

## AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

PAGE 1 OF 1

AMENDMENT/MODIFICATION NO. Eleven (11)	2. EFFECTIVE DATE 10-28-80	3. REQUISITION/PURCHASE REQUEST NO. NRR-79-118	4. PROJECT NO. (If applicable)
ISSUED BY U. S. Nuclear Regulatory Commission Division of Contracts Washington, D. C. 20555	CODE	5. ADMINISTERED BY (If other than block 3)	CODE

CONTRACTOR NAME AND ADDRESS The Franklin Institute Franklin Research Center 20th and Race Streets Philadelphia, PA 19103	CODE	FACILITY CODE	6. AMENDMENT OF SOLICITATION NO. DATED (See block 9)
Street, city, county, state, and ZIP Code			7. MODIFICATION OF CONTRACT/ORDER NO. NRC-03-79-118 DATED 9/28/79 (See block 11)

## 7. 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.

Offers 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.

## 8. ACCOUNTING AND APPROPRIATION DATA (If required)

N/A

## 9. 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 mutual agreement of the parties  
It modifies the above numbered contract as set forth in block 12.

## 10. DESCRIPTION OF AMENDMENT/MODIFICATION

This modification exercises the two year option under Section 2.0 Performance and Delivery, Article 2.2 - Option to Extend the Terms of the Contract, and the contract is revised to read as follows:

THE CONTRACT SCHEDULESection 1.0 Description of WorkArticle 1.1 Scope of Work

The Contractor independently, and not as an agent of the Government, shall manage and review that portion of license up to 500 licensing actions in the areas identified below:

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.

11. <input type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT. <input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 3 COPIES TO ISSUING OFFICE.	12. NAME OF CONTRACTOR/OFFEROR: THE FRANKLIN INSTITUTE			13. UNITED STATES OF AMERICA
14. SIGNATURE OF CONTRACTOR/OFFEROR: <i>[Signature]</i>		15. SIGNATURE OF CONTRACTING OFFICER: <i>[Signature]</i>		16. DATE SIGNED: 10/30/80
17. NAME AND TITLE OF SIGNER (Type or print): John R. Stover, Vice President		18. NAME OF CONTRACTING OFFICER (Type or print): D. J. Dougherty		19. DATE SIGNED: 10/30/80

8106190 341

### Specific Topics For First Year

- a. Mechanical Systems Engineering
- b. Control Rod Drive (CRD) Systems Modifications

The contractor shall review and evaluate General Electric Company final recommendations for CRD system modifications in order to reduce the creation and growth of reactor vessel nozzle cracks. The evaluation is to consider the effect of the modifications at each Boiling Water Reactor (BWR) plant on the CRD mechanisms individually and collectively during normal power operation and scrams. The contractor shall

prepare reports that will contain: (a) a description of the modifications; (b) a comparison of General Electric's CRD system acceptance criteria with the test results following the modifications; (c) the reactor coolant makeup capability following the modifications as compared to that which existed before the modifications. Also, its adequacy to provide makeup water following the loss of all other makeup systems; (d) an evaluation of the potential for future CRD malfunctions as a result of the modifications (this includes long terms effects such as building up of foreign material in the system, increased duty requirements of components and changes in drive line friction and broken seals); (e) conclusions regarding the effectiveness of reducing reactor vessel return line nozzle cracking as a result of the modifications and the potential for acceptable future CRD system operation following the modifications; (f) recommendations to the NRC staff regarding acceptability of the modifications and any additional measures that would further enhance reliable CRD system operation and reduction in the development in reactor vessel return line nozzle cracks.

### c. Inservice Testing

The contractor shall review and evaluate licensees' submittals in regard to its compliance with the ASME, Boiler and Pressure Vessel Code, Section XI, 1974 edition, as required by 10 CFR 50.55a (g), in the area of inservice testing practices for valves.

