



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

JAN 22 2001

ICF Incorporated  
ATTN: Ms. Frances Schossow  
Project Administrator  
9300 Lee Highway  
Fairfax, VA 22031-1207

Dear Ms. Schossow:

Subject: Modification No. 7 to Task Order No. 16 Entitled, "Major Revision to 10 CFR Part 71: Packaging and Transportation of Radioactive Materials," under Contract No. NRC-04-95-065

The purpose of this modification is to (1) modify the Statement of Work (SOW) by adding within-scope work in accordance with the attached revised SOW and the contractor's technical proposal dated January 5, 2001; (2) increase the ceiling by \$49,129 from \$359,098 to \$408,227, all of which represents the reimbursable costs; and (3) increase the obligated amount by \$49,129 from \$359,098 to \$408,227.

Accounting Data for Task Order No. 16, Modification No. 7 is as follows:

APPN No.:	31X0200
B&R No.:	15015203115
Job No.:	J5236
BOC No.:	252A
Obligated Amount:	\$49,129

A summary of obligations for this task order, from award date through the date of this action is given below:

Total FY 1998 Obligation Amount:	\$ 65,000
Total FY 1999 Obligation Amount:	\$ 69,235
Total FY 2000 Obligation Amount:	\$224,863
Total FY 2001 Obligation Amount:	\$ 49,129

Cumulative Total of NRC Obligations: \$408,227

This modification obligates FY2001 funds in the amount of \$49,129.

All other terms and conditions of the subject task order remain unchanged.

Please indicate your acceptance of this Modification No. 7 to Task Order No. 16 by having an official authorized to bind your organization execute three copies of this document in the space provided and return two copies to the Contract Specialist at the following address. You should retain the third copy for your records.

U.S. Nuclear Regulatory Commission  
ATTN: Paulette Smith, Contract Specialist  
Division of Contracts and Property Management  
Mail Stop: T-7-I-2  
Washington, DC 20555

If you have any questions regarding this modification, please contact Paulette Smith, of my staff, on (301) 415-6594.

Sincerely,



Mary Mace, Contracting Officer  
Contract Management Branch 1  
Division of Contracts and  
Property Management  
Office of Administration

ACCEPTANCE:

NAME:

Paul E. Bullock

TITLE:

SR. Vice President

DATE:

6/24/01

STATEMENT OF WORK  
TECHNICAL ASSISTANCE - DEVELOPMENT OF INFORMATION  
TO SUPPORT RULEMAKING

Major Revision of 10 CFR Part 71:  
Packaging and Transportation of Radioactive Materials

CHANGES TO THIS TASK ORDER ARE SHOWN IN **BOLD**:

BACKGROUND:

The NRC has decided to use an enhanced public-participation process for the Part 71 rulemaking, which will provide more opportunity for input from the public, stakeholders, and the industry. This enhanced public-participation process follows the Commission directive on December 13, 1999, in SRM-M991109A regarding stakeholder participation.

Solicitation of public comment will occur on several occasions. The first opportunity for public comment begins with the publication of a Federal Register Notice (FRN), which will contain an Issues Paper and announces 4 public meetings. The Issues Paper summarizes 17 issues associated with the Part 71 rulemaking. Eleven of these issues are IAEA compatibility related, and 6 are non-IAEA related but requested by the Commission or identified by the staff. These include the fissile material exempt and general license provisions (the emergency final rule provisions), and PRM-71-12, the Pu double-containment petition. A brief discussion is presented on each issue. In addition to publication in the Federal Register, the staff is planning to put the FRN on an NRC web site to: 1) announce the time and location of four public outreach meetings; 2) solicit public comments on the Issues Paper; and 3) provide for electronic interactions with stakeholders.

The four public outreach meetings will be held to discuss the Issues Paper and solicit comments on this Part 71 revision. The first three public outreach meetings are tentatively scheduled on July 11, 2000, in Chicago, IL; July 13, 2000, in San Francisco, CA; and July 18, 2000, in Atlanta, GA. These 3 meetings will be primarily conducted to collect verbal and written comments from all participants. The fourth public outreach meeting is tentatively planned for August 10, 2000, in the Washington, DC area, and will be conducted as a workshop/roundtable discussion of the issues in the Part 71 rulemaking.

