By submission of a Disclosure Statement, disclose in writing his cost accounting practices as required by regulations of the Cost Accounting Standards Board. The required disclosures must be made prior to contract award unless the Contracting Officer provides a written notice to the Contractor authorizing postaward submission in accordance with regulations of the Cost Accounting Standards Board. The practices disclosed for this contract shall be the same as the practices currently disclosed and applied on all other contracts and subcontracts being performed by the Contractor and which contain this Cost Accounting Standards clause. If the Contractor has notified the Contracting Officer that the Disclosure Statement contains trade secrets and commercial or financial information which is privileged and confidential, the Disclosure Statement will not be released outside of the Government.

(2) Follow consistently the cost accounting practices disclosed pursuant to (1), above, in accumulating and reporting contract performance cost data concerning this contract. If any change in disclosed practices is made for purposes of any contract or subcontract

subject to Cost Accounting Standards Board requirements, the change must be applied prospectively to this contract, and the Disclosure Statement must be amended accordingly. If the contract price or cost allowance of this contract is affected by such changes, adjustment shall be made in accordance with subparagraph (a)(4) or (a)(5), below, as appropriate.

(3) Comply with all Cost Accounting Standards in effect on the date of award of this contract or if the Contractor has submitted cost or pricing data, on the date of final agreement on price as shown on the Contractor's signed certificate of current cost or pricing data. The Contractor shall also comply with any Cost Accounting Standard which hereafter becomes applicable to a contract or subcontract of the Contractor. Such compliance shall be required prospectively from the date of applicability to such contract or subcontract.

(4) (A) Agree to an equitable adjustment (as provided in the Changes clause of this contract, if any) if the contract cost is affected by a change which, pursuant to (3) above, the Contractor is required to make to his established cost accounting practices whether such practices are covered by a Disclosure Statement or not.

(B) Negotiate with the Contracting Officer to determine the terms and conditions under which a change to either a disclosed cost accounting practice, other than a change under (4)(A), above, may be made. A change to a practice may be proposed by either the Government or the Contractor, provided, however, that no agreement may be made under this provision that will increase costs paid by the United States.

(5) Agree to an adjustment of the contract price or cost allowance, as appropriate, if he or a subcontractor fails to comply with an applicable Cost Accounting Standard or to follow any practice disclosed pursuant to subparagraphs (a)(1) and (a)(2), above, and such failure results in any increased costs paid by the United States. Such adjustment shall provide for recovery of the increased costs to the United States together with interest thereon computed at the rate determined by the Secretary of the Treasury pursuant to P.L. 92-41, 85 Stat. 97, or 7 percent per annum, whichever is less, from the time the payment by the United States was made to the time the adjustment is effected.

(b) If the parties fail to agree whether the Contractor or a subcontractor has complied with an applicable Cost Accounting Standard, rule, or regulation of the Cost Accounting Standards Board and as to any cost adjustment demanded by the United States, such failure to agree shall be a dispute concerning a question of fact within the meaning of the Disputes clause of this contract.

(c) The Contractor shall permit any authorized representatives of the head of the Commission, of the Cost Accounting Standards Board, or of the Comptroller General of the United States to examine and make copies of any documents, papers, or records relating to compliance with the requirements of this clause.

(d) The Contractor shall include in all negotiated subcontracts which he enters into the substance of this clause except paragraph (b), and shall require such inclusion in all other subcontracts of any tier, except that this requirement shall apply only to negotiated subcontracts in excess of \$100,000 where the price negotiated is not based on:

(1) Established catalog or market prices of commercial items sold in substantial quantities to the general public; or

(2) Prices set by law or regulation, and except that the requirement shall not apply to negotiated subcontracts otherwise exempt from the requirement to accept the Cost Accounting Standards clause by reason of § 331.30(b) of Title 4, Code of Federal Regulations (4 CFR 331.30(b)) or § 1-3.1203(a)(2) of Title 41, Code of Federal Regulations (41 CFR 1-3.1203(a)(2)).

However, if this is a contract with an agency which permits subcontracts to appeal final decisions of the Contracting Officer directly to the head of the agency or his duly authorized representative, then the Contractor shall include the substance of paragraph (b) as well.

NOTE: (1) Subcontractors shall be required to submit their Disclosure Statements to the Contractor. However, if a subcontractor has previously submitted his Disclosure Statement to a Government Contracting Officer he may satisfy that requirement by certifying to the Contractor the date of such Statement and the address of the Contracting Officer.

(2) In any case where a subcontractor determines that the Disclosure Statement information is privileged and confidential and declines to provide it to his Contractor or higher tier subcontractor, the Contractor may authorize direct submission of that subcontractor's Disclosure Statement to the same Government offices to which the Contractor was required to make submission of his Disclosure Statement. Such authorization shall in no way relieve the Contractor of liability as provided in paragraph (a)(5) of this clause. In view of the foregoing and since the contract may be subject to adjustment under this clause by reason of any failure to comply with rules, regulations, and standards of the Cost Accounting Standards Board in connection with covered subcontracts, it is expected that the Contractor may wish to include a clause in each such subcontract requiring the subcontractor to appropriately indemnify the Contractor. However, the inclusion of such a clause and the terms thereof

are matters for negotiation and agreement between the Contractor and the subcontractor, provided that they do not conflict with the duties of the contractor under its contract with the Government. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification to be submitted by his subcontractors.

(e) The terms defined in Sec. 331.20 of Part 331 of Title 4, Code of Federal Regulations (4 CFR 331.20) shall have the same meanings herein. As there defined, "negotiated subcontract" means "any subcontract except a firm fixed-price subcontract made by a Contractor or subcontractor after receiving offers from at least two firms not associated with each other or such Contractor or subcontractor, providing (1) the solicitation to all competing firms is identical, (2) price is the only consideration in selecting the subcontractor from among the competing firms solicited, and (3) the lowest offer received in compliance with the solicitation from among those solicited is accepted."

38. ADMINISTRATION OF COST ACCOUNTING STANDARDS (1-3.1204-2) (When applicable)

For the purpose of administering Cost Accounting Standards requirements under this contract the Contractor shall:

(a) Submit to the cognizant contracting officer a description of the accounting change and the general dollar magnitude of the change to reflect the sum of all increases and the sum of all decreases for all contracts containing the Cost Accounting Standards clause:

(1) For any change in cost accounting practices required to comply with a new Cost Accounting Standard in accordance with paragraphs (a)(3) and (a)(4)(A) of the clause of this contract entitled "Cost Accounting Standards" within 60 days (or such other date as may be mutually agreed to) after award of a contract requiring such change;

(2) For any change to cost accounting practices proposed in accordance with paragraph (a)(4)(B) of the clause of this contract entitled "Cost Accounting Standards" not less than 60 days (or such other date as may be mutually agreed to) prior to the effective date of the proposed change; or

(3) For any failure to comply with an applicable Cost Accounting Standard or to follow a disclosed practice as contemplated by paragraph (a)(5) of the clause of this contract entitled "Cost Accounting Standards" within 60 days (or such other date as may be mutually agreed to) after the date of agreement of such noncompliance by the Contractor.

(b) Submit a cost impact proposal in the form and manner specified by the cognizant contracting officer within 60 days (or such other date as may be mutually agreed to) after the date of determination of the adequacy and compliance of a change submitted pursuant to (a)(1), (2) or (3) above.

(c) Agree to appropriate contract and subcontract amendments to reflect adjustments established in accordance with paragraphs (a)(4) and (a)(5) of the clause of this contract entitled "Cost Accounting Standards."

(d) Include the substance of this clause in all negotiated subcontracts containing the clause entitled "Cost Accounting Standards." In addition, include a provision in these subcontracts which will require such subcontractors, within thirty (30) days after receipt of award, to submit the following information to the contracting officer cognizant of the subcontractor's facility:

(1) Subcontractor's name and subcontract number;

(2) Dollar amount and date of award;

(3) Name of Contractor making the award; and

(4) A statement as to whether the subcontractor has made or proposes to make any changes to accounting practices that affect prime contracts or subcontracts containing the Cost Accounting Standards clause, unless such changes have already been reported. If award of the subcontract results in making a Cost Accounting Standard(s) effective for the first time this shall also be reported.

(e) In the event an adjustment is required to be made to any subcontract hereunder, notify the cognizant contracting officer in writing of such adjustment and agree to an adjustment in the price or estimated cost and fee of this contract, as appropriate, based upon the adjustment established under subcontract. Such notice shall be given within 30 days after receipt of the proposed subcontract adjustment, and shall include a proposal for adjustment to such higher tier subcontract or prime contract, as appropriate.

(f) When the Cost Accounting Standards clause and this clause are included in subcontracts, the term "contracting officer" shall be suitably altered to identify the purchaser.

39. NOTICE REGARDING LATE DELIVERY (1-7.204-4)

In the event the Contractor encounters difficulty in meeting the performance requirements, or anticipates difficulty in complying with the contract delivery schedule or date, the Contractor shall immediately notify the Contracting Officer thereof in writing, giving pertinent details, including the date by which it expects to complete performance or make delivery: Provided, however, that this data shall be informational only in character and that receipt thereof shall not be construed as a waiver by the Government of any contract delivery schedule or date, or any rights or remedies provided by law or under this contract.

40. KEY PERSONNEL (1-7.304-6)

The personnel specified in this contract are considered to be essential to the work being performed hereunder. Prior to diverting any of the specified

individuals to other programs, the Contractor shall notify the Contracting Officer reasonably in advance and shall submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the program. No diversion shall be made by the Contractor without the written consent of the Contracting Officer: Provided, That the Contracting Officer may ratify in writing such diversion and such ratification shall constitute the consent of the Contracting Officer required by this clause. The attachment to this contract may be amended from time to time during the course of the contract to either add or delete personnel, as appropriate.

41/ EXCUSABLE DELAYS (1-8.708)

Except with respect to defaults of subcontractors, the contractor shall not be in default by reason of any failure in performance of this contract in accordance with its terms (including any failure by the contractor to make progress in the prosecution of the work hereunder which endangers such performance) if such failure arises out of causes beyond the control and without the fault or negligence of the contractor. Such causes may include, but are not restricted to acts of God or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather, but in every case the failure to perform must be beyond the control and without the fault or negligence of the contractor. If the failure to perform is caused by the failure of the subcontractor to perform or make progress, and if such failure arises out of causes beyond the control of both the contractor and subcontractor, and without the fault or negligence of either of them, the contractor shall not be deemed to be in default, unless (a) the supplies or services to be furnished by the subcontractor were obtainable from other sources, (b) the Contracting Officer shall have ordered the contractor in writing to procure such supplies or services from such other sources, and (c) the contractor shall have failed to comply reasonably with such order. Upon request of the contractor, the Contracting Officer shall ascertain the facts and extent of such failure and, if he shall determine that any failure to perform was occasioned by any one or more of the said causes, the delivery schedule shall be revised accordingly, subject to the rights of the Government under the clause hereof entitled "Termination for Default or for Convenience of the Government." (As used in this clause, the terms "subcontractor" and "subcontractors" means subcontractor(s) at any tier.)

42. STATE AND LOCAL TAXES (9-11.452)

(a) The contractor agrees to notify the Commission of any state or local tax, fee, or charge levied or purported to be levied on or collected from the contractor with respect to the contract work, any transaction thereunder, or property in the custody or control of the contractor and constituting an allowable item of cost if due and payable, but which the contractor has reason to believe, or the Commission has advised the contractor, is or may be inapplicable or invalid; and the contractor further agrees to refrain from

paying any such tax, fee, or charge unless authorized in writing by the Commission. Any state or local tax, fee, or charge paid with the approval of the Commission or on the basis of advice from the Commission that such tax, fee, or charge is applicable and valid, and which would otherwise be an allowable item of cost, shall not be disallowed as an item of cost by reason of any subsequent ruling or determination that such tax, fee, or charge was in fact inapplicable or invalid.

(b) The contractor agrees to take such action as may be required or approved by the Commission to cause any state or local tax, fee, or charge which would be an allowable cost to be paid under protest; and to take such action as may be required or approved by the Commission to seek recovery of any payments made, including assignment to the Government or its designee of all rights to an abatement or refund thereof, and granting permission for the Government to join with the contractor in any proceedings for the recovery thereof or to sue for recovery in the name of the contractor. If the Commission directs the contractor to institute litigation to enjoin the collection of or to recover payment of any such tax, fee, or charge referred to above, or if a claim or suit is filed against the contractor for a tax, fee, or charge it has refrained from paying in accordance with this article, the procedures and requirements of the article entitled "Litigation and Claims" shall apply and the costs and expenses incurred by the contractor shall be allowable items of cost, as provided in this contract, together with the amount of any judgment rendered against the contractor.

(c) The Government shall save the contractor harmless from penalties and interest incurred through compliance with this article. All recoveries or credits in respect of the foregoing taxes, fees, and charges (including interest) shall inure to be for the sole benefit of the Government.

43. COPYRIGHT (9-9.5103(d))

(a) The contractor (i) agrees that the Commission shall determine the disposition of the title to and the rights under any copyright secured by the contractor or its employees on copyrightable material first produced or composed under this contract and (ii) hereby grants to the Government a royalty-free, nonexclusive, irrevocable license to reproduce, translate, publish, use and dispose of, and to authorize others so to do, all copyrighted or copyrightable work not first produced or composed by the contractor in the performance of this contract but which is incorporated in the material furnished under the contract, provided that such license shall be only to the extent the contractor now has, or prior to the completion or final settlement of the contract may acquire the right to grant such license without becoming liable to pay compensation to others solely because of such grant.

(b) The contractor agrees that it will not include any copyrighted material in any written or copyrightable material furnished or delivered under this contract without a license as provided for in paragraph (a)(ii) hereof or without the consent of the copyright owner, unless specific written approval of the Contracting Officer for the inclusion of such copyrighted material is secured.

(c) The contractor agrees to report in writing to the Commission, promptly and in reasonable detail, any notice or claim or copyright infringement received by the contractor with respect to any material delivered under this contract.

44. PATENT INDEMNITY (9-9.5009(c))

The contractor agrees to indemnify the Government, its officers, agents, servants and employees against liability of any kind (including costs and expenses incurred) for the use of any invention or discovery and for the infringement or any Letters Patent (not including liability, arising pursuant to Section 183, Title 35, (1952) U.S. Code, prior to the issuance of Letters Patent) occurring in the performance of this contract or arising by reason of the use of disposal by or for the account of the Government of items manufactured or supplied under this contract.

45. COPYRIGHT INDEMNIFICATION OF GOVERNMENT (9-9.5104)

Except as otherwise provided, the contractor agrees to indemnify the Government, its officers, agents, servants, and employees against liability, including costs and expenses, for the infringement of any copyright in any work protected under the copyright laws of the United States arising out of the performance of this contract, including the reproduction, translation, publication or use of any such copyright material.

46. LITIGATION AND CLAIMS (9-7.5006-50)

(a) Initiation of litigation. The contractor may, with the prior written authorization of the Contracting Officer, and shall, upon the request of the Commission initiate litigation against third parties, including proceedings before administrative agencies, in connection with this contract. The contractor shall proceed with such litigation in good faith and as directed from time to time by the Contracting Officer.

(b) Defense and settlement of claims. The contractor shall give the Contracting Officer immediate notice in writing (1) of any action, including any proceeding before an administrative agency, filed against the contractor arising out of the performance of this contract, and (2) of any claim against the contractor, the cost and expense of which is allowable under the clause entitled "Allowable Costs." Except as otherwise directed by the Contracting Officer, in writing, the contractor shall furnish immediately to the Contracting

Officer copies of all pertinent papers received by the contractor with respect to such action or claim. To the extent not in conflict with any applicable policy of insurance, the contractor may with the Contracting Officer's approval settle any such action or claim, shall effect at the Contracting Officer's request an assignment and subrogation in favor of the Government of all the contractor's rights and claims (except those against the Government) arising out of any such action or claim against the contractor, and, if required by the Contracting Officer, shall authorize representatives of the Government to settle or defend any such action or claim and to represent the contractor in, or to take charge of, any action. If the settlement or defense of an action or claim against the contractor is undertaken by the Government, the contractor shall furnish all reasonable assistance in effecting a settlement or asserting a defense. Where an action against the contractor is not covered by a policy of insurance, the contractor shall, with the approval of the Contracting Officer, proceed with the defense of the action in good faith; and in such event the defense of the action shall be at the expense of the Government: Provided, however, That the Government shall not be liable for such expense to the extent that it would have been compensated for by insurance which was required by law or by the written direction of the Contracting Officer, but which the contractor failed to secure through its own fault or negligence.

47. RENEGOTIATION (9-7.5004-20)

If this contract is subject to the Renegotiation Act of 1951, as amended, the following provisions shall apply:

(a) This contract is subject to the Renegotiation Act of 1951 (50 U.S.C. App. 1211, et. seq.), as amended, and to any subsequent act of Congress providing for the renegotiation of contracts. Nothing contained in this clause shall impose any renegotiation obligation with respect to this contract or any subcontract hereunder which is not imposed by an act of Congress heretofore or hereafter enacted. Subject to the foregoing, this contract shall be deemed to contain all the provisions required by section 104 of the Renegotiation Act of 1951, and by any such other act, without subsequent contract amendment specifically incorporating such provisions.

(b) The contractor agrees to insert the provisions of this clause, including this paragraph (b), in all subcontracts, as that term is defined in section 103 g. of the Renegotiation Act of 1951, as amended.

48. PERMITS (9-7.5006-48)

Except as otherwise directed by the Contracting Officer, the contractor shall procure all necessary permits or licenses and abide by all applicable laws, regulations, and ordinances of the United States and of the State, territory, and political subdivision in which the work under this contract is performed.

49. CONSULTANT OR COMPARABLE EMPLOYMENT SERVICES OF CONTRACTOR EMPLOYEES
(9-7.5006-45(a))

The contractor shall require all employees who are employed full-time (an individual who performs work under the cost-type contract on a full-time annual basis) or part-time (50 percent or more of regular annual compensation received under terms of a contract with the Commission) on the contract work to disclose to the contractor all consultant or other comparable employment services which the employees proposed to undertake for others. The contractor shall transmit to the Contracting Officer all information obtained from such disclosures. The contractor will require any employee who will be employed full-time on the contract to agree, as a condition of his participation in such work, that he will not perform consultant or other comparable employment services for another Commission cost-type contractor under its contract with the Commission except with the prior approval of the contractor.

50. SAFETY, HEALTH, AND FIRE PROTECTION (9-7.5006-47)

The contractor shall take all reasonable precautions in the performance of the work under this contract to protect the health and safety of employees and of members of the public and to minimize danger from all hazards to life and property and shall comply with all health, safety, and fire protection regulations and requirements (including reporting requirements) of the Commission. In the event that the contractor fails to comply with said regulations or requirements of the Commission, the Contracting Officer may, without prejudice to any other legal or contractual rights of the Commission, issue an order stopping all or any part of the work; thereafter a start order for resumption of work may be issued at the discretion of the Contracting Officer. The contractor shall make no claim for an extension of time or for compensation or damages by reason of or in connection with such work stoppage.

51. SECURITY (9-7.5004-11 Modified)

(Applicable if Restricted Data or Classified information is involved)

(a) Contractor's duty to safeguard Restricted Data, Formerly Restricted Data, and other classified information. The Contractor shall, in accordance with the Nuclear Regulatory Commission's security regulations and requirements, be responsible for safeguarding Restricted Data, Formerly Restricted Data, and other classified information and protecting against sabotage, espionage, loss and theft, the classified documents and material in the contractor's possession in connection with the performance of work under this contract. Except as otherwise expressly provided in this contract, the contractor shall, upon completion or termination of this contract, transmit to the Commission any classified matter in the possession of the contractor or any person under the contractor's control in connection with the performance of this contract.

If retention by the Contractor of any classified matter is required after the completion or termination of the contract and such retention is approved by the Contracting Officer the Contractor will complete a certificate of possession to be furnished to the Nuclear Regulatory Commission specifying the classified matter to be retained. The certification shall identify the

items and types or categories of matter retained, the conditions governing the retention of the matter and the period of retention, if known. If the retention is approved by the Contracting Officer, the security provisions of the contract will continue to be applicable to the matter retained.

(b) Regulations. The Contractor agrees to conform to all security regulations and requirements of the Commission.

(c) Definition of Restricted Data. The term "Restricted Data," as used in this clause, means all data concerning (1) design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142 of the Atomic Energy Act of 1954, as amended.

(d) Definition of Formerly Restricted Data. The term "Formerly Restricted Data," as used in this clause, means all data removed from the Restricted Data category under section 142 d. of the Atomic Energy Act of 1954, as amended.

(e) Security clearance of personnel. The Contractor shall not permit any individual to have access to Restricted Data, Formerly Restricted Data, or other classified information, except in accordance with the Atomic Energy Act of 1954, as amended, and the Commission's regulations or requirements applicable in the particular type or category of classified information to which access is required.

(f) Criminal Liability - It is understood that disclosure of Restricted Data, Formerly Restricted Data, or other classified information relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to safeguard any Restricted Data, Formerly Restricted Data, or other classified matter that may come to the Contractor or any person under the contractor's control in connection with work under this contract, may subject the contractor, its agents, employees, or subcontractors to criminal liability under the laws of the United States. (See the Atomic Energy Act of 1954; as amended, 42 U.S.C. 2011 et seq.; 18 U.S.C. 793 and 794; and Executive Order 11652.)

(g) Subcontracts and purchase orders. Except as otherwise authorized in writing by the Contracting Officer, the contractor shall insert provisions similar to the foregoing in all subcontracts and purchase orders under this contract.

(h) In the performance of the work under this contract, the contractor shall assign classifications to all documents, material, and equipment originated or generated by the Contractor in accordance with classification guidance furnished to the contractor by the Commission. Every subcontract and purchase order issued hereunder involving the origination or generation of classified documents, material, or equipment shall include a provision to the effect that in the performance of such subcontracts or purchase orders the subcontractor or supplier shall assign classifications to all such documents, material and equipment in accordance with classification guidance furnished to such subcontractor or supplier by the contractor.

52. CONTRACTOR'S ORGANIZATION (9-7.5006-6)

(a) Organization Chart. As promptly as possible after the execution of this contract, the contractor shall furnish to the Contracting Officer a chart showing the names, duties, and organization of key personnel to be employed in connection with the work, and shall furnish from time to time supplementary information reflecting changes therein.

(b) Supervising representative of contractor. Unless otherwise directed by the Contracting Officer, a competent full-time resident supervising representative of the contractor satisfactory to the Contracting Officer shall be in charge of the work at the site at all times.

(c) The contractor shall be responsible for maintaining satisfactory standards of employee competency, conduct, and integrity and shall be responsible for taking such disciplinary action with respect to his employees as may be necessary. The contractor shall establish such standards and procedures as are necessary to implement effectively the provisions set forth in AECPR 9-12.54, and such standards and procedures shall be subject to the approval of the Contracting Officer.

53. PRIVATE USE OF CONTRACT INFORMATION AND DATA (9-7.5006-59)

Except as specifically authorized by this contract, or as otherwise approved by the Contracting Officer, information and other data developed or acquired by or furnished the contractor in the performance of this contract, shall be used only in connection with the work under this contract.

54. DRAWINGS, DESIGNS, SPECIFICATIONS (9-7.5006-13)

All drawings, sketches, designs, design data, specifications, notebooks, technical and scientific data, and all photographs, negatives, reports, findings, recommendations, data and memoranda of every description relating thereto, as well as all copies of the foregoing relating to the work or any part thereof, shall be subject to inspection by the Commission at all reasonable times (for which inspection the proper facilities shall be afforded the Commission by the contractor and its subcontractors), shall be the property of the Government and may be used by the Government for any purpose whatsoever without any claim on the part of the contractor and its subcontractors and vendors for additional compensation and shall, subject to the right of the contractor to retain a copy of said material for its own use, be delivered to the Government, or otherwise disposed of by the contractor either as the Contracting Officer may from time to time direct during the progress of the work or in any event as the Contracting Officer shall direct upon completion or termination of this contract. The contractor's right of retention and use shall be subject to the security, patent, and use of information provisions, if any, of this contract.

55. CONTRACTOR PROCUREMENT (9-7.5006-29)

(a) The Commission reserves the right at any time to require that the contractor submit for approval any or all procurements under this contract. The contractor shall not procure any item whose purchase is expressly prohibited by the written direction of the Commission and shall use such special and directed procurement sources as may be expressly required by the Commission. The contractor shall, if requested by the Contracting Officer, provide information concerning procurement methods, practices, and procedures used or proposed to be used and shall use methods, practices, and procedures which are acceptable to the Commission. Procurement arrangements under this contract shall not relieve the contractor of any obligation under this contract (including, among other things, the obligation to properly supervise, administer, and coordinate the work of subcontractors) and shall be in such form and contain such provisions as are required by this contract or as the Commission may prescribe.

(b) Procurement or transfer of equipment, materials, supplies, or services from a contractor-controlled source (any division or other organizational component of the prime contractor (exclusive of the contracting component) and any subsidiary or affiliate of the contractor under a common control) shall be considered a procurement for the purposes of this article.

56. PREFERENCE FOR U.S. FLAG AIR CARRIERS (1-1.323-2)

(a) Pub. L. 93-623 requires that all Federal agencies and Government contractors and subcontractors will use U.S. flag air carriers for international air transportation of personnel (and their personal effects) or property to the extent service by such carriers is available. It further provides that the Comptroller General of the United States shall disallow any expenditure from appropriated funds for international air transportation on other than a U.S. flag air carrier in the absence of satisfactory proof of the necessity therefor.

(b) The contractor agrees to utilize U.S. flag air carriers for international air transportation of personnel (and their personal effects) or property to the extent service by such carriers is available.

(c) In the event that the contractor selects a carrier other than a U.S. flag air carrier for international air transportation; he will include a certification on vouchers involving such transportation which is essentially as follows:

CERTIFICATION OF UNAVAILABILITY OF U.S. FLAG
AIR CARRIERS

I hereby certify that transportation service for personnel (and their personal effects) or property by certificated air carrier was unavailable for the following reasons:¹(state reasons)

¹ See Federal Procurement Regulations (41 CFR 1-1.323-3) or section 1-336.2 of the Armed Services Procurement Regulations, as applicable.

(d) The terms used in this clause have the following meanings:

(1) "International air transportation" means transportation of persons (and their personal effects) or property by air between a place in the United States and a place outside thereof or between two places both of which are outside the United States.

(2) "U.S. flag air carrier" means one of a class of air carriers holding a certificate of public convenience and necessity issued by the Civil Aeronautics Board, approved by the President, authorizing operations between the United States and/or its territories and one or more foreign countries.

(3) The term "United States" includes the fifty states, Commonwealth of Puerto Rico, possessions of the United States, and the District of Columbia.

(e) The contractor shall include the substance of this clause, including this paragraph (e), in each subcontract or purchase hereunder which may involve international air transportation.

57. AUTHORIZED REPRESENTATIVE

The Contracting Officer may designate an authorized representative under this contract for the purpose of assuring that services required under the contract are ordered and delivered in accordance therewith. Such representative as may be appointed will be specifically designated in writing to the Contractor from the Contracting Officer, including the extent of such designee's authority.

58. STOP WORK ORDER

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of ninety (90) days after the order is delivered to the Contractor, and for any further period at which the parties may agree. Any such order shall be specifically identified as a Stop Work Order issued pursuant to this clause. Upon receipt of such an order, the Contractor shall forthwith comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of ninety (90) days after a stop work order is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contractor Officer shall either:

- (i) cancel the stop work order, or
- (ii) terminate the work covered by such order as provided in the "Default" or the "Termination for Convenience" clause of this contract.

(b) If a stop work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. An equitable adjustment shall be made in the delivery schedule, the estimated cost, the fee, or a combination thereof, and the contract shall be modified in writing accordingly, if:

- (i) the stop work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract, and
- (ii) the Contractor asserts a claim for such adjustment within thirty (30) days after the end of the period of work stoppage; provided that, if the Contracting Officer decides the facts justify such action, he may receive and act upon any such claim asserted at any time prior to final payment under this contract.

(c) If a stop work order is not canceled and the work covered by such order is terminated for the convenience of the Government, the reasonable costs resulting from the stop work order shall be allowed in arriving at the termination settlement.

(d) If a stop work order is not cancelled and the work covered by such order is terminated for default, the reasonable costs resulting from the stop work order shall be allowed by equitable adjustment or otherwise.

59. PUBLICATION AND PUBLICITY

Unless otherwise specified in this contract, the Contractor is encouraged to publish and make available through accepted channels the results of its work under this contract. The Contractor shall submit a copy of each article or other information to the Project Officer prior to publication or dissemination for public use. If the article or other information is subsequently modified or altered in any manner, the Contractor shall promptly notify the Project Officer and furnish him/her a copy of the article or other information as finally submitted for publication or dissemination.

The Contractor shall acknowledge the support of the U. S. Nuclear Regulatory Commission whenever publicizing the work under this contract in any media. To effectuate the foregoing, the Contractor shall include in any publication resulting from work performed under this contract an acknowledgement substantially as follows:

"The work upon which this publication is based was performed pursuant to Contract (insert number) with the (insert name of constituent agency), U. S. Nuclear Regulatory Commission."

Either Clause No. 60. entitled "Dissemination of Contract Information" or Clause No. 59. is for application but not both. In the absence of a clear delineation, Clause No. 59. applies.

60. DISSEMINATION OF CONTRACT INFORMATION

The Contractor shall not publish, permit to be published, or distribute for public consumption, any information, oral or written, concerning the results of conclusions made pursuant to the performance of this contract, without the prior written consent of the Contracting Officer. (Two copies of any material proposed to be published or distributed shall be submitted to the Contracting Officer.) Failure to comply with this clause shall be grounds for termination of this contract.

61. WORK FOR OTHERS

Notwithstanding any other provision of this contract, during the term of this contract, the contractor agrees to forego entering into consulting or other contractual arrangements with any firm or organization, the result of which may give rise to an actual or apparent conflict of interest with respect to the work being performed under this contract. The contractor shall insure that all employees designated as key personnel if any, under this contract abide by the provisions of this clause. If the contractor believes with respect to itself or any such employee that any proposed consultant or other contractual arrangement with any firm or organization may involve a possible conflict of interest, the contractor shall obtain the written approval of the Contracting Officer prior to execution of such contractual arrangement.