This activity will include the evaluation of the technical bases for the licensee's request for relief from the ASME requirements that have been determined to be impractical for his facility. The generic areas of the plant that are to be reviewed are:

PWR

1. Reactor Coolant System
2. Secondary System
3. High Pressure Injection System
4. Low Pressure Injection System
5. Accumulator Systems
6. Primary and Secondary Safety and Relief Valves
7. Containment Spray System
8. Auxiliary Feedwater Systems
9. Active Components in Service Water and Instrument Air Systems which are Required to Support Safety System Functions
10. Containment Isolation Valves Required to Change Position to Isolate Containment
11. Chemical and Volume Control System
12. Other Key Components in Auxiliary Systems Which are Required to Directly Support Plant Shutdown or Safety System Function

BWR

1. Reactor Coolant System
2. High Pressure Core Injection System
3. Low Pressure Core Injection System
4. Residual Heat Removal System (Shutdown Cooling System)
5. Low Pressure Core Spray System
6. Safety, Relief, and Safety/Relief Valves
7. Reactor Core Isolation Cooling (RCIC) System
8. Standby Liquid Control System (Boron System)
9. Automatic Depressurization System (Any Pilot or Control Valves, Associated Hydraulic or Pneumatic Systems, etc.)
10. Emergency Condenser System (Isolation Condenser System)
11. Containment Spray System
12. Containment Cooling System
13. Containment Isolation Valves Required to Change Position to Isolate Containment
14. Control Rod Drive Hydraulic System ("Scram" Function)
15. Active Components in Service Water and/or Closed Cooling Water and/or Fire Water and/or Well Water Systems and Other Auxiliary Systems Which are Required to Support Safety System Functions or Plant Shutdown

d. Containment Air Dilution System

Most operating BWR plants have an inerted (i.e., oxygen deficient) containment atmosphere as part of the measures to control combustible gases that may be formed following a postulated Loss of Coolant Accident (LOCA). A recently issued Regulation (10 CFR 50.44) would allow these plants to de-inert by providing an alternate combustible gas control system involving repressurization of the containment for dilution.

The contractor shall review and evaluate licensees' submittals on the proposed combustible gas control system, e.g., containment air dilution system. The activities will include the evaluation of the system design, system operating procedure, instrumentation and control, and radiation dose release. The result of the evaluation shall include a recommendation for the licensee's request for de-inerting activities.

e. Reactor Containment Performance

The contractor shall review and evaluate licensees' submittals covering the following specific categories with regard to existing designs or design changes in the containment systems of operating reactors:

1. Containment Response to a LOCA
2. Subcompartment Differential Pressure Response
3. Containment Heat Removal Systems
4. Secondary Containment Functional Design
5. Containment Isolation System
6. Combustible Gas Control Systems
7. Containment Leakage Testing

The contractor shall review specific issues or licensee proposed modifications to determine the extent to which they satisfy the criteria set forth by the staff for containment design.

f. Containment Leakage Testing

The contractor shall review and evaluate licensees' submittals regarding its compliance with Appendix J to 10 CFR 50 and associated staff positions for the implementation of Appendix J to operating reactors. The activities will include the evaluation of the technical bases for licensee's request for exemption from Appendix J requirements that may have been determined to be impractical for his facility.

g. Electrical Engineering

h. Degraded Voltage of Offsite Power System and Interaction of the Offsite and Onsite Emergency Power Systems



The contractor shall review and evaluate licensees' submittals concerning onsite emergency power systems to assess the susceptibility of their associated redundant safety-related electrical equipment to:

- (a) Sustained degraded voltage conditions at the offsite power source;
- (b) Interaction of the offsite and onsite emergency power systems; and
- (c) Voltage drop of the offsite and onsite emergency power systems.

This review will be done with full consideration to the staff positions outlined in attachment B to this work scope.

i. Bypassing Related to Containment Purging

The contractor shall review and evaluate licensees' submittals which will justify purging of containment and will address technical specification changes and plant modifications to permit proposed purging operations. The licensee may propose limited purging (limited to a number of hours per year) or unlimited purging.

The contractor shall evaluate the impact of emergency purging during Emergency Core Cooling System (ECCS) performance, the radiological consequence of a LOCA during purging operations, and conformance of isolation instrumentation and circuit design to IEEE-279-1971.

j. Reactor Protection System Power Supply

The NRC staff has requested that licensees of BWR's evaluate their reactor protection system power supplies and determine whether there is potential for undetected single failures to adversely affect the reactor protection system and whether there is a potential for a postulated sequence of events initiated by an earthquake which could adversely affect the reactor protection systems.

The contractor shall review and evaluate the licensee's proposals and any modifications or technical specification changes that are proposed.

k. Electrical Component Qualification

The contractor shall review the environmental qualification of electrical equipment subjected to the environment resulting from either LOCA or main steam line break (MSLB) accidents in nuclear power plants. The environmental qualification analyses will consider such factors as steam at pressure and temperature, radioactivity, chemical spray, electrical stress and mechanical stresses. The qualification data provided by licensees will have to be reviewed against criteria provided by NRC.

