



AMERICAN NUCLEAR SOCIETY
STANDARDS COMMITTEE

Headquarters:
555 North Kensington Avenue
LaGrange Park, Illinois 60525 USA
Telephone 312/352-6611
Telecopy 312/352-0499
Telex 254635

December 18, 1984

Mr. Kellog V. Morton, Grants Officer
Research Contracts Branch, Division of Contracts
Office of Administration
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Grant No. NRC-G-04-81-001

Dear Mr. Morton:

This letter is to request a no-cost extension and modification to the above designated grant. The grant was originally made to support development of the PRA Procedures Guide, published by NRC in January 1983 as NUREG/CR-2300. When the project was initiated in 1980, a decision was made to re-evaluate the need to develop modifications or supplemental information to this document within two years after its publication. Through Modification #4 to the grant, funds in the amount of \$20,000 were set aside to make this evaluation and to initiate any required work. The grant will expire on 31 December, 1984; therefore, an extension to 31 December, 1985 is requested.

Mr. James F. Mallay was director for ANS of the original project to develop the PRA Procedures Guide. It is intended that he convene the ad hoc group by March 31, 1985. It is suggested that this group include John Garrick, Ian Wall, Robert Bernero, and Frank Gillespie, as well as Mr. Mallay. All were members of the original PRA group with the exception of Mr. Gillespie, who is now Director, Division of Risk Analysis and Operation, RES.

Extension of the grant will permit ANS to provide support as necessary for this evaluation and any required initiation of new work. We look forward to your positive reply.

Sincerely,

A handwritten signature in cursive script, appearing to read "Marilyn D. Weber".

Mrs. Marilyn D. Weber
Program Administrator

MDW:ej

cc: J. F. Mallay
F. P. Gillespie
R. Bernero
J. R. Heelan
R. Clemmons

8508080352 850621
PDR FOIA
AFTERG0085-85 PDR

MODIFICATION NO. 1 TO GRANT NRC-G-04-81-001

BETWEEN

AMERICAN NUCLEAR SOCIETY

AND

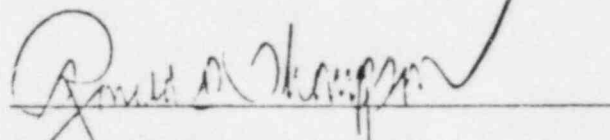
THE U.S. NUCLEAR REGULATORY COMMISSION

- A. The purpose of this Modification is to change the dollar amount in block no. 15 of the Notice of Grant Award.
- B. Specifically, block no. 15, Funding Sources, of this grant no. NRC-G-04-81-001 is increased by \$32,494.03 from \$227,700.00 to \$260,194.03.
- C. All other terms and conditions under this grant remain the same.
- D. In witness whereof, the parties have executed this document.

United States of America

Date: Aug. 5, 1981

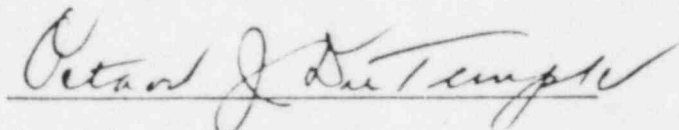
By


Ronald D. Thompson, Acting Chief
Operations Support Branch
Division of Contracts
Office of Administration
U.S. Nuclear Regulatory Commission

Grantee

Date: July 28, 1981

By


(Title) Executive Director
American Nuclear Society

8109230774 PIR

lp

#3

MODIFICATION NO. 2 TO GRANT NRC-G-04-81-001
BETWEEN
AMERICAN NUCLEAR SOCIETY
AND
THE U.S. NUCLEAR REGULATORY COMMISSION

- A. The purpose of this modification is to change the dollar amount in block No. 15 of the Notice of Grant Award.
- B. Specifically, block No. 15, Funding Sources, of this grant No. NRC-G-04-81-001 is increased by \$45,000 from \$260,194.03 to \$305,194.03.
- C. All other terms and conditions under this grant remain the same.
- D. In witness whereof, the parties have executed this document.

