



# AMERICAN NUCLEAR SOCIETY

555 North Kensington Avenue, LaGrange Park, Illinois 60525 USA

Telephone: (312) 352-6611

Telex: 254635

NRC-G-04-81-001

OCTAVE J. DU TEMPLE  
Executive Director

October 31, 1980

Mr. Robert M. Bernero, Director  
Division of Systems and Reliability Research  
Office of Nuclear Regulatory Research  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555



Dear Mr. Bernero:

You will find enclosed a proposal and estimate by the American Nuclear Society for support to the "NREP Grant" (Nuclear Reliability Evaluation Program) program in response to your letter of October 10, 1980. Mr. L. N. Rib of your office has advised that the forms you enclosed are to be considered as an application.

The American Nuclear Society proposes to administer the NREP Grant project to prepare a Procedures Guide on probabilistic risk assessment for nuclear power plants. The estimate is \$424,000 for support to the project.

The American Nuclear Society is a 501(C)3 not-for-profit scientific and educational organization of engineers, scientists and educators. It is authorized by its charter to cooperate with government agencies and to prepare and disseminate technical and scientific information. As such, it is uniquely qualified to administer this project.

The schedule of payments is an important factor to the American Nuclear Society. As a not-for-profit organization, it is important that additional costs are not incurred by borrowing to provide financial support to the project. Therefore, it is requested that 90% of the grant be made available to ANS when work commences on the program.

This estimate by ANS is based upon our understanding of the work to be accomplished. The estimate is subject to negotiation and adjustment if the scope and details of the project can be defined in more detail to our mutual agreement. Please direct any inquiries to Marilyn D. Weber, the contact person for ANS, or to me.

Sincerely,

Octave J. Du Temple  
Executive Director

OJDT:kw

810427 0 400

FEDERAL ASSISTANCE

1. TYPE OF ACTION  
 PREAPPLICATION  
 APPLICATION  
 NOTIFICATION OF INTENT (Opt.)  
 REPORT OF FEDERAL ACTION  
(Mark appropriate box)

2. APPLICANT'S APPLICATION  
 a. NUMBER: 27007  
 b. DATE: 1980 10 27

3. STA APPLICATION IDENTIFIER  
 a. NUMBER: N/A  
 b. DATE ASSIGNED: 19

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 a. County: Cook  
 e. State: Illinois g. ZIP Code: 60525  
 h. Contact Person (Name & telephone No.): M. Weber (312) 352-6611

5. FEDERAL EMPLOYER IDENTIFICATION NO.: 362386176  
 6. PROGRAM (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 N-Community Action Agency  
 B-Interstate I-Higher Educational Institution  
 C-Substate J-Indian Tribe  
 District K-Other (Specify):  
 D-County Not-for-profit scientific and educational  
 E-City Enter appropriate letter  K  
 F-School District  
 G-Special Purpose District

9. TYPE OF ASSISTANCE  
 A-Basic Grant D-Insurance  
 B-Supplemental Grant E-Other Enter appropriate letter(s)  A   
 C-Less

10. AREA OF PROJECT IMPACT (Names of cities, counties, States, etc.)  
 Washington, D.C. and Chicago, Illinois

12. TYPE OF APPLICATION  
 A-New C-Revision E-Augmentation  
 B-Renewal D-Continuation Enter appropriate letter  A

|                      |                |  |                |
|----------------------|----------------|--|----------------|
| 13. PROPOSED FUNDING |                | 14. CONGRESSIONAL DISTRICTS OF:                      |                |
| a. FEDERAL           | \$ 424,000 .00 | a. APPLICANT   | N/A            |
| b. APPLICANT         | .00            | b. PROJECT   | N/A            |
| c. STATE             | .00            | 16. PROJECT START DATE                               | 1980 11 13     |
| d. LOCAL             | .00            | 17. PROJECT DURATION                                 | 15 - 18 Months |
| e. OTHER             | .00            | 18. ESTIMATED DATE TO BE SUBMITTED TO FEDERAL AGENCY | 19 80 10 27    |
| f. TOTAL             | \$ 424,000 .00 |  |                |

15. TYPE OF CHANGE (For 18c or 18e)  
 A-Increase Dollars F-Other (Specify):  
 B-Decrease Dollars  
 C-Increase Duration  
 D-Decrease Duration  
 E-Cancellation  
 Enter appropriate letter(s)

20. FEDERAL AGENCY TO RECEIVE REQUEST (Name, City, State, ZIP code)  
 U.S. Nuclear Regulatory Commission, Washington, DC 20555

21. REMARKS ADDED  
 Yes  No

22. THE APPLICANT CERTIFIES THAT:  
 a. To the best of my knowledge and belief, data in this application/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 clearinghouses and all responses are attached:  
 None  Response attached   
 (1) N/A   
 (2)   
 (3)

23. CERTIFYING REPRESENTATIVE  
 a. TYPED NAME AND TITLE: Octave J. Du Temple, Executive Director  
 b. SIGNATURE: *Octave J. Du Temple*  
 c. DATE SIGNED: 1980 10 31

24. AGENCY NAME

25. APPLICATION RECEIVED: 19

26. ORGANIZATIONAL UNIT

28. FEDERAL APPLICATION IDENTIFICATION

27. ADMINISTRATIVE OFFICE

29. ADDRESS

30. FEDERAL GRANT IDENTIFICATION

|  |              |        |
|--|--------------|--------|
| 31. ACTION TAKEN<br><input type="checkbox"/> a. AWARDED<br><input type="checkbox"/> b. REJECTED<br><input type="checkbox"/> c. RETURNED FOR AMENDMENT<br><input type="checkbox"/> d. DEFERRED<br><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: 19

34. STARTING DATE: 19

35. CONTACT FOR ADDITIONAL INFORMATION (Name and telephone number)

36. ENDING DATE: 19

37. REMARKS ADDED  
 Yes  No

38. FEDERAL AGENCY A-95 ACTION  
 a. Is 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.)

POOR ORIGINAL

---

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

ATTACHMENT M-1

PREAPPLICATION FOR FEDERAL ASSISTANCE  
American Nuclear Society - National Reliability Evaluation Program  
PART II

1. Does this assistance request require State, local, regional or other priority rating?  Yes  No
2. Does this assistance require State or local advisory, educational or health clearance?  Yes  No
3. Does this assistance request require Clearinghouse review?  Yes  No
4. Does this assistance request require State, local, regional or other planning approval?  Yes  No
5. Is the proposed project covered by an approved comprehensive plan?  
 Yes  No
6. Will the assistance requested serve a Federal installation?  Yes  No
7. Will the assistance requested be on Federal land or installation?  
 Yes  No
8. Will the assistance requested have an effect on the environment?  
 Yes  No
9. Will the assistance requested cause the displacement of individuals, families, businesses, or farms?  Yes  No
10. Is there other related assistance for this project previous, pending or anticipated?  Yes  No
11. Is the project in a designated flood hazard area?  Yes  No

ATTACHMENT M-1 (Cont'd)

PREAPPLICATION FOR FEDERAL ASSISTANCE

American Nuclear Society - National Reliability Evaluation Program Grant  
 PART III - PROJECT BUDGET

| Federal Catalog No.<br>(a) | Type of Assistance<br>Loan, Grant, etc.<br>(b) | First Budget Period<br>(c) | Balance of Project<br>(d) | Total<br>(e)   |
|----------------------------|--|----------------------------|---------------------------|----------------|
| 1.                         | Grant  | N/A                        | N/A                       | 15 - 18 months |
| 2.                         |  |                            |                           |                |
| 3.                         |  |                            |                           |                |
| 4.                         |  |                            |                           |                |
| 5.                         |  |                            |                           |                |
| 6.                         | Total Federal Contribution                     | \$                         | \$                        | \$ 424,000     |
| 7.                         | State Contribution                             | N/A                        |                           |                |
| 8.                         | Applicant Contribution                         | N/A                        |                           |                |
| 9.                         | Other Contributions                            | N/A                        |                           |                |
| 10.                        | TOTALS   | \$                         | \$                        | \$ 424,000     |

PART IV - PROGRAM NARRATIVE STATEMENT  
 (Attach per instruction)

See Attachment to Form 424.

ATTACHMENT M-3

PART II

PROJECT APPROVAL INFORMATION

American Nuclear Society - National Reliability Evaluation Program Grant

Item 1.

Does this assistance request require State, local, regional, or other priority rating?

\_\_\_ Yes \_\_\_  No

Name of Governing Body: \_\_\_\_\_

Priority Rating \_\_\_\_\_

Item 2.

Does this assistance request require State, or local advisory, educational or health clearances?

\_\_\_ Yes \_\_\_  No

Name of Agency or Board: \_\_\_\_\_

(Attach Documentation)

Item 3.

Does this assistance request require clearinghouse review in accordance with OMB Circular A-95?

\_\_\_ Yes \_\_\_  No

(Attach Comments)

Item 4.

Does this assistance request require State, local, regional or other planning approval?

\_\_\_ Yes \_\_\_  No

Name of Approving Agency: \_\_\_\_\_

Date \_\_\_\_\_

Item 5.

Is the proposed project covered by an approved comprehensive plan?

\_\_\_ Yes \_\_\_  No

Check one: State  Local

Regional

Location of Plan \_\_\_\_\_

Item 6.

Will the assistance requested serve a Federal installation?

\_\_\_ Yes \_\_\_  No

Name of Federal Installation: \_\_\_\_\_

Federal population benefiting from Project \_\_\_\_\_



ATTACHMENT M-3 (Cont'd)

PART II - PROJECT APPROVAL INFORMATION

American Nuclear Society - National Reliability Evaluation Program Grant

---

Item 7.

Will the assistance requested be on Federal land or installation?

\_\_\_ Yes \_\_\_  No

Name of Federal Installation: \_\_\_\_\_

Location of Federal Land \_\_\_\_\_

Percent of Project \_\_\_\_\_

---

Item 8.

Will the assistance requested have an impact or effect on the environment?

\_\_\_ Yes \_\_\_  No

See instructions for additional information to be provided.

---

Item 9.

Will the assistance requested cause the displacement of individuals, families, businesses, or farms?

\_\_\_ Yes \_\_\_  No

Number of:  
Individuals \_\_\_\_\_

Families \_\_\_\_\_

Businesses \_\_\_\_\_

Farms \_\_\_\_\_

---

Item 10.

Is there other related assistance on this project previous, pending, or anticipated?

\_\_\_ Yes \_\_\_  No

See instruction for additional information to be provided.

---

Item 11.

Is the project in a designated flood hazard area?

\_\_\_ Yes \_\_\_  No

---

See instruction for additional information to be provided.

PART III - BUDGET INFORMATION  
 American Nuclear Society - National Reliability Evaluation Program Grant

SECTION A - BUDGET SUMMARY

|    | Grant Program Function or Activity (a) | Federal Catalog No. (b) | Estimated Unobligated Funds |                 | New or Revised Budget |                 |              |
|----|--|-------------------------|-----------------------------|-----------------|-----------------------|-----------------|--------------|
|    |  |                         | Federal (c)                 | Non-Federal (d) | Federal (e)           | Non-Federal (f) | Total (g)    |
| 1. | NREP Grant                             | N/A                     | \$                          | \$              | \$ 424,000 *          | \$              | \$ 424,000 * |
| 2. |  |                         |                             |                 |                       |                 |              |
| 3. |  |                         |                             |                 |                       |                 |              |
| 4. |  |                         |                             |                 |                       |                 |              |
| 5. | TOTALS                                 |                         | \$                          | \$              | \$ 424,000 *          | \$              | \$ 424,000 * |

\* 90% of total is requested to be paid to grantee when work commences on the project with the remainder to be paid at the completion of the work.

PART III - BUDGET INFORMATION (Cont'd)

American Nuclear Society - National Reliability Evaluation Program Grant

SECTION B - BUDGET CATEGORIES

| 6. Object Class Categories | Grant Program, Function or Activity |     |     |     | Total<br>(5) |
|----------------------------|-------------------------------------|-----|-----|-----|--------------|
|                            | (1) NREP Grant                      | (2) | (3) | (4) |              |
| a. Personnel               | \$ 83,000                           | \$  | \$  | \$  | \$ 83,000    |
| b. Fringe Benefits         | N/A                                 |     |     |     | N/A          |
| c. Travel                  | 144,000                             |     |     |     | 144,000      |
| d. Equipment               | 18,000                              |     |     |     | 18,000       |
| e. Supplies                | 1,000                               |     |     |     | 1,000        |
| f. Contractual             | N/A                                 |     |     |     | N/A          |
| g. Construction            | N/A                                 |     |     |     | N/A          |
| h. Other *                 | 66,000                              |     |     |     | 66,000       |
| i. Total Direct Charges    | 312,000                             |     |     |     | 312,000      |
| j. Indirect Charges        | 112,000                             |     |     |     | 112,000      |
| k. TOTALS                  | \$ 424,000                          | \$  | \$  | \$  | \$ 424,000   |
| 7. Program Income          | \$ N/A                              | \$  | \$  | \$  | \$ N/A       |

\* h1. Conference rooms 7,500  
 h2. Postage 3,000  
 h3. Telephone service 2,500

h4. Incidental expense 3,000  
 h5. Conference support 30,000  
 h6. Publication costs for Procedures Guide 20,000

ATTACHMENT M-3 (Cont'd)  
 American Nuclear Society

## SECTION C - NON-FEDERAL RESOURCES

N/A

|     | (a) Grant Program | (b) Applicant | (c) State | (d) Other Sources | (e) Totals |
|-----|-------------------|---------------|-----------|-------------------|------------|
| 8.  |                   | \$            | \$        | \$                | \$         |
| 9.  |                   |               |           |                   |            |
| 10. |                   |               |           |                   |            |
| 11. |                   |               |           |                   |            |
| 12. | TOTALS            | \$            | \$        | \$                | \$         |

## SECTION D - FORECASTED CASH NEEDS \*

American Nuclear Society - National Reliability Evaluation Program Grant

|                 | Total for 1st Year *<br>Project | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter |
|-----------------|---------------------------------|-------------|-------------|-------------|-------------|
| 13. Federal     | \$ 381,000                      | \$          | \$          | \$          | \$          |
| 14. Non-Federal |                                 |             |             |             |             |
| 15. TOTAL       | \$ 381,000                      | \$          | \$          | \$          | \$          |

\* 90% of total is requested to be paid to grantee when work commences on the project with the remainder to be paid at the completion of the work.



**SECTION E - BUDGET ESTIMATE OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT**  
**American Nuclear Society - National Reliability Evaluation Program Grant**

| (a) Grant Program | Future Funding Periods (Years) |            |           |            |
|-------------------|--------------------------------|------------|-----------|------------|
|                   | (b) First                      | (c) Second | (d) Third | (e) Fourth |
| 16. NREP Grant    | \$ 43,000. *                   | \$         | \$        | \$         |
| 17.               |                                |            |           |            |
| 18.               |                                |            |           |            |
| 19.               |                                |            |           |            |
| 20. TOTALS        | \$ 43,000.                     | \$         | \$        | \$         |

\* 90% of total is requested to be paid to grantee when work commences on the project with the remainder to be paid at the completion of the work.

**SECTION F - OTHER BUDGET INFORMATION**  
**(Attached additional sheets if necessary)**

21. Direct Charges:

22. Indirect Charges:

23. Remarks:

PART IV - PROGRAM NARRATIVE  
 (Attach per instructions)

ATTACHMENT M-3 (Cont'd)

American Nuclear Society

PART III - BUDGET INFORMATION (Cont'd)

SECTION B - BUDGET CATEGORIES

| Object Class Categories    | Grant Program, Function or Activity |     |     | Total (5)  |
|----------------------------|-------------------------------------|-----|-----|------------|
|                            | (1)                                 | (2) | (3) |            |
| a. Personnel               | \$ 83,000                           | \$  | \$  | \$ 83,000  |
| b. Fringe Benefits         | N/A                                 |     |     | N/A        |
| c. Travel                  | 75,000                              |     |     | 75,000     |
| d. Equipment               | 18,000                              |     |     | 18,000     |
| e. Supplies                | 1,000                               |     |     | 1,000      |
| f. Contractual             | N/A                                 |     |     | N/A        |
| g. Construction            | N/A                                 |     |     | N/A        |
| h. Other *                 | 16,000                              |     |     | 16,000     |
| i. Total Direct Charges ** | 193,000                             |     |     | 193,000    |
| j. Indirect Charges        | 29,000                              | \$  | \$  | 29,000     |
| k. TOTALS                  | \$ 232,000                          | \$  | \$  | \$ 232,000 |
| 7. Program Income          | \$ N/A                              | \$  | \$  | \$         |

h4. Incidental expense 3,000

\*h1. Conference rooms 7,500  
 h2. Postage 3,000  
 h3. Telephone service 2,500

\*\* See applicable NOTE on pages 2 and 3.

Amended 11/10/80

Wayne Batson

ANS - NREP Grant

REVISED

Please deliver AT ONCE to:

Mr. Louis N. Rib  
U.S. Nuclear Regulatory Commission  
Office of Nuclear Regulatory Research  
Willstee Building  
7915 Eastern Avenue  
Silver Spring, MD 20910

FROM:

Marilyn D. Weber  
American Nuclear Society  
555 N. Kensington Ave.  
La Grange Park, IL 60525  
312/352-6611, Ext. 268

Mr. Rib:

These sheets represent the budget, amended as you requested.  
In accord with our telephone conversation on 11/10/80, I have  
omitted "Travel" for the Technical Steering Group but have  
retained this cost for the Technical Writing Group.

11/10/80

## A. PERSONNEL - \$83,000

Technical Writing Group  
 9 meetings - 4 days each  
 10 members; 1 ANS staff

- |  |               |
|--|---------------|
| 1. ANS Staff:<br>\$30 x 8 (hrs) x 4 (days) x 9 (meetings) =        | <u>8,640.</u> |
| 2. Secretarial - (temp. service) @ \$10./hr:<br>\$10 x 8 x 4 x 9 = | <u>2,880.</u> |

Technical Steering Group  
 9 meetings - 15 members  
 2 staff - 1 ANS, 1 IEEE (with IEEE support)  
 (5 mtgs. of 2 days) = 14 days  
 (4 mtgs. of 1 day)

- |  |               |
|--|---------------|
| 1. ANS Staff:<br>(\$30 x 8) x 14 =                   | <u>3,360.</u> |
| 2. Secretarial - none at meetings (other than staff) |               |

Support Services/Administration  
 Between meetings support  
 10 support periods: 8 between mtgs.;  
 1 "before;" 1 "following"

- |  |        |                |
|--|--------|----------------|
| 1. <u>Staff secretarial services</u> @ 2 days/wk for each of 7 weeks<br>between meetings @ \$25/hr.:<br>(\$25 x 8) x (2 x 7) x 8 = | 22,400 |                |
| Staff secretarial services following 5 days:<br>(\$25 x 8) x 5 =   | 1,000  | <u>23,400.</u> |
| 2. Administrative staff support @ 2.5 days/wk.<br>for each of 7 wks. between meetings:<br>(\$30 x 8) x (7 x 2.5) x 8 =             | 33,600 |                |
| Admn. staff support @ 5 days before;<br>5 days following:<br>(\$30 x 8) x 10 =   | 2,400  | <u>36,000.</u> |
| 3. Copy editor @ 3 days/each "between" period (8):<br>(\$25 x 8) x 3 x 8 =   | 4,800  |                |
| 10 days for editing of final copy <sup>①</sup><br>(\$25 x 8) x 10 =  | 2,000  | <u>6,800.</u>  |
| 4. Reproduction clerk 10 days @ \$25/hr:<br>(\$25 x 8) x 10 =  |        | <u>2,000.</u>  |

① Reduce by 5 days if ANS does not publish Procedures Guide.

NOTE: Omitted from the original proposal was an item for salaries to be paid to the "three members (of the Technical Writing Group) needed for management, writing, and integration assistance;" see attached memo, J.F. Mallay, dated 8/27/80. It is assumed that these salaries will be paid on the basis of engineering services calculated at approximately \$60./hr and that these participants will give 50% of their working time to the project. It is further assumed that the American Nuclear Society will have the responsibility for administering this expense. No figures are provided at this time because it is anticipated that the Technical Steering Group will better define this function at its first meeting.

Amended



C. TRAVEL - \$75,000

Technical Writing Group

|   |         |                |
|---|---------|----------------|
| 1. Air: (11-1) <sup>①</sup> x \$400 x 9 = |         | <u>36,000.</u> |
| Ground: To/from home/airport              |         |                |
| (20 x 2) x 9 x 20c/mi x 10 =              | 720.    |                |
| : To/from ORD; 9 x 2 x 10 x \$5=          | 900.    |                |
| : (40 x 2) x 9 x 20c/mi x 1 =             | 144.    | <u>1,764.</u>  |
| 2. Living costs - Hotel \$70; Meals \$25  | --      |                |
| 10 <sup>②</sup> x \$95 x 4 x 9 =          | 34,200. |                |
| 1 x \$95 x 4 x 9 (ANS staff)°             | 3,420.  | <u>37,620.</u> |

TWG: 10 members; 1 ANS staff (11 persons)

1. <sup>①</sup> 10 members - ANS staff  
       (11-1 persons) x \$400 x 9 meetings  
       (20 mi. x 2) x 9 mtgs. x 20c/mi x 10 people  
       (40 mi. x 2) x 9 mtgs. x 20c/mi x 1 Chicago-based ANS staff
  2. <sup>②</sup> 10 members  
       1 ANS staff
- 

I. INDIRECT CHARGES - \$29,000

|                      |               |                 |
|----------------------|---------------|-----------------|
| Total Direct Charges | 193,000 *     |                 |
| add 15% G & A        | <u>29,000</u> | 28,950 (29,000) |
|                      | 232,000       |                 |

\*NOTE: Omitted from the original proposal was an item for salaries to be paid to the "three members (of the Technical Writing Group) needed for management, writing, and integration assistance;" see attached Memo, J.F. Mallay, dated 8/27/80. It is assumed that these salaries will be paid on the basis of engineering services calculated at approximately \$60./hr. and that these participants will give 50% of their working time to the project. It is further assumed that the American Nuclear Society will have the responsibility for administering this expense. No figures are provided at this time because it is anticipated that the Technical Steering Group will better define this function at its first meeting.

Amended 11/10/80