## 1. Mechanical Engineering

### m. Hydraulic Snubber Technical Specification Review

Periodic surveillance of hydraulic snubbers in nuclear power plants is necessary to insure proper operability and functionability of these supports throughout their design life. The NRC staff has developed standard surveillance requirements for hydraulic snubbers and is requiring the operating plants to implement these requirements to the extent practical. The review that is required shall be to assess the proposed licensee implementation program against the staff's standard requirements or acceptance criteria.

The standard surveillance program consists of two parts: first, the reservoir hydraulic fluid levels are inspected and compared, along with the time in service, to the manufacturer's limits. Secondly, a test for functional reliability must be performed which compares drag, activation rate and the bleed rate against manufacturer's limits.

The review will consider the following: the completeness of the proposed program, the areas where complete compliance with the staff's standards are not proposed, and proposed alternatives evaluated on the basis of consequences of the support failing.

### n. Structural Engineering

#### o. Heavy Loads Near Spent Fuel Pools

Heavy loads transported over or near spent fuel pools involve the postulation of an accidental drop of the heavy load with potential for subsequent damage to the stored spent fuel, the spent fuel pool structures or other safety related equipment or systems. The licensee submittals include a survey of potential accidents resulting from heavy loads near spent fuel pools and an assessment of the results. The review will entail an assessment of the fuel and equipment handling cranes for structural design and operational interlock devices, the completeness of heavy load analysis of potential drop accidents and assessment of resulting consequences. Specific acceptance criteria will be supplied by the NRC staff.

#### p. Mark-I Hydrodynamic Loads

New suppression pool hydrodynamic loads associated with a postulated LOCA and Safety Relief Valve (SRV) discharge have been identified which were not considered in the original design of the Mark-I containment systems. Load definitions for the loading transients have been approved by the NRC staff. The licensee submittals will include a reanalysis of the containment system response to the new loading transients. The containment systems include the torus structure, its supports and attached piping. Specific acceptance criteria will be provided by the staff.

q. Materials Engineering

r. Atypical Weld Material

A number of Babcock and Wilcox reactor pressure vessels potentially have weld material which has not been reviewed and approved for use. The contractor shall review Quality Assurance (QA) records or the results of the records search conducted by Babcock and Wilcox and determine whether this unapproved weld material was used. Experimental programs to determine the weld material properties including environmental effects will be assessed. Proposed changes in the operating pressure-temperature limits will also be reviewed and assessed.

In addition to the above topics, the following generic topics are added to the work scope.

8. New Generic Topics

<u>Code</u>	<u>Title</u>
1.	SEP Safety Assessment - Design Basis Event Evaluation
2.	SEP Safety Assessment - Miscellaneous Licensing Actions
3. B-36	Resistance Temperature Detector (RTD) Response - CE
4. E-06	CEA Position Indication Failures - CE
5. E-07	Reactor Protection System Logic - CE
6.	Safety Injection Reset/Bypass Circuitry
7.	Loss of Non-Class-1E Instrumentation and Control Power System Bus During Operation
8.	Relief and Safety Valve Test Program
9.	TMI Lessons Learned (NUREG-0600) Miscellaneous Licensing Actions.

Develop a short "NRC Users Manual" which provides instructions for NRC personnel who require access to the information and for updating purposes to the NRC computerized Licensing Action Tracking System (LATS).

## Article 1.2 - Reporting Requirements

The contractor shall furnish a monthly letter-type progress report by the fifteenth of the month for the previous month being reported. This report shall state in concise form:

- a. A short description of the project and objectives;
- b. A brief statement on what was actually accomplished in completing each assigned task during the reporting period;
- c. Funds committed during the reporting period;
- d. What is planned for accomplishment during the next reporting period;
- e. Preliminary or interim results, conclusions, trends, or other items of information that the contractor feels are of timely interest;
- f. Problems or delays that the contractor has experienced in the conduct of his effort;
- g. Specific action that the contractor would like NRC to undertake to alleviate a problem;
- h. Updated task and sub-task schedules, network flow chart, program milestone chart, program management summary, personnel assignments, and funding from those initially submitted in the plan of work and methodology.

