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ARTICLE I - SCOPE OF WORK

The Contractor shall provide expert advice to the ACRS regarding the highly technical discussion of the proper method and consequences of combining dynamic loadings on a mechanical system (primarily piping) of nuclear power plants. The advice will be relevant to a variety of generic safety issues identified by the Advisory Committee on Reactor Safeguards including the seismic design bases for piping systems, protection against pipe whip, and the design of reactor vessel support structures.

This advice shall be given orally at meetings of the ACRS Subcommittee and in writing as letter reports following Subcommittee meetings. Subcommittee meetings involving seven ACRS members shall be scheduled during the CY 1981. During these meetings the NRC staff will set forth its position and basis regarding the combining of dynamic loads as required by Regulatory Guides 1.26, 1.29 and 1.46. The contractor shall evaluate these arguments and make a recommendation to the ACRS that may result in an ACRS report to the Nuclear Regulatory Commission.

ARTICLE II - PERIOD OF PERFORMANCE

The period of performance under this contract will begin on January 1, 1981 and all effort shall be completed by December 31, 1981.

ARTICLE III - CONSIDERATION

In full consideration of the Contractor's performance NRC shall pay the Engineers, Scientists, etc. - \$66.31/hr; Technical Support Personnel - \$16.13/hr; office supplies, materials and miscellaneous - \$75.00. Reimbursement will be made for the following reasonable domestic travel costs incurred directly and specifically in the performance of this contract and accepted by the Contracting Officer:

 When travel is to one of the high-rate geographical areas listed below actual subsistence costs shall be reimbursed at a daily rate not to exceed the rates indicated:

> Washington, D.C. - \$75.00 San Francisco - \$75.00

- Incidental expenses, i.e., office supplies, postage, etc. not reflected in the overhead rate or otherwise in the hourly rate and incurred in the perfor rance of work hereunder shall be reimbursed at actual cost.
- The cost of travel by privately owned automobile shall be reimbursed at the rate of 22.5¢ per mile.
- The cost of travel by rented automobile shall be reimbursed on a reasonable actual expense basis.

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- 5. All common carrier travel reimbursable hereunder shall be via economy class rates when available. If not available, reimbursement vouchers will be annotated that economy class accommodations were not available. First-class air travel is not authorized.
- Receipts are required for common carrier transportation, lodging and miscellaneous items in excess of \$15.00.

ARTICLE IV - OBLIGATIONS

The amount presently obligated by the NRC with respect to this contract is 6,300.00. The Government reserves the right to unilaterally fund this contract in the amount of \$2100.00 for fiscal year 1982. ARTICLE V - PAYMENT

The Contractor shall be paid an amount computed by multiplying the appropriate hourly rate, or rates, set forth in the Schedule of the contract, by the number of direct labor hours performed, which rates shall include wages, overhead, general and administrative expense and profit. Fractional parts of an hour shall be payable on a prorated basis. Vouchers may be submitted one each month, if approved by the Contracting Officer. The Contractor will substantiate youchers by evidence of actual payment. Promptly after receipt of such substantiated voucher, the Government shall, except as otherwise provided in this contract, make payment there on as approved by the Contracting Officer's Technical Representative.

It is estimated that the total cost to the Government for the performance of this contract will not exceed the ceiling price set forth in the Schedule, and the Contractor agrees to use his best efforts to perform the work specified in the Schedule and all obligations under this contract within such ceiling price. If at any time the Contractor has reason to believe that the hourly rate payments and material costs which will accrue in the performance of this contract in the next succeeding thirty (30) days, when added to all other payments and costs previously accured, will exceed eight-five percent (85%) of the ceiling price then set forth in the Schedule, the Contractor shall notify the Contracting Officer to that effect giving his revised estimate of the total price to the Government for the performance of this contract, together with supporting reasons and documentation. If at any time during the performance of this contract, the Contractor has reason to believe that the total price to the Government for the performance of this contract will be substantially greater or less than the then stated ceiling price, the Contractor shall so notify the Contracting Officer, giving his revised estimate of the total price for the performance of this contract, together with supporting reasons and documentation. If at any time during the performance of this contract, the Government has reason to believe that the work to be required in the performance of this contract will be substantially greater or less than the stated ceiling price, the Contracting Officer will so advise the Contractor, giving the then revised estimate of the total amount of effort to be required under the contract.



The Government shall not be obligated to pay the Contractor any amount in excess of the ceiling price set forth in the Schedule, and the Contractor shall not be obligated to continue performance if to do so would exceed the ceiling price set forth in the Schedule, unless and until the Contracting Officer shall have specified in such notice a revised ceiling which shall thereupon constitute the ceiling price for performance under this contract. When and to the extent that the ceiling price set forth in the Schedule has been increased, any hours expended and material costs incurred by the Contractor in excess of the ceiling price prior to the increase shall be allowable to the same extent as if such hours expended and materials costs had been incurred after such increase in the ceiling price.

ARTICLE VI - SPECIAL PROVISIONS

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VI.1 CONTRACTING OFFICER'S AUTHORIZED REPRESENTATIVE (COAR)

Performance of the work hereunder shall be subject to the Technical instructions issued by the U.S. Nuclear Regulatory Commission. The technical instructions shall be signed by the COAR.

The COAR is responsible for:

- monitoring the Contractor's technical progress, including the surveillance and assessment or performance and recommending to the Contracting Officer changes in requirement;
- (2) interpreting the statement of work;
- (3) performing technical evaluation as required;
- (4) performing technical inspections and acceptance required by this contract;
- (5) assistant the Contractor in the resolution of technical problems encountered during the performance.

Within the purview of this authority, the COAR is authorized to approve payment vouchers for supplies/services required under the contract. The Contracting Officer is responsible for directing or negotiating any changes in terms, conditions, or amounts cited in the contract.

For guidance from the COAR to the Contractor to be valid, it must:

- (1) be consistent with the description of work set forth in this contract;
- (2) not constitute new assignment of work or change of the expressed terms, conditions, or specifications incorporated into this contract;
- (3) not constitute a basis for an extension to the period of performance or contract delivery schedule;
- (4) not constitute a basis for any increase in the contract price.

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If the Contractor receives guidance from the COAR which the Contractor feels is not valid under the criteria cited above, the Contractor shall immediately notify the COAR. If the COAR and the Contractor are not able to resolve the questions within five (5) days, the Contractor shall notify the Contracting Officer.

VI.2 - INSPECTION AND ACCEPTANCE

Acceptance of the services and reports to be delivered herein will be made by the COAR.

VI.3 - DISSEMINATION OF CONTRACT INFORMATION

The Contractor shall not publish, permit to be published, or distribute for public consumption any information, oral or written, concerning the results of conclusions made pursuant to the performance of this contract, without the prior written consent of the Contracting Officer. (Two copies of any material proposed to be published or distributed shall be submitted to the Contracting Officer).

VI.4 - KEY PERSONNEL

For the purposes of Clause 26 of the General Provisions, Mr. E. Rodabaugh is identified as being essential to the work being performed.

ARTICLE VII - GENERAL PROVISIONS

This contract is subject to the Fixed Price Research & Development Contracts under \$10,000 dated November 14, 1977, which incorporated the FPR Changes and Additions and NRC additions, attached hereto and made a part of hereof.

Clause No. 14 - Patent Rights - Acquisition by the Government is deleted in its entirety.

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