United States of America

Date: 12/3/81

By Ronald D. Thompson
Ronald D. Thompson, Chief
Operations Support Branch
Division of Contracts
Office of Administration
U.S. Nuclear Regulatory Commission

Date: 4 Jan 1982

Grantee
By Peter J. DeTemple
(Title) Executive Director
American Nuclear Society

~~8202050163 PDR~~
18

MODIFICATION NO. 3 TO GRANT NO. NRC-G-04-81-001
BETWEEN
AMERICAN NUCLEAR SOCIETY
AND
THE U.S. NUCLEAR REGULATORY COMMISSION

- A. The purpose of this modification is to change the grant period in block No. 3 of the Notice of Grant Award.
- B. Specifically, block No. 3, Grant Period, of this Grant No. NRC-G-04-81-001 is extended from July 31, 1982 to December 31, 1982.
- C. All other terms and conditions under this grant remain the same.
- D. In witness whereof, the parties have executed this document.

UNITED STATES OF AMERICA

Date:

8/12/82

By:

Raymond P. Austin
Kellogg V. Morton
Grants Officer
Research Contracts Branch
Division of Contracts
Office of Administration
U. S. Nuclear Regulatory Commission

GRANTEE

Date:

23 July 1982

By:

American Nuclear Society

Robert J. DuTemple

Executive Director

(Title)

~~8208260465 PDR~~

1P

MODIFICATION NO. 4 TO GRANT NO. NRC-G-04-81-001
BETWEEN
THE AMERICAN NUCLEAR SOCIETY (ANS)
AND
THE U.S. NUCLEAR REGULATORY COMMISSION

- A. The purpose of this Modification is to change the grant period in Block No. 3, and incorporate the scope modification as proposed by ANS' letter dated July 22, 1982.
- B. Specifically, of this Grant No. NRC-G-04-81-001:
1. Block No. 3, Grant Period, is extended by two (2) years from December 31, 1982 through December 31, 1984.
 2. Block No. 9 shall include the work scope modification as proposed by ANS' letter dated July 22, 1982.
- C. All other terms and conditions under this Grant remain the same.
- D. In witness whereof, the parties have executed this document.

UNITED STATES OF AMERICA:

DATE: 10-19-82

BY: [Signature]

Kellogg V. Morton, Grants Officer
Research Contracts Branch
Division of Contracts
Office of Administration

GRANTEE:

DATE: October 19, 1982

BY: [Signature]

TITLE: Executive Director

American Nuclear Society

~~821145488 PDR~~
LP

MODIFICATION NO. ⁵ 10 GRANT NO. NRL-G-04-81-001

BETWEEN

THE AMERICAN NUCLEAR SOCIETY (ANS)

AND

THE U.S. NUCLEAR REGULATORY COMMISSION

- A. The purpose of this Modification is to change the grant period in Block No. 3 to reflect a six-month no-cost extension.
- B. Specifically, of this Grant No. NRC-G-04-81-001:
1. Block No. 3, Grant Period, is extended by six (6) months from December 31, 1984 through June 30, 1985.
- C. All other terms and conditions under this Grant remain the same.
- D. In witness whereof, the parties have executed this document.

UNITED STATES OF AMERICA:

Date 2/11/85

By Paul J. Edgeworth
PAUL J. EDGEWORTH for
Kellogg V. Norton, Chief
Technical Contracts Branch
Division of Contracts
Office of Administration

GRANTEE:

Date February 15, 1985

By Octavio J. De Tencate
Title Executive Director
American Nuclear Society

8502270630 PDR
lp

U. S. NUCLEAR REGULATORY COMMISSION
NOTICE OF GRANT AWARD

1/19/81

1. GRANT NUMBER NRC-G-04-81-001	2. MODIFICATION NUMBER ----	3. GRANT PERIOD FROM: 1/21/81 TO: 7/31/82
4. AUTHORITY Sections 31a. & 141b. of Atomic Energy Act of 1954, as amended	5. TYPE OF AWARD Grant	6. GRANTEE TYPE Professional Society Not-for-Profit
7. GRANTEE NAME AND ADDRESS American Nuclear Society 555 North Kensington Avenue LaGrange Park, IL 60525		8. PROJECT TITLE Support of the Nuclear Reliability Evaluation Program
9. PROJECT WILL BE CONDUCTED PER GRANTEE'S PROPOSAL(S), Entitled "Support of the Nuclear Reliability Evaluation Program" DATED October 31, 1980 and APPENDIX A - PROJECT GRANT PROVISIONS		10. TECHNICAL REPORTS ARE REQUIRED _____X_____ PROGRESS AND FINAL _____ FINAL ONLY _____ OTHER
11. PRINCIPAL INVESTIGATOR(S) NAME AND ADDRESS Marilyn Weber 555 North Kensington Avenue LaGrange Park, IL 60525 312/352-6611		12. NRC PROGRAM OFFICE (Name and Address) Office of Nuclear Regulatory Research Washington, DC 20555 Louis Rib TELEPHONE NO. 301/427-4320
13. ACCOUNTING AND APPROPRIATION DATA B&R#: 60190310 FIN#: G1004 APPN#: 31X0200.601		14. METHOD OF PAYMENT _____ ADVANCE BY TREASURY CHECK _____ REIMBURSEMENT BY TREASURY CHECK _____y_____ LETTER OF CREDIT _____ OTHER (specify)

15. FUNDING SOURCES

<u>SOURCE</u>	<u>AMOUNT</u>
NRC:	
THIS GRANT	\$ 227,700.00
PREVIOUSLY OBLIGATED	\$ --
GRANTEE SHARE:	
THIS GRANT	\$ -0-
PRIOR GRANT	\$ --
TOTAL FUNDING	\$ 227,700.00

~~8102170745~~
6PP

16. AMOUNT OBLIGATED BY THIS GRANT ACTION: \$ 227,700.00

17. NRC GRANTING OFFICE (Name and Address)

Office of Administration
Division of Contracts
Washington, DC 20555

18. GRANTEE

Octave J. DuTemple 19 Jan 1981
(Signature) (Date)

NAME(typed) Octave J. DuTemple

TITLE Executive Director

TELEPHONE NO. 312/352-6611

19. NRC GRANT OFFICER

Ronald D. Thompson Jan. 26 1981
(Signature) (Date)

NAME(typed) Ronald D. Thompson
Acting Chief

TITLE Special Projects Staff

TELEPHONE NO. 301/427-4383

20. GRANT PAYMENT INFORMATION

The grantee shall receive payments under this grant by letter of credit drawn in amounts necessary to meet current needs pursuant to OMB Circular A-110, Attachment I, unless the grantee has failed to comply with the program objectives, grant award conditions or Federal reporting requirements.

21. Attached is a copy of the "NRC Project Grant Provisions for Institutions of Higher Education and Other Nonprofit Organizations." Acceptance of these terms and conditions is acknowledged when federal funds are used on this grant project.

FEDERAL ASSISTANCE		2. APPLICANT'S APPLICATION	3. NUMBER 27007	3. STATE APPLICATION IDENTIFICATION NUMBER	3. NUMBER N/A
1. TYPE OF ACTION (Mark appropriate box) <input type="checkbox"/> PREAPPLICATION <input checked="" type="checkbox"/> APPLICATION <input type="checkbox"/> NOTIFICATION OF INTENT (Opt.) <input type="checkbox"/> REPORT OF FEDERAL ACTION	4. LEGAL APPLICANT/RECIPIENT a. Applicant Name : American Nuclear Society b. Organization Unit : c. Street/P.O. Box : 555 North Kensington Avenue d. City : LaGrange Park e. County : Cook f. State : Illinois g. ZIP Code : 60525 h. Contact Person (Name & telephone No.) : M. Weber (312) 352-6611	5. FEDERAL EMPLOYER IDENTIFICATION NO 362386176	6. PRO-GRAM (From Federal Catalog) a. NUMBER N/A b. TITLE N/A	7. TITLE AND DESCRIPTION OF APPLICANT'S PROJECT NREP Grant (National Reliability Evaluation Program) see item 21 and Attachment for Section IV	8. TYPE OF APPLICANT/RECIPIENT A-State B-Interstate C-Substate D-County E-City F-School District G-Special Purpose District H-Community Action Agency I-Higher Educational Institution J-Indian Tribe K-Other (Specify): Not-for-profit scientific and educational Enter appropriate letter <input checked="" type="checkbox"/> K
9. TYPE OF ASSISTANCE A-Basic Grant B-Supplemental Grant C-Loan D-Insurance E-Other Enter appropriate letter(s) <input type="checkbox"/> A	10. AREA OF PROJECT IMPACT (Names of cities, counties, States, etc.) Washington, D.C. and Chicago, Illinois	11. ESTIMATED NUMBER OF PERSONS BENEFITING	12. TYPE OF APPLICATION A-New B-Renewal C-Revision D-Continuation E-Augmentation Enter appropriate letter <input type="checkbox"/> A	13. PROPOSED FUNDING a. FEDERAL \$ 424,000 .00 b. APPLICANT .00 c. STATE .00 d. LOCAL .00 e. OTHER .00 f. TOTAL \$ 424,000 .00	14. CONGRESSIONAL DISTRICTS OF: a. APPLICANT N/A b. PROJECT N/A 16. PROJECT START DATE Year month day 1980 11 13 17. PROJECT DURATION 15 - 18 Months 18. ESTIMATED DATE TO BE SUBMITTED TO FEDERAL AGENCY Year month day 19 80 10 27
15. TYPE OF CHANGE (For 18c or 18e) A-Increase Dollars B-Decrease Dollars C-Increase Duration D-Decrease Duration E-Cancellation F-Other (Specify): Enter appropriate letter(s) <input type="checkbox"/>	19. EXISTING FEDERAL IDENTIFICATION NUMBER N/A	20. FEDERAL AGENCY TO RECEIVE REQUEST (Name, City, State, ZIP code) U.S. Nuclear Regulatory Commission, Washington, DC 20555	21. REMARKS ADDED <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	22. THE APPLICANT CERTIFIES THAT: a. To the best of my knowledge and belief, data in this preapplication/application are true and correct, the document has been duly authorized by the governing body of the applicant and the applicant will comply with the attached assurance if the assistance is approved. b. If required by OMB Circular A-95 this application was submitted, pursuant to instructions therein, to appropriate clearinghouse and all responses are attached. (1) N/A (2) (3)	23. CERTIFYING REPRESENTATIVE a. TYPED NAME AND TITLE Octave J. Du Temple Executive Director b. SIGNATURE <i>Octave J. Du Temple</i> c. DATE SIGNED Year month day 1980 10 31
24. AGENCY NAME	25. APPLICATION RECEIVED Year month day 19	26. ORGANIZATIONAL UNIT	27. ADMINISTRATIVE OFFICE	28. FEDERAL APPLICATION IDENTIFICATION	29. ADDRESS
30. FEDERAL GRANT IDENTIFICATION	31. ACTION TAKEN <input type="checkbox"/> a. AWARDED <input type="checkbox"/> b. REJECTED <input type="checkbox"/> c. RETURNED FOR AMENDMENT <input type="checkbox"/> d. DEFERRED <input type="checkbox"/> e. WITHDRAWN	32. FUNDING a. FEDERAL \$.00 b. APPLICANT .00 c. STATE .00 d. LOCAL .00 e. OTHER .00 f. TOTAL \$.00	33. ACTION DATE Year month day 19	34. STARTING DATE Year month day 19	35. CONTACT FOR ADDITIONAL INFORMATION (Name and telephone number)
36. ENDING DATE Year month day 19	37. REMARKS ADDED <input type="checkbox"/> Yes <input type="checkbox"/> No	38. FEDERAL AGENCY A-95 ACTION a. In taking above action, any comments received from clearinghouses were considered. If agency response is due under provisions of Part 1, OMB Circular A-95, it has been or is being made. b. FEDERAL AGENCY A-95 OFFICIAL (Name and telephone no.) #1			

SECTION IV-REMARKS (Please reference the proper item number from Sections I, II or III, if applicable)

Section I, items 7 and 21; see attachment.

The American Nuclear Society (ANS) offers this proposal to support the Nuclear Regulatory Commission (NRC)-nuclear industry effort to prepare a Procedures Guide on probabilistic risk assessment. This offer is being made in response to an NRC request for administrative assistance for this project and as a result of an expression of interest from various industry organizations to have ANS perform this service. The ANS, as a not-for-profit scientific and educational organization of nuclear scientists and engineers, is pleased to make this offer as part of its technical and professional involvement in the project. The ANS will participate in the project by having members on the technical steering group representing the ANS standards program and the Nuclear Reactor Safety Division of the Society.

This proposal covers the support services for the technical writing group, the technical steering committee, the publication of the final Procedures Guide, distribution of drafts for review and comment, and a conference (topical meeting) to be held near the completion of the project. Each of these subjects is discussed below and a detailed tabulation of individual tasks follows.

This proposal includes several support services for the technical steering committee. All normal travel and living expenses will be paid for each member of the committee and for one staff member each from ANS and the Institute of Electrical and Electronics Engineers (IEEE) (as necessary), but excluding payment of travel and living expenses for NRC members and their consultants. All direct meeting costs will be paid. This proposal is based on the holding of nine technical steering committee meetings. Five of these meetings will be of two days duration; the other four are assumed to be of one day each. All meetings will be held at the same location in Chicago. This will permit the most economical travel arrangements, the most economical hotel and secretarial arrangements, and will afford ready access to any other needed services.

This proposal includes several support services for the technical writing group. All normal travel and living expenses will be paid for each member of the group plus one staff member from ANS (as necessary), but excluding payment of travel and living expenses for NRC members and their consultants. The proposal excludes payment of fees and travel expenses for any consultants to the group which may be provided by the IEEE to provide advice from outside the nuclear industry. Support services will be provided for the group as needed and as are reasonable for the performance of the project; such services may include secretarial and reproduction services and communication services, such as telephone calls and telecopy service, as is reasonable and usual for this type of project. This proposal is based on the holding of nine technical writing group meetings, all of which are assumed to be of four days duration. All meetings will be held at the same location as those of the technical steering committee.

Normal and usual support services will be provided to both the technical steering committee and the technical writing group. These services will include the making of hotel reservations, conference room arrangements, and other normal meeting services. These services will include the typing and distribution of drafts, the preparation and distribution of meeting notices, agenda, and meeting minutes, except that the preparation of meeting minutes for the technical writing group will be the responsibility of that group. These services will include the performance of action items resulting from meetings of the technical steering group and the technical writing group that would normally be performed as a non-technical staff function.

Publication of the Procedures Guide will be done using the usual publication facilities used by ANS at the time of publication, subject to bids rendered. The format and processes used will be those customarily employed for such a project. No

provision is made in this proposal for updating of the Procedures Guide beyond the termination of the project.

The conference to be held near the completion of the project will be devoted to the holding of technical sessions, technical seminars, lectures, and such other discussions as are customary for a technical conference in the areas of reliability, consequence analysis, probabilistic risk assessment, and related technologies for nuclear power plants. The primary theme of the conference will be the discussion of the Procedures Guide, its implications and uses, and related future work.

The figures given in the attached tabulation for number of meeting participants, number of meeting days, consulting fees, and support services form the basis of this offer. It is anticipated that some adjustment may be required to accommodate special needs of the project; such changes shall be limited to those deemed reasonable for the conduct of the project but will not be such as to exceed the value of any grant, as amended, given to ANS by the NRC for the performance of this work. Any services requested by the NRC, the technical steering group, or the technical writing group not covered by this proposal will require amendment to the provisions of any grant given to ANS by the NRC based on a written estimate prepared by ANS.

Definition of Project:

That work performed by the joint nuclear industry - NRC technical steering committee and technical writing group to prepare a Procedures Guide on probabilistic risk assessment for nuclear power plants.

nm/31.1/MDW