The contractor shall prepare a report for each licensee submittal at the completion of his review. This report shall as a minimum include:

The licensee's submittals should be reviewed to determine the adequacy of the information presented with the information requirement stated by the staff. If the submittals are found to be incomplete, the contractor will provide requests to be transmitted to the NRC staff for forwarding to licensees to obtain additional information. The contractor will determine the extent to which the licensee's design criteria comply with criteria provided by the staff. The contractor will provide a written technical evaluation for each plant addressing the acceptability of the licensee's proposed design and technical specification modifications as appropriate and the adequacy of these modifications. Copies of all progress reports shall be submitted in accordance with the above criteria and shall be forwarded to the following NRC personnel:

Fee Determination Official (FDO)	-	Darrell Eisenhut
Performance Evaluation Board (PEB)	-	E. Butcher, D. J. Dougherty, Gus Lainas, V. Noonan, C. Beckwith
Evaluation Coordinator	-	A. F. Glagola
Performance Monitors	-	All current monitors

The contractor shall prepare and arrange the monthly progress meeting to be held each month. Final arrangements for the meeting (i.e. agenda, date, time, and location) shall be made with the NRC Project Officer named in Article 5.1-Sec.5.0. Generally, these meetings will be held alternately at the NRC facilities in Bethesda, Md. and the contractor's facilities in Philadelphia, Penna.

### Article 1.3 Level of Effort

During the performance of work under this contract, the contractor agrees to utilize personnel in the following categories for the approximate time indicated.

<u>Category for Franklin Research Center</u>	<u>Approximate Person-Months</u>
Department Director	9.6
Laboratory Manager	17.2
Principal Scientist/Engr.	27.2
Sr. Staff Scientist/Engr.	160.0
Sr. Research Scientist/Engr.	106.0
Res. Scientist I/Res. Engr. I	106.0
Res. Scientist II/Res. Engr. II	36.0
Technical Associate I	12.0
Res. Scientist III/Res. Engr. III	24.0
Report Preparation - Technical	20.8
Report Preparation - Typing	23.67
TOTAL	542.47

<u>Category for Science Info. Services Organ.</u>	<u>Approximate Person-Months</u>
Asst. Director	0.46
Project Supervisor	0.92
Sr. Info. Analyst	5.37
Keyboard Operator/Sec.	5.77
TOTAL	12.52

The contractor agrees to use his best efforts to accomplish all the work outlined or referenced above. His obligation will be deemed complete if the work is performed in accordance with high standards of scientific and professional skill, and the approximate level of effort has been diligently applied; except, however, all other requirements must be met including delivery of reports and materials as may be required under the contract.



## Section 2.0 Performance and Delivery

### Article 2.1 - Period of Performance

Performance of this contract shall begin on October 2, 1979, and shall not extend beyond September 30, 1982, unless the period is extended by amendment of the contract.

### Article 2.2 - Place of Performance

The work under this contract shall be performed at the Contractor's facilities located in Philadelphia, Pennsylvania.

## Section 3.0 Consideration and Payment

### Article 3.1 - Estimated Cost, Base Fee, and Award Fee

1. The estimated cost to the Government for all allowable costs, base fee, and award fee shall not exceed \$5,498,830.00 for performance of this contract.
2. The Contractor shall be reimbursed for all allowable costs incurred, and accepted by the Contracting Officer, not to exceed the estimated amount of \$4,816,991.00.
3. Award Fee may also be earned under this contract as provided by Article 3.2, Award Fee.
4. Total funds currently available for payment and allotted to this contract is \$1,519,830.00 of which \$1,356,991 represents the estimated reimbursable costs, and of which \$162,839.00 represents the award fee for the period October 2, 1979 through September 30, 1980. For further provisions on funding, see the General Provision entitled: "Limitation of Funds", clause no. 3.
5. It is estimated that the amount currently allotted hereby will cover the performance period October 2, 1979 through November 30, 1980.

### Article 3.2 - Base and Award Fee

An award fee pool of \$162,839 is hereby established for the period October 2, 1979 through September 30, 1980. A base fee of \$103,800.00 and an award fee pool of \$415,200.00 is hereby established for the period October 1, 1980 through September 30, 1982. Evaluation of award fee earned for the period October 2, 1979 through September 30, 1980 shall be accomplished quarterly. Evaluation of award fee earned for the period October 1, 1980 through September 30, 1982 shall be accomplished as follows:

October 1, 1980 through December 31, 1980  
January 1, 1981 through June 30, 1981  
July 1, 1981 through December 31, 1981  
January 1, 1982 through June 30, 1982  
July 1, 1982 through September 30, 1982