The issues that require rulemaking are twofold. First, the NRC regulations in Part 71 are based in general on the safety standards developed by the International Atomic Energy Agency (IAEA). These IAEA safety standards are adopted by member states, including the United States. The IAEA revises its transportation standards periodically. The last revision, ST-1, was published in December 1996. The Commission decided in SRM-SECY-98-168, dated October 19, 1998, to promulgate a rule to conform Part 71 with the IAEA ST-1. The principal ST-1 provisions considered for Part 71 are: 1) change to SI units only; 2) radionuclide-specific exemption values; 3) revision of A1 and A2 values with correct footnotes; 4) addition of

uranium UF6 package requirements; 5) criticality safety index; 6) special arrangements for shipment of special packages; and 7) type C packages and low dispersible radioactive material.

The second issue involves other Part 71, non-IAEA related amendments being considered by the NRC management. These amendments are: 1) expansion of Part 71 to include cask certificate holders and owners; 2) adoption of ASME B&PV Code, Section III, Division 3, for spent fuel casks; 3) reduction in information collection requirements; 4) adoption of section similar to §72.48; 5) double containment of plutonium shipments; 6) deep immersion test (§71.61); 7) grand fathering of previously approved packages; 8) revision similar to Department of Transportation (DOT) regulations on surface contamination; 9) changes to various definitions; and 10) fissile material exemptions and general license provisions.

Following the Commission's decision in SRM-SECY-98-168, the NRC management has decided to combine the above Part 71 revisions into a single rulemaking effort.

A certain amount of work has already been completed which will assist in this major revision of Part 71. In April 1997, and following publication of ST-1, the NRC issued a task order to ICF to conduct a comparison between ST-1 and the previous edition: 1985 IAEA Safety Series No. 6. The results of this comparison was intended to be used in a rulemaking to revise Part 71. ICF completed the task and delivered its final report in July 1997. This report will be used in this task order.

A few months earlier, the NRC published an emergency final rule (62 FR 5907, February 10, 1997), which amended Part 71 regarding the shipments of exempt quantities of fissile material and the shipment of fissile material under a general license. Although the rule was final, the NRC nevertheless invited the public to comment in a 30-day post-promulgation period, and promised to conduct additional rulemaking if necessary. Most of the commenters supported the emergency final rule as an action that was necessary. However, they all felt that the rule had gone too far, that it was excessively restrictive and would be costly to licensees, and that further rulemaking was necessary. Following receipt of the comments, SFPO/NMSS initiated a contract with Oak Ridge National Laboratory (ORNL) to study the regulatory and technical bases associated with fissile exemptions and general license regulations. ORNL issued the draft NUREG/CR-5342 for NRC review. NMSS completed its review of the draft NUREG and recommended proceeding with rulemaking. Initially, Task Order 16 was awarded to ICF to conduct a Regulatory Analysis (RA) and an Environmental Assessment (EA) for fissile material exempt and general license revisions based on the recommendations in NUREG/CR-5342. ICF completed a qualitative Draft RA and EA in September 1998, and is in the process of collecting, through the Nuclear Energy Institute, cost/benefit data from licensees. Therefore, ICF work in updating the Draft RA and EA for fissile material exempt and general license revisions will continue (Item 10 in the non-IAEA related list) under this modification.

This task order will provide supporting documents for a proposed rule for a major revision of 10 CFR Part 71.

OBJECTIVE:

The objective of this task order is to: 1) provide three reports - an RA and EA in **NUREG/CR format**, and an information collection burden report; 2) provide technical and logistical support for the four public outreach meetings; and 3) compile and coordinate responses and resolution of public comments; **4) summarize public comments received from the public meetings, by mail, and on the NRC web site, and provide in NUREG/CR format; and 5) provide technical assistance and support to the NRC Technical Project Manager on the Statement of Consideration of the FRN.**

WORK SCOPE:

There are **six eight** subtasks to be performed under this task order: 1) to support the rulemaking plan, the contractor will provide a Preliminary RA that will contain the estimated costs and benefits of the proposed amendments to Part 71, and after the receipt of NRC comments on the rulemaking plan, the contractor will finalize a **Draft RA in NUREG/CR format**; 2) the contractor will provide a Preliminary EA, and after NRC reviews and comments on the Preliminary EA, the document contractor will be finalize a **Draft EA in NUREG/CR format**; 3) to provide technical support for analysis of issues and comparison with IAEA standards; 4) to provide logistical support for 4 public meetings; 5) to coordinate responses and resolution of public comments; and 6) the contractor will provide an information collection burden report; **7) summarize comments received from the public meetings, by mail, and on the NRC web site; and 8) provide technical assistance and support to the NRC Technical Project Manager on the Statement of Consideration of the FRN.**

Subtasks will be as follows:

- 1a. Preliminary RA: The contractor shall estimate the total number of shippers and shipments in the United States, and the types of shipments. The contractor shall then perform a cost/benefit analysis for adopting each new or revised ST-1 provision that was identified in the 1997 ICF comparison study, also for adopting non-IAEA related changes, as outlined below.

