Modification No. 5 Supplemental Agreement to Contract No. NRC-04-76-289

# SUPPLEMENTAL AGREEMENT BETWEEN THE UNIVERSITY OF MINNESOTA

# AND

## THE U. S. NUCLEAR REGULATORY COMMISSION

THIS SUPPLEMENTAL AGREEMENT, effective the 1st day of July , 1979, by and between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), as represented by the UNITED STATES NUCLEAR REGULATORY COMMIS-SION (hereinafter referred to as the "Commission"), and THE UNIVERSITY OF MINNESOTA

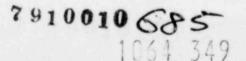
(hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

WHEREAS, the parties desire to modify Contract No. NRC-04-76-289 as hereinafter provided, and this supplemental agreement is authorized by law, including the Energy Reorganization Act of 1974, as amended, and the Atomic Energy Act of 1954, as amended.

NOW, THEREFORE, said contract is hereby modified as follows:

- Appendix A, attached to this supplemental agreement and made a part hereof, provides for the research to be performed by the Contractor during the contract period specified therein.
- In Article II The Period of Performance, the date "June 30, 1980 is substituted for the date " June 30, 1979 ".
- In Article III Consideration, the sum "\$189,708.00" is substituted for the sum "\$151,569.00".



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IN WITNESS WHEREOF, the parties have executed this document.

UNITED STATES OF AMERICA
BY: Kellogg V! Morton, Chief
Research Contracts Branch (title)
Nuclear Regulatory Commission
THE UNIVERSITY OF MINNESOTA
BY: 1 by DA Jatenne
A.R. Potami, Director

(title)

under this document; that \_\_\_\_\_\_ (signatory)

who signed this document on behalf of said Contractor was then Director of the Office of Research Administration of said Contractor; that .

this document was duly signed for and on behalf of said Contractor by authority of its governing body and is within the scope of its legal powers.

IN WITNESS WHEREOF, I have hereunto affixed my hand and the seal of said Contractor.

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Duane A. Wilson, Secretary Board of Regents University of Minnesota

(SEAL)

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CONTRACTOR: THE UNIVERSITY OF MINNESOTA

APPENDIX A

For the Contract period July 1, 1979 through June 30, 1980

Article A-I RESEARCH TO BE PERFORMED BY CONTRACTOR

- (a) The unclassified scope of work under this contract entitled, "Seismicity and Tectonic Relationships for Upper Great Lakes Precambrian Shield Province" is as follows:
  - 1. The Central Minnesota Seismic Array and the Seismograph stations at Minneapolis and Warren, Minn., will be maintained and operated.
  - The analysis from records from nearby seismic events will be made to further refine the sub-surface earth model in central Minnesota with particular emphasis on defining the velocity structure more exactly.
  - 3. Assessment of the hypocenter locating capability of the array and the accuracy of the locations will be made.
  - Magnitude calibration, wave form and array processing techniques, and surface waves will be studied to develop more accurate methods and results and to delimit and explain anomalous conditions.
- (b) The Principal Investigator expects to devote the following approximate amount(s) of time to the contract work:

H. M. Mooney: 100% of L. ime for 1 month M. Walton: 100% of his time for <sup>1</sup>/<sub>2</sub> month

ARTICLE A-II WAYS AND MEANS OF PERFORMANCE

(a) Items for which support will be provided as indicated in A-III, below

(1) Salaries and Wages

\$ 14,285.00

-0-

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\$

(2) Equipment to be purchased or fabricated by the Contractor

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(3) Travel
(i) Domestic

(ii) Foreign

\$ 1,200.00 \$ -0-

- (4) Other direct costs
- (5) Indirect costs based on a predetermined rate of 53.6 percent applicable to salaries and wages.
- (b) Items, if any, significant to the performance of this contract, but excluded from computation of Support Cost and from consideration in proportioning costs:

#### NONE

(c) Time or effort of Principal Investigator(s) including indirect costs and fringe benefits contributed by Contractor but excluded from computation of Support Cost and from consideration in proportioning costs:

### NONE

#### Article A-III

The total estimated cost of items under A-II(a) above for the contract period stated in this Appendix A is \$38,139.00 ; the Commission will pay 100 percent of the actual costs of these items incurred during the contract period stated in this Appendix A, subject to the provisions of Article III and Article B-XXVIII. The estimated NRC Support Cost for the contract period stated in this Appendix A is \$38,139.00 .

The estimated NRC Support Cost is funded as follows:

- (a) Estimated unexpended balance from prior period(s)
- 38,139.00

-0-

- (b) New funds for the current period
- (c) The new funds being added in A-III(b) constitute the basis for advance payments provided under Article B-X.

\$