Preliminary evaluation shall be conducted by a Performance Evaluation Board (PEB). The board shall recommend the fee award to the NRC Fee Determination Official (FDO). The final evaluation and interim determination as to the amount of award fee earned during an evaluation period shall be made by the NRC FDO. After initial notification of such fee determination to the Contractor and receipt of any comments in response thereto, a determination of award fee for the particular review period shall be made and the Contractor advised by unilateral contract modification. The evaluation on which the fee determination is to be based will be in accordance with the criteria shown in the Award Fee Determination Plan.(AFDP)

The membership of the PEB and the FDO is shown in the Award Fee Determination Plan included in this contract as attachment C. The Government reserves the right to unilaterally change the membership of the PEB at any time during the life of this contract. Any changes to the plan itself will be furnished to the Contractor prior to the date they become effective. The Contractor is required to submit periodic self evaluations of performance for the consideration of the PEB. These self-evaluations are to coincide with the periods of performance being evaluated by the Government. The amount of award fee available for each period of evaluation and the amount of time for each period is set forth in the AFDP.

The determination as to the amount of fee earned during a given period shall not be subject to the clause of this contract entitled, "Disputes". The Contractor shall be advised of the FDO's written decision by the Contracting Officer in a Notice of Award Fee which shall include the rationale for reaching the decision.

In the event this contract is terminated prior to a regularly scheduled award fee determination, the fee to be paid to the Contractor shall be an appropriate portion of any available award fee as may be determined by the Fee Determination Official.

Article 3.3 - Payment of Indirect Costs

Pending establishment of final indirect cost rates for any period, billing and reimbursement of indirect costs pursuant to General Provision No. 34, Negotiated Overhead Rates, the following provisional rates applied to the bases identified shall be in effect unless otherwise modified:

<u>Identification of Type of Rate</u>	<u>Rate</u>	<u>Base</u>
Overhead	80%	Total Direct Labor and Fringe Benefits
G & A	See Below	See Below

For the first three (3) months of the program, 20% on all FRC costs, and on the subcontract 20% on the first \$25,000.00, 9% on the next \$75,000.00, and 5% on the balance. For the remaining nine (9) months, the G & A is 17.5% on all FRC costs, and on the subcontract, the sliding scale as shown during the first three (3) months.

The following provisional indirect rates shall apply for the Science Information Services Organization of FRC.

<u>Identification of Types of Rate</u>	<u>Rate</u>	<u>Base</u>
Overhead	55%	Total Direct Labor & Fringe Benefits
G & A	See Below	See Below

For the first three (3) months of the program, 20% on all costs and 17.5% on costs for the remainder of the contract.

The above provisional rates apply for the period October 2, 1979 through November 1, 1980.

The following provisional rates apply to bases identified and shall apply for the period November 1, 1980 through September 30, 1982 unless otherwise modified:

<u>Identification of Type of Rate</u>	<u>Rate</u>	<u>Base</u>
Overhead	95%	Total Direct Labor and Fringe Benefits
G & A	See below	See Below

A provisional G & A rate of 20% is applied to all FRC costs except subcontracting costs. A provisional G & A rate of 20% is applied to the first \$25,000 of each subcontract. A fixed G & A rate of 9% is applied to those subcontracting costs in excess of \$25,000.00 but not to exceed \$100,000.00 for each subcontract. A fixed G & A rate of 5% is applied to each subcontracting costs exceeding \$100,000.00.

Article 3.4 - Payment of Base and Award Fee

The fees provided for in Article 3.1, "Estimated Cost, Base Fee, Awards Fee and Obligation of Funds", shall be paid as specified in Attachment C and C<sup>1</sup>.

Article 3.5 - Letter of Credit

This contract shall be funded under a Nuclear Regulatory Commission (NRC) Letter of Credit, against which the Contractor will withdraw funds pursuant to NRC Letter of Credit Procedures and Instructions for Recipient Organizations as approved by the U. S. Department of Treasury on April 1, 1977.

The Contractor shall request cash drawdowns only as and when actually needed for its disbursements, and shall make timely reporting as required by NRC with the understanding that failure to adhere to these commitments may cause the unobligated portion of the Letter of Credit to be revoked.

In no event shall the accumulated total of funds withdrawn for the account of this contract against such Letter of Credit exceed the presently obligated amount in the contract as covered by Article 3.1 subparagraph 4.

When so requested in writing by the Contracting Officer, the Contractor shall repay to the Government such part of the unliquidated balance of the advance payments as shall, in the opinion of the Contracting Officer, be in excess of the Contractor's current needs or in excess of the contract's estimated cost.

