DCR 016

May 18, 1984

OThompson

Docket No. 50-289

Distribution:

BSnyder	Docket File	JVanVliet
HDenton	NRC PDR	WJones
SECY	LPDR	LHarmon
	NSIC	Gray Files 4
	DEisenhut	Reading File
	OELD	TMI site pouch
	EJordan	TPoindexter
	JNGrace	EBlackwood
	ACRS 10	HOrnstein
	CMiles	TBarnhart 4
	RDiggs	DBrinkman
		RIngram

Mr. Henry D. Hukill, Vice President
and Director - TMI-1
GPU Nuclear Corporation
P. O. Box 480
Middletown, Pennsylvania 17057

Dear Mr. Hukill:

SUBJECT: AMENDMENT NO.93 TO FACILITY OPERATING LICENSE NO. DPR-50

The Commission has issued the enclosed Amendment No.93 to Facility Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit No. 1 (TMI-1). This amendment consists of changes to the Technical Specifications (TSs) in response to your application (Change Request No. 113) dated April 21, 1982.

This amendment changes Section 4.4.1.2 of the Technical Specifications regarding local leakage rate testing of containment isolation valves and resilient seals in penetrations. The amendment adds several valves to the Type C testing program and deletes other valves. The amendment also includes editorial changes.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's next Monthly Federal Register Notice.

Sincerely,

/S/

John F. Stolz, Chief
Operating Reactors Branch No. 4
Division of Licensing

Enclosures:
1. Amendment No93 to DPR-50
2. Safety Evaluation

cc w/enclosures:
See next page

ORB#4:DL	ORB#4:DL	ORB#4:DL	AD:OR:DL	OELD
RIngram	~~JVanVliet~~;ef	JFStolz	GLainas	J. Goldberg
05/11/84	05/11/84	05/11/84	05/16/84	05/15/84
	OThompson			

8405310094 840518
PDR ADOCK 05000289
P PDR

Mr. R. J. Toole
O&M Director, TMI-1
GPU Nuclear Corporation
P. O. Box 480
Middletown, Pennsylvania 17057

Board of Directors
P. A. N. E.
P. O. Box 268
Middletown, Pennsylvania 17057

Docketing and Service Section
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Chauncey Kepford
Judith H. Johnsrud
Environmental Coalition on Nuclear Power
433 Orlando Avenue
State College, Pennsylvania 16801

Judge Reginald L. Gotchy
Atomic Safety & Licensing Appeal Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

J. B. Lieberman, Esq.
Berlock, Israel & Lieberman
26 Broadway
New York, New York 10004

Mr. Thomas E. Murley, Regional Administrator
U. S. N. R. C., Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

ANGRY/TMI PIRC
1037 Maclay Street
Harrisburg, Pennsylvania 17103

John Levin, Esq.
Pennsylvania Public Utilities
Commission
Box 3265
Harrisburg, Pennsylvania 17120

Jordan D. Cunningham, Esq.
Fox, Farr and Cunningham
2320 North 2nd Street
Harrisburg, Pennsylvania 17110

Ms. Louise Bradford
TMIA
1011 Green Street
Harrisburg, Pennsylvania 17102

Ms. Marjorie M. Aamodt
R. D. #5
Coatesville, Pennsylvania 19320

Earl B. Hoffman
Dauphin County Commissioner
Dauphin County Courthouse
Front and Market Streets
Harrisburg, Pennsylvania 17101

Ellyn R. Weiss
Harmon, Weiss & Jordan
20001 S Street
Suite 430
Washington, D.C. 20009

Mr. Steven C. Sholly
Union of Concerned Scientists
1346 Connecticut Avenue, N. W.
Dupont Circle Building, Suite 1101
Washington, D. C. 20036

Ivan W. Smith, Esq., Chairman
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Gary J. Edles, Chairman
Atomic Safety & Licensing Appeal
Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dr. John H. Buck
Atomic Safety & Licensing Appeal
Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Mr. Thomas M. Gerusky, Director
Bureau of Radiation Protection
Pennsylvania Department of
Environmental Resources
P. O. Box 2063
Harrisburg, Pennsylvania 17120

Marvin I. Lewis
6504 Bradford Terrace
Philadelphia, Pennsylvania 19149

G. F. Trowbridge, Esq.
Shaw, Pittman, Potts & Trowbridge
1800 M Street, N.W.
Washington, D. C. 20036

J. S. Wetmore
Manager, PWR Licensing
GPU Nuclear Corporation
100 Interpace Parkway
Parsippany, New Jersey 07054

Ellyn R. Weiss
Harmon, Weiss & Jordan
20001 S Street, N.W. Suite 430
Washington, D.C. 20009

Ms. Virginia Southard, Chairman
Citizens for a Safe Environment
264 Walton Street
Lemoyne, Pennsylvania 17043

Dr. David Hetrick
Professor of Nuclear Energy
University of Arizona
Tucson, Arizona 85721

Mr. David D. Maxwell, Chairman
Board of Supervisors
Londonderry Township
RFD#1 - Geyers Church Road
Middletown, Pennsylvania 17057

Regional Radiation Representative
EPA Region III
Curtis Building (Sixth Floor)
6th and Walnut Streets
Philadelphia, Pennsylvania 19106

Mr. Richard Conte
Senior Resident Inspector (TMI-1)
U.S.N.R.C.
P. O. Box 311
Middletown, Pennsylvania 17057

General Counsel
Federal Emergency Management Agency
ATTN: Docket Clerk
1725 I Street, NW
Washington, DC 20472

Karin W. Carter, Esq.
505 Executive House
P. O. Box 2357
Harrisburg, Pennsylvania 17120

Dr. James Lamb
313 Woodhaven Road
Chapel Hill, North Carolina 27514

Dauphin County Office Emergency
Preparedness
Court House, Room 7
Front & Market Streets
Harrisburg, Pennsylvania 17101

Christine N. Kohl, Esq.
Atomic Safety & Licensing Appeal
Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Ms. Lennie Prough
U. S. N. R. C. - TMI Site
P. O. Box 311
Middletown, Pennsylvania 17057

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
Suite 220, 7910 Woodmont Avenue
Bethesda, Maryland 20814

Mr. Gustave A. Linenberger, Jr.
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. C. W. Smyth
TMI-1 Licensing Manager
GPU Nuclear Corporation
P. O. Box 480
Middletown, Pennsylvania 17057

Governor's Office of State Planning
and Development
ATTN: Coordinator, Pennsylvania
State Clearinghouse
P. O. Box 1323
Harrisburg, Pennsylvania 17120

Sheldon J. Wolfe, Esq., Chairman
Atomic Safety & Licensing Board
Washington, D.C. 20555

Jane Lee
183 Valley Road
Etters, Pennsylvania 17319

Bruce Molholt
Haverford College
Haverford, Pennsylvania 19041

Norman Aamodt
R. D. #5, Box 428
Coatesville, Pennsylvania 19320

Michael McBride, Esq.
LeBoeuf, Lamb, Leiby & McRae
Suite 1100
1333 New Hampshire Avenue, N.W.
Washington, D.C. 20036

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

METROPOLITAN EDISON COMPANY

JERSEY CENTRAL POWER AND LIGHT COMPANY

PENNSYLVANIA ELECTRIC COMPANY

GPU NUCLEAR CORPORATION

DOCKET NO. 50-289

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 93
License No. DPR-50

1. The Nuclear Regulatory Commission (the Commission) has found that:

A. The application for amendment by GPU Nuclear Corporation, et al (the licensees) dated April 21, 1982, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

8405310099 840518
PDR ADOCK 05000289
P PDR

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment, and paragraph 2.c.(2) of Facility Operating License No. DPR-50 is hereby amended to read as follows:

   Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 93 , are hereby incorporated in the license. GPU Nuclear Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Chief
Operating Reactors Branch No. 4
Division of Licensing

Enclosure:
Changes to the Technical
Specifications

Date of Issuance: May 18, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 93

FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the areas of change.

Remove	Insert
4-32	4-32
4-33	4-33
4-34b	4-34b

detection tests. Sufficient data and analysis shall be included to show that a stabilized leak rate was attained and to identify all significant required correction factors such as those associated with humidity and barometric pressure, and all significant errors such as those associated with instrumentation sensitivities and data scatter. This report shall be titled Reactor Containment Building Integrated Leak Rate Test and shall be submitted to the NRC within 3 months of the test.

4.4.1.2 Local Leakage Rate Tests

4.4.1.2.1 Scope of Testing

a. The local leak rate shall be measured for the following components using a type "B" test as defined in 10 CFR 50, Appendix J.

1. Personnel air lock door gaskets and other seals

2. Emergency air lock door gaskets and other seals

3. The resilient seals on the equipment hatch and fuel transfer tube blind flanges
4. Blind flanges on penetration No. 414 (L.R. Pressure Sensing)
5. Reactor Building Purge valves (AH-V1A, B, C and D)

6. Blind flanges on both ends of pipe through the following penetrations:

6.1 No. 104 (S/G drains)
6.2 No. 105 (S/G cleaning)
6.3 No. 106 (S/G cleaning)
6.4 No. 210 (S/G annulus drains)
6.5 No. 211 (S/G annulus drains)
6.6 No. 241 (Incore Inst. Transfer Tube)
6.7 No. 415 (L.R. Test Bleed Line)
6.8 No. 416 (L.R. Test Bleed Line)

b. The local leak rate shall be measured for the following isolation valves using a type "C" test as defined in 10 CFR 50, Appendix J.

1. CA-V1, 2, 3, 13 (Primary Sampling)
CA-V189, 192 (Reclaimed Water)
CA-V4A, 4B, 5A, 5B (Secondary Sampling)

2. CF-V2A, 2B, 12A, 12B, 19A, 19B, 20A, 20B (Core Flood)

3. CM-V1, 2, 3, 4 (Containment Monitoring)

4. DH-V64, 69 (Decay Heat)

5. HP-V1, 6 (Hydrogen Purge)

6. HR-2A, 2B, 4A, 4B, 22A, 22B, 23A, 23B (Hydrogen Recombiner)

7. IA-V6, 20 (Instrument Air)

8. IC-V2, 3, 4, 6, 16, 18 (Intermediate Cooling)

9. LR-V1, 4, 5, 6, 10, 49 (Leak Rate Test)

10. MU-V2A, 2B, 3, 18, 20, 25, 26, 116 (Make up and Purification)

11. NI-V27 (Nitrogen)

12. NS-V4, 11, 15, 35 (Nuclear Services Closed Cooling)

13. RB-V2A, 7 (R.B. Industrial Cooling System)

14. SA-V2, 3 (Service Air)

15. SF-V23 (Spent Fuel Cooling)

16. WDG-V3, 4 (Waste Gas Header)

17. WDL-V303, 304 (Waste Disposal Liquid)

18. WDL-V534, 535 (R.B. Sump Gravity Drains)

4.4.1.2.2 Conduct of Tests

a. Local leak rate tests shall be performed pneumatically at a pressure of not less than P_a, with the following exception: The access hatch door seal test shall normally be performed at 10 psig and the test every six months specified in 4.4.1.2.5.b shall be performed at a pressure not less than P_a.

b. Acceptable methods of testing are halogen gas detection, pressure decay, pneumatic flow measurement or equivalent.

c. The pressure for a valve test shall be applied in the same direction as that when the valve would be required to perform its safety function unless it can be determined that the direction will provide equivalent or more conservative results.

d. Valves to be tested shall be closed by normal operation and without any preliminary exercising or adjustments.

4.4.1.2.3 Acceptance Criteria

The combined leakage from all items listed in 4.4.1.2.1 shall not exceed .6 L_a (the maximum allowable leakage rate at P_a).

The minimum test pressure of 27.5 psig for the periodic integrated leakage rate test is sufficiently high to provide an accurate measurement of the leakage rate and it duplicates the pre-operational leakage rate test at the reduced pressure. The specification provides a relationship for relating the measured leakage of air at the reduced pressure to the potential leakage of 55 psig. The minimum of 24 hours was specified for the integrated leakage rate test to help stabilize conditions and thus improve accuracy and to better evaluate data scatter. The frequency of the periodic integrated leakage rate test is keyed to the refueling schedule for the reactor, because these tests can best be performed during refueling shutdowns.

The specified frequency of periodic integrated leakage rate tests is based on three major considerations. First is the low probability of leaks in the liner, because of conformance of the complete containment to a 0.10 percent leakage rate at 55 psig during pre-operational testing and the absence of any significant stresses in the liner during reactor operation. Second is the more frequent testing, at design pressure, of those portions of the containment envelope that are most likely to develop leaks during reactor operation, and the low value (0.06 percent) of leakage that is specified as acceptable from penetrations and isolation valves. Third is the tendon stress surveillance program which provides assurance that an important part of the structural integrity of the containment is maintained.

More frequent testing of various penetrations is specified as these locations are more susceptible to leakage than the reactor building liner due to the mechanical closure involved. The basis for specifying a total leakage rate of 0.06 percent from those penetrations and isolation valves is that more than one-half of the allowable integrated leakage rate will be from these sources.

Valve operability tests are specified to assure proper closure or opening of the reactor building isolation valves to provide for isolation or functioning of Engineered Safety Features systems. Valves will be stroked to the position required to fulfill their safety function unless it is established that such testing is not practical during operation. Valves that cannot be full-stroke tested will be part-stroke tested during operation and full-stroke tested during each normal refueling shutdown.

Periodic surveillance of the airlock interlock systems is specified to assure continued operability and preclude instances where one or both doors are inadvertently left open. When an airlock is inoperable and containment integrity is required, local supervision of airlock operation is specified.

Reference

(1) FSAR, Section 5.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO.93 TO FACILITY OPERATING LICENSE NO. DPR-50

METROPOLITAN EDISON COMPANY
JERSEY CENTRAL POWER AND LIGHT COMPANY
PENNSYLVANIA ELECTRIC COMPANY
GPU NUCLEAR CORPORATION

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-289

Introduction

By letter dated April 21, 1982, the licensee proposed certain changes to the facility Technical Specifications concerning containment leakage rate testing, as required by Appendix J to 10 CFR 50. Specifically, these proposed changes relate to local (Type B and C) leakage rate testing of containment isolation valves and resilient seals in penetrations. The licensee would add several valves to the Type C testing program, delete others, and make certain editorial changes.

Evaluation

In an NRC letter dated November 4, 1981, the licensee was requested to include valves IC-V16, V18, and NS-V11 in their Type C testing program. In a letter dated January 26, 1982, the licensee concurred and, in addition, committed to include certain recently-installed containment isolation valves associated with the hydrogen recombiner system (valves HR-V2A, 2B, 4A, 4B, 22A, 22B, 23A, 23B). We consider the addition of these valves to the Type C testing program to be appropriate and acceptable.

In conjunction with the recombiner system modification, containment isolation valves LR-V2 and LR-V3 will no longer function as containment isolation barriers; instead, blind flanges located downstream fulfill this function. Therefore, the licensee proposes to remove valves LR-V2 and LR-V3 from the Type C testing program. These valves will remain in place, but will function only to throttle the flow of air from the containment during depressurization following containment integrated leak rate tests. Due to the configuration used during leak testing (pressurizing between two flanges at either end of penetration), the results of local leak (Type B) testing of blind flanges on penetrations 415 and 416 will include any leakage from packing and bonnet gaskets on valves LR-V2 and LR-V3. We, therefore, conclude that valves LR-V2 and LR-V3 need not be Type C tested and may be removed from the Type C testing program.

8405310103 840518
PDR ADOCK 05000289
P PDR

The licensee states that since it has been determined that their fluid blocking systems do not meet the Appendix J requirements for a containment isolation valve sealing system, all the valves and penetrations listed in the proposed changes to the Technical Specifications concerning local leakage rate tests (4.2.1.2.1) are either Type B or C tested, as appropriate, in accordance with Appendix J. The licensee has not taken credit for the fluid blocking systems (mentioned in current Technical Specifications) in lieu of Type B and C testing since 1977. The licensee proposes, therefore, to remove all discussion of these fluid blocking systems from the Technical Specifications. Valves and penetrations currently shown as served by the fluid blocking systems and not requiring Type B and C tests would instead be listed as requiring Type B and C tests. The licensee proposes to rearrange the valve listing into alphabetical order by valve tag number; also, valve tag number RB-V2A, which is incorrectly listed in current Technical Specifications as "RB-V2*", would be corrected. We consider these changes to be appropriate and acceptable.

In conclusion, we find all of the proposed changes to the Technical Specifications contained in the licensee's letter of April 21, 1982, to be acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: May 18, 1984

Principal Contributor:
J. Pulsipher

REFERENCES:

1. Letter, J. Stolz (NRC) to H. Hukill (Metropolitan Edison Company), "Addition of Valves to Local Leak Rate Testing Program for TMI-1," dated November 4, 1981.

2. Letter, H. Hukill (Metropolitan Edison Company) to J. Stolz (NRC), "Type 'C' Testing for Valves NS-V11, IC-V16 & V18," dated January 26, 1982.

May 18, 1984

MEMORANDUM FOR: James R. Miller, Chief
Operating Reactors Branch No. 3
Division of Licensing

Distribution:
Docket File
Memo File
RIngram
JVanVliet
OThompson

FROM: John F. Stolz, Chief
Operating Reactors Branch No. 4
Division of Licensing

SUBJECT: REQUEST FOR PUBLICATION IN MONTHLY FR NOTICE-
NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

GPU Nuclear Corporation, et al., Docket No. 50-289, Three Mile Island Nuclear Station, Unit No. 1, Dauphin County, Pennsylvania

Date of application for amendment: April 21, 1982

Brief description of amendment: This amendment changes Section 4.4.1.2 of the Technical Specifications regarding local leakage rate testing of containment isolation valves and resilient seals in penetrations. The amendment adds several valves to the Type C testing program and deletes other valves. The amendment also includes editorial changes.

Date of issuance: May 18, 1984

Effective date: May 18, 1984

Amendment No. 93

Facility Operating License No. DPR-50. Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: November 22, 1983, 48 FR 52816

The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated May 18, 1984.

No significant hazards consideration comments received: No

8405310109 840518
PDR ADOCK 05000289
P PDR

Local Public Document Room location: Government Publications Section, State Library of Pennsylvania, Education Building, Commonwealth and Walnut Streets, Harrisburg, Pennsylvania 17126

John F. Stolz, Chief
Operating Reactors Branch No. 4
Division of Licensing

ORB#4:DL	ORB#4:DL	ORB#4:DL	OELD
RIngram;ef	~~JVanVliet;ef~~	JFStolz	
05/11/84	05/11/84	05/11/84	05/11/84
	OThompson		

NRC FORM 255
(10-76)

DIVISION OF CONTRACTS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

NOTIFICATION OF CONTRACT EXECUTION

CONTRACT NUMBER: NRC-02-84-001

MODIFICATION NUMBER: 1

☐ NEW ☒ MODIFICATION

OTHER (Specify)

TO: Eleni Davis (Title)

Office of Nuclear Material Safety and Safeguards (Organization)

CONTRACT BASED ON:

AUTHORIZATION NUMBER: NMS-84-001

DATE: 5/23/84

FROM: Marie Page *Marie Page* 5/23/84 (Date)
Contract Administrator

Technical Contracts Branch

Contract Administrator

DIVISION OF CONTRACTS, ADM

CONTRACT CHANGES PER THIS ACTION

Definitizes Task Order 001

CONTRACTOR (Name & Location)

Weston Geophysical Corporation
P. O. Box 550
Westboro, MA 01581

EXECUTION DATE: 5/15/84

TYPE OF CONTRACT: CPFF/Delivery Orders

PROJECT TITLE

"Technical Assistance in Geophysical Methods for Site Characterization"

PERIOD OF PERFORMANCE: 3/9/84-3/8/85

PRINCIPAL INVESTIGATOR: Vincent Murphy

NRC AUTHORIZED REPRESENTATIVE: Ben Rice

FUNDING	B&R NUMBER	FIN NUMBER	AMOUNT
	50-19-03-01	D1003-4	
	NEW NRC FUNDS		$ -0-
	TOTAL FY 84 FUNDING		$ 281,942.00
	TOTAL NRC OBLIGATIONS		$ 281,942.00

GOVERNMENT PROPERTY: N/A

8405310083 840515
PDR CONTR
NRC-02-84-001 PDR

ATTACHMENT(S):

CONTRACT DOCUMENT (Mod. #1)

NRC FORM 255
(10-76)

RF/PDR

STANDARD FORM 30, JULY 1966
GENERAL SERVICES ADMINISTRATION
FED. PROC. REG. (41 CFR) 1-16.101

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. AMENDMENT/MODIFICATION NO.	2. EFFECTIVE DATE	3. REQUISITION/PURCHASE REQUEST NO.	4. PROJECT NO. (If applicable)
One (1)	3/9/84	NMS-84-001	

5. ISSUED BY CODE

U. S. Nuclear Regulatory Commission
Division of Contracts
Washington, DC 20555

6. ADMINISTERED BY (If other than block 5) CODE

7. CONTRACTOR NAME AND ADDRESS CODE FACILITY CODE

(Street, city, county, state, and ZIP Code)

Weston Geophysical Corporation
ATTN: Mrs. Mary Fannon
P. O. Box 550
Westboro, MA 01581

8. ☐ AMENDMENT OF SOLICITATION NO. _____

DATED _____ (See block 9)

☒ MODIFICATION OF CONTRACT/ORDER NO. NRC-02-84-001

DATED 3/9/84 (See block 11)

9. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in block 12. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended, by one of the following methods: (a) By signing and returning _____ copies of this amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If, by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

10. ACCOUNTING AND APPROPRIATION DATA (If required)

B&R No. 50-19-03-01 FIN D-1003-4 $7,596.00

11. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS

(a) ☐ This Change Order is issued pursuant to _____

The Changes set forth in block 12 are made to the above numbered contract/order.

(b) ☐ The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, appropriation data, etc.) set forth in block 12.

(c) ☒ This Supplemental Agreement is entered into pursuant to authority of Article II of contract

It modifies the above numbered contract as set forth in block 12.

12. DESCRIPTION OF AMENDMENT/MODIFICATION

The purpose of this modification is to issue a fully definitized Task Order 001.

I. In accordance with Article II, authority is hereby provided for the contractor to perform Task Order No. 001. The effort shall be performed as shown below:

1. Statement of Work

The contractor shall participate in the Basalt Waste Isolation Project (BMP) Geology - Geologic Stability Workshops, March 12 to 16, 1984 in Hanford, Washington. The participation shall be in the area of data analysis and discussions concerning basalt investigations (seismic reflection, magnetaleurics, gravity, and magnetics).

8405310096 840515
PDR CONTR
NRC-02-84-001 PDR

2. Reports

Upon completion of the workshop, the contractor shall submit a

Except as provided herein, all terms and conditions of the document referenced in block 8, as heretofore changed, remain unchanged and in full force and effect.

13. ☐ CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT ☒ CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 3 COPIES TO ISSUING OFFICE

14. NAME OF CONTRACTOR/OFFEROR WESTON GEOPHYSICAL CORP.

BY Mary M. Fannon (Signature of person authorized to sign)

15. NAME AND TITLE OF SIGNER (Type or print)
MARY M. FANNON
CLERK OF CORPORATION

16. DATE SIGNED 5-15-84

17. UNITED STATES OF AMERICA

BY [signature] (Signature of Contracting Officer)

18. NAME OF CONTRACTING OFFICER (Type or print)
Kellogg V. Morton

19. DATE SIGNED 3-9-84

U.S. GOVERNMENT PRINTING OFFICE : 1982 O - 361-526 (7447)

trip report summarizing major issues and data information with regard to geophysical methods and interpretation.

3. Period of Performance

The period of performance shall be from March 12, 1984 to March 19, 1984.

4. Task Order Cost Ceiling

The cost ceiling associated with this Task Order is $7,596.00, of which $6,931.00 represents the total estimated cost and $665.00 represents the fixed fee.