The principal new or revised ST-1 provisions for analysis are: 1) change to SI units only; 2) radionuclide-specific exemption values; 3) revision of A1 and A2 values with correct footnotes; 4) addition of uranium UF6 package requirements; 5) criticality safety index; 6) special arrangements for shipment of special packages (such as the Trojan Reactor Vessel Package); and 7) type C packages and low dispersible radioactive material.

The principal non-IAEA related changes for analysis are: 1) expansion of the scope of Part 71 to include cask certificate holders and owners; 2) adoption of ASME B&PV Code, Section III, Division 3, for spent fuel casks; 3) reduction in information collection requirements; 4) adoption of a section similar to §72.48; 5) double containment of plutonium; 6) deep immersion test §71.61; 7) grand fathering of previously approved packages; 8) Part 71 revision similar to DOT regulations on surface contamination; 9) changes to various definitions; and 10) fissile material exemptions and general license provisions.

The contractor shall use the information in the ICF 1997 comparison study and other appropriate information from other sources such as NUREG-0170 and SAND84-7174 (these documents shall be provided to the contractor) to complete the Preliminary RA. NRC staff will make available to the contractor, any NRC documents or correspondence to aid the completion of this task order. This Preliminary RA will be included in the rulemaking plan which will be submitted to the Commission for approval.

- 1b. Draft RA: The contractor shall revise the Preliminary RA on the basis of: 1) comments received from the Commission on the rulemaking plan; and 2) any additional information found by the contractor or the NRC staff; and 3) **public comments related to cost/benefit and environmental impact. The contractor shall prepare the draft RA in NUREG/CR format, which shall be ready for NRC publication as a NUREG/CR report.** This Draft RA will be included in the proposed rulemaking which will be published for public comments.
- 2a. Preliminary EA: The contractor shall use the information gathered in Subtask 1a to complete a Preliminary EA of transportation activities associated with shipments that are expected to be made under the proposed amendments.
- 2b. Draft EA: The contractor shall revise the Preliminary EA on the basis of: 1) comments received from the Commission on the rulemaking plan; and 2) any additional information found by the contractor or the NRC staff; and 3) **public comments related to cost/benefit and environmental impact. The contractor shall prepare the Draft EA in NUREG/CR format, which shall be ready for NRC publication as a NUREG/CR report.** This Draft EA will be included in the proposed rulemaking.
3. Technical Support: In addition to its own staff, the contractor shall obtain a technical expert well-versed in the IAEA/ST-1 and radioactive materials transportation regulations in the U.S. to provide NRC with technical support/expertise on the IAEA/Part 71 changes throughout the four public outreach meetings of the enhanced public-participation process, i.e., to assist the NRC staff in preparation for the meetings, with the technical discussions and responses to comments during the meetings, and with summary of comments after the meetings.
4. Logistical Support: The contractor shall provide the NRC with the following services: a) prepare a distribution list of potentially interested agencies, professional societies, and groups to receive the announcement and the Issues Paper; b) prepare and publish a meeting announcement in the local newspapers, at least 2 weeks before the public outreach meeting dates, and coordinate announcement with the NRC Office of Public Affairs; c) reserve meeting facilities in an easily accessible public place; and d) provide all necessary audiovisual equipment for the meetings (i.e., microphones, projector, etc.).  
NOTE: Items 4.c. and d. shall be coordinated with Robert Temps of NRC/NMSS/SFPO. Mr. Temps may be reached at (301) 415-2552.
5. Coordinate Responses and Resolution of Public Comments: The contractor shall provide the following services: a) develop issues outline for the ICF Comment Response Data System; b) upload all comments received from the meetings and the web site into the Comment Response Data System (transcription of the meetings

minutes has been arranged by the NRC/SFPO with "Ann Riley & Associates," and the web site will be established and managed by NRC); c) categorize comments according to the issues outline; d) prepare summaries of comments for each issue according to the issues outline; e) prepare draft responses to the comments for NRC review.

- 6. Information Collection Burden Report: The contractor shall use information gathered in Subtasks 1 and 2 to calculate/estimate the information collection burden impact on licensees and the NRC which will result from the proposed amendments. NRC will provide the contractor with the NRC format that has been used in the past for such submissions.
- 7. **Summarize Public Comments: The contractor shall prepare a report that summarizes all comments received from the public meetings, by mail, and on the NRC web site in NUREG/CR format, which shall be ready for NRC publication as a NUREG/CR report.**
- 8. **Statement of Consideration: The contractor shall provide technical assistance and support to the NRC Technical Project Manager on the Statement of Consideration for the FRN on the proposed Part 71 rule.**

DELIVERABLES:

<u>PRODUCT</u>	<u>TIME TO PERFORM THE TASK</u>	<u>DUE DATE</u>
Subtask 1a: Preliminary RA NRC staff review and comment	5 months 0.5 month	February 1, 2000 February 15, 2000
Subtask 1b: Draft RA NRC staff review and comment <b>Final Draft RA in NUREG/CR format</b>	0.5 month after receipt of NRC comments <b>0.25 month</b>	<b>December 29, 2000</b> <b>January 29, 2001</b> <b>February 5, 2001</b>
Subtask 2a: Preliminary EA NRC staff review and comment	5 months 0.5 month	February 1, 2000 February 15, 2000
Subtask 2b: Draft EA NRC staff review and comment <b>Final Draft EA in NUREG/CR format</b>	0.5 month after receipt of NRC comments <b>0.25 month</b>	<b>December 29, 2000</b> <b>January 29, 2001</b> <b>February 5, 2001</b>
Subtask 3: Consultant Support	5 months	August 31, 2000
Subtask 4: Logistical Support	4 months	August 31, 2000
Subtask 5: Collection and Resolution of Stakeholders comments	5 months	September 30, 2000

DELIVERABLES: (continued)

<u>PRODUCT</u>	<u>TIME TO PERFORM THE TASK</u>	<u>DUE DATE</u>
Subtask 6: Information Collection Burden NRC staff review and comment	1 month 0.5 month	November 1, 2000 November 15, 2000
<b>Subtask 7: Summarize Public Comments in NUREG/CR format</b>	<b>1.5 months</b>	<b>January 29, 2001</b>
<b>Subtask 8: Statement of Consideration</b>	<b>2 months</b>	<b>March 1, 2001</b>

PERIOD OF PERFORMANCE:

The period of performance for this task order shall expire on March 1, 2001. Note that Subtasks 1 and 2 are not sequential, therefore, the contractor can work on these subtasks simultaneously.

TRAVEL:

The contractor shall plan on 2 individuals making 12 trips to NRC Headquarters during the period of performance to participate in meetings with the NRC Technical Project Manager to discuss progress or to resolve problems related to this task order. In addition, the contractor shall plan on two people (one ICF staff member and the IAEA/ST-1 technical expert) for four 2-day trips to provide the needed support at the public outreach meetings discussed in the BACKGROUND section.

TECHNICAL DIRECTION:

The NRC Technical Project Manager for this task order is Naiem S. Tanious. Mr. Tanious may be contacted at (301) 415-6103. The NRC Project Officer for this task order is Carolyn Boyle. Ms. Boyle may be contacted at (301) 415-7818.

NRC-FURNISHED MATERIAL:

The NRC Technical Project Manager shall provide the contractor with the following documents:

1. ICF, "Comparison of IAEA 1985 SS-6 with IAEA 1996 ST-1," final report to the NRC on Task Order 7, Subtask 1, July 17, 1997.



2. Summary outline of Part 71 requested revisions provided by SFPO in a November 10, 1998, meeting between P. Holahan, E. Easton, J. Cook, and N. Tanious.
3. U.S. Nuclear Regulatory Commission, "Authorization of the Trojan Reactor Vessel Package For One-Time Shipment for Disposal," Commission Paper SECY-98-231, October 2, 1998.
4. U.S. Nuclear Regulatory Commission, "Final Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes," NUREG-0170, Vol. 1, December 1977.
5. "Transport of Radioactive Material in the United States: Results of a Survey to Determine the Magnitude and Characteristics of Domestic, Unclassified Shipments of Radioactive Materials," SAND84-7174, TTC-0534, April 1985.
6. U.S. Nuclear Regulatory Commission, "Assessment and Recommendations for Fissile Material Packaging Exemptions and General Licenses Within 10 CFR Part 71," NUREG/CR-5342, July 1998.
7. Letter from Mr. James M. Taylor, NRC Executive Director for Operations, to Ms. A. Bishop, President, Atomic Energy Control Board, Ottawa, CANADA, dated May 31, 1996.
8. NRC format for an Information Collection Burden Report (Subtask 3).