If upon completion or termination of this contract, all amounts obtained by the Contractor under this Letter of Credit have not been fully liquidated by authorized charges under the contract, the balance thereof shall be deducted from any sums otherwise due to the Contractor from the Government, and any excess funds shall be repaid by the Contractor to the Government upon demand.

The Letter of Credit Identification Number for The Franklin Institute is G-C5257.

Upon the happening of any of the following events of default, (1) termination of this contract by reason of fault of the Contractor; (2) a finding by the Administering Office that the Contractor (i) has failed to observe any of the covenants, conditions, or warranties of these provisions or has failed to comply with any material provision of this contract, or (ii) has so failed to make progress, or is in such unsatisfactory

financial condition, as to endanger performance of this contract, or (iii) has allocated inventory to this contract substantially exceeding reasonable requirements, or (iv) is delinquent in payment of taxes of the costs of performance of this contract in the ordinary course of business; (3) appointment of a trustee, receiver or liquidator for all or a substantial part of the Contractor's property, or institution of bankruptcy, reorganization, arrangement or liquidation proceedings by or against the contractor; (4) service of any writ of attachment, levy of execution, or commencement or garnishment proceedings with respect to the Special Bank Account; or (5) the commission of an act of bankruptcy; the Government, without limiting any rights which it may otherwise have, may, in its discretion and upon written notice to the Contractor, withhold further withdrawals from the Special Bank Account and withhold further payments on this contract. Upon the continuance of any such events of default for a period of thirty (30) days after such written notice to the Contractor, the Government may, in its discretion, and without limiting any other rights which the Government may have, take the following additional actions as it may deem appropriate in the circumstances: (1) Withdraw all or any part of the balance in the Special Bank Account by checks payable to the Treasurer of the United States signed solely by the Countersigning Agency and apply such amounts in reduction of advance payments then outstanding hereunder and in reduction of any other claims of the Government against the Contractor; (2) Charge interest on advance payments outstanding during the period of any such default at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41, 85 Stat. 97 for the Renegotiation Board;

No interest shall be charged for advance payments made hereunder, except interest during a period of default as provided in the preceding paragraph. The Contractor shall charge interest at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41; 85 Stat. 97, for the Renegotiation Board on sub advances or downpayments to subcontractors, and such interest will be credited to the account of the Government. However, interest need not be charged in subadvances on subcontracts with nonprofit educational or research institutions for experimental, developmental or research work.

#### Article 3.6 Billing Instructions

In addition to the procedures specified in Attachment D, U.S. N.R.C. letter of Credit Procedures, the Contractor shall forward concurrently two (2) copies of each monthly invoice to the Contracting Officer.

#### Article 3.7 PROVISIONAL AWARD FEE PAYMENT

Provisional payment of award fee shall be made in an amount not to exceed \$81,414.50 (based on one-half of the award fee and representing the "expected level").

During the period October 2, 1979 - October 1, 1980, the Contractor may bill for provisional payment of award fee at the rate of 1/12 of \$81,414.50 per month.

Provisional payment of award fee shall be made in an amount not to exceed \$207,600.00 (based on one-half of the award fee and representing the "expected level").



During the period October 1, 1980 - September 30, 1982, the Contractor may bill for provisional payment of award fee at the rate of 1/24 of \$207,600.00 per month.

Interim fee payment will cease when:

1. The fee awarded exceeds the provisional fee.
2. The Contracting Officer determines that the projected award fee will be less than the fee paid under this provision.

Payments under the provisions of this Article shall be credited to any amount awarded under Article 3.2 - Award Fee.

In the event that the payment under the provisions of this Article should exceed that amount which can be awarded under the provisions of Article 3.2 - Award Fee, then such overpayment may be deducted from allowable costs due and payable or paid under this contract.

#### Section 4.0 Inspection and Acceptance

##### Article 4.1 - Inspection

Inspection of the services and deliverables called for hereunder shall be performed by the NRC Project Manager named on the cover page of the contract.

##### Article 4.2 - Acceptance

Acceptance of the services and deliverables called for hereunder shall be accomplished by the Contracting Officer, or his duly authorized representative, who for the purposes of this contract shall be the NRC Project Manager named in Article 5.1.

#### Section 5.0 Special Provisions

##### Article 5.1 - Identification of NRC Project Officer

Mr. E. Butcher is designated by the Contracting Officer as Project Officer under this contract. Authorities and responsibilities as delineated in Article's 5.2 and 5.3.

##### Article 5.2 - Responsibilities of the NRC Project Officer

- (a) The Project Officer is responsible for: (1) Monitoring the contractor's technical progress, including the surveillance and assessment of performance and recommending to the Contracting Officer changes in requirements; (2) interpreting the statement of work; (3) performing technical evaluation as required; (4) performing technical inspections and acceptances required by this contract; and (5) assisting the contractor in the resolution of technical problems encountered during performance. Within the purview of this authority, the representative 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.

- (b) For guidance from the Project Officer 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 to 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.
- (c) If the contractor receives guidance from the Project Officer which the contractor feels is not valid under the criteria cited above, the contractor shall immediately notify the Project Officer. If the two are not able to resolve the question within five days, the contractor shall notify the Contracting Officer.

#### ARTICLE 5.3 Technical Direction

- (a) The NRC Project Officer named in Article 5.1 of this contract is responsible for guiding the technical aspects of the project and for the general surveillance of the work performed. The Project Officer is not authorized to make any commitments or any changes which constitute work not within the general scope of this contract, change the expressed terms and conditions incorporated into this contract, or constitute a basis for any increase in contract price or extension of the contract Period of Performance.
- (b) Technical direction must be within the general scope of work stated in the contract. The Project Officer does not have the authority to and may not issue any technical direction which:
  - (1) Constitutes an assignment of additional work outside the general scope of the contract.
  - (2) Constitutes a change as defined in the clause of the General Provisions, entitled "Changes."
  - (3) In any way causes an increase or decrease in the total estimated contract cost, the fixed fee, if any, or the time required for contract performance.

(4) Changes any of the expressed terms, conditions or specifications of the contract.

(c) ALL TECHNICAL DIRECTIONS SHALL BE ISSUED IN WRITING BY THE PROJECT OFFICER OR SHALL BE CONFIRMED BY HIM IN WRITING WITHIN TEN (10)

WORKING DAYS AFTER VERBAL ISSUANCE. A copy of said written direction shall be submitted to the Contracting Officer. If the contractor receives guidance from the Project Officer which the contractor feels is not valid under the criteria cited above, the contractor shall immediately notify the Project Officer. If the Project Officer and the contractor are not able to resolve the question within five days, the contractor shall notify the Contracting Officer.

(d) In the event the Project Officer desires a change to the contract within one or more of the categories as defined in (1) through (4) of paragraph B above, he must direct such request to the Contracting Officer. The Contracting Officer will handle the request in accordance with applicable laws and regulations.

(e) Any unauthorized commitment or direction issued by the Project Officer may result in an unnecessary delay in the Contractor's performance, and may even result in the contractor expending his funds for unallowable costs under the contract.

Article 5.4 Private Use and Protection of Unclassified Government Information and Contract Information and Data

- (a) Except as specifically authorized by this contract, or as otherwise approved by the Contracting Officer, records, data, information, documents and material developed or acquired by or furnished to the contractor in the performance of this contract shall be used only in connection with the work performed under this contract. The contractor shall, upon completion or termination of this contract, transmit to the Commission all records or other information, documents and material, and any copies thereof, furnished by the Commission to the contractor in the performance of this contract.
- (b) The contractor shall be responsible for safeguarding from unauthorized disclosure any information or other documents and material exempt from public disclosure by the Commission's regulations and made available to the contractor in connection with the performance of the work under this contract. The contractor agrees to conform to all regulations, requirements, and direction of the Commission with respect to such material.
- (c) The contractor's duties under this clause shall not be construed to limit or affect in any way the contractor's obligation to conform to all security regulations and requirements, of the Commission pertaining to classified information and material.

Article 5.5 Protection of Proprietary and Company Confidential Information

If proprietary or company confidential data is provided to the contractor by the Government in connection with this contract, the contractor agrees to safeguard such information and agrees not to release such information to any person not directly involved in the performance of work under this contract unless such release is authorized in writing by the Contracting Officer. Upon completion or termination of this contract, all copies of any such proprietary or company confidential data shall be returned to the Commission.

Article 5.6 Disclaimer

The following notice shall be added to any report prepared under the provisions of this contract: "This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, or any of their employees, makes any warranty, expressed or implied, or assume any legal liability or responsibility for any third party's use, or the results of such use, of any information, apparatus, product or process disclosed in this report, or represents that its use by such third party would not infringe privately owned rights."

#### Article 5.7 - Continuity of Services

In recognition of the fact that the functions covered under this contract are in support of NRC programs, and require uninterrupted performance; that upon expiration of this contract, the services hereunder may be provided by the Government or a successor Contractor, as a result of a competitive solicitation, and any successor will require phase-in training; that the retention of personnel experienced in the work covered hereunder by any successor is important to the Government; the Contractor agrees as follows:

1. To provide the necessary resources to complete those work items commenced during the period of this contract or any renewal thereof, which would not otherwise have been completed, within such a period.
2. To provide phase-in, phase-out services for a period not to exceed sixty (60) days, commencing the day after expiration of the contract, to the extent required by the Government, and expeditiously negotiate an equitable adjustment to the estimated cost of the contract for such services, to be provided by continuing the assignment of qualified personnel then currently assigned to the contract.
3. Upon selection of a successor Contractor, to jointly prepare with said successor, a mutually agreeable plan for phase-in, phase-out operations. Said plan shall set forth in detail the training program for the successor with a proposed date by which the successor will assume responsibility for work performance. Prior to said date the contractor shall retain full responsibility for work performed. This plan shall be submitted to the Contracting Officer for his approval prior to expiration of this contract, and implementation in accordance therewith. However, it is understood and agreed that the foregoing is subject to the "Limitation of Cost" or "Limitation of Funds" clause of this contract.

Article 5.8 Key Personnel is revised in its entirety, and reads as follows:

"Pursuant to General Provision No. 40 entitled, "Key Personnel", the following individuals are considered to be essential to the work being performed hereunder:

<u>Name</u>	<u>Title</u>
Dr. L. Zudans	Project Director
Dr. S. Carfagno	Project Manager



Article 5.9 - Contractor Organizational Conflicts of Interest

See Attachment E entitled, "Contractor Organizational Conflict of Interest" for particulars.

Article 5.10 - Government Furnished Material/Data

The Government shall furnish to the Contractor all vital and necessary data/material in order for the contractor to perform the work above.

Article 5.11 - Representations and Certifications

The offeror representations and certifications submitted in response to RFP No. RS-NRR-79-118 as modified by the Contractor's letter dated September 7, 1979.

Article 5.12 Subcontracts

The Contractor is hereby authorized to enter into negotiations with its proposed subcontractor, WESTEC Services, Inc. and upon consummation of negotiations, forward to the Contracting Officer the necessary documentation as required by General Provision No. 10 entitled Subcontracts.

Article 5.13 Guidelines for Work Flow

NRC will forward to FRC preliminary work assignments identified as Tentative Work Assignment A.B.C., etc. All such work assignments must be signed by the Project Officer, Mr. Gary Zech. Specific NRC individuals will be identified in the letter as authorized point(s) of contact regarding that particular assignment, and only those may contact or be contacted by Franklin during the review period. The review period will be an agreed upon time frame during which Franklin's response is due.

After receipt at NRC, the Franklin proposed schedule will be discussed, and following agreement with FRC, final work assignments identified as Assignment #1, 2, 3, etc. will be issued by the Project Officer.

Prior to receipt of any tentative assignment package, Franklin personnel should not engage in discussion with any NRC representative other than the Project Officer.

Following agreement and receipt of a final work assignment, Franklin may enter into discussions or correspond with any of the individuals identified in the work assignment (s). Franklin is not to conduct any discussions with licensees for any purpose whatsoever without NRC representation either at physical meetings or through conference telephone conversations.

Article 5.14 Consultant Compensation

The Contractor hereby agrees to provide the services of Professor Alan W. Pense in the performance of this contract. Professor Pense shall be reimbursed by the Contractor at a rate of \$300.00 per day for a total ceiling not to exceed \$7,400.00. This ceiling shall not be exceeded without the expressed prior written consent of the Contracting Officer.

Article 5.15 UTILIZATION OF SMALL BUSINESS CONCERNS AND SMALL BUSINESS CONCERNS OWNED AND CONTROLLED BY SOCIALLY AND ECONOMICALLY DISADVANTAGED INDIVIDUALS

- (a) It is the policy of the United States that small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals shall have the maximum practicable opportunity to participate in the performance of contracts let by any Federal agency.
- (b) The contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with the efficient performance of this contract. The contractor further agrees to cooperate in any studies or surveys that may be conducted by the Small Business Administration or the contracting agency which may be necessary to determine the extent of the contractor's compliance with this clause
- (c)
  - (1) The term "small business concern" shall mean a small business as defined pursuant to Section 3 of the Small Business Act and in relevant regulations promulgated pursuant thereto.
  - (2) The term "small business concerns" owned and controlled by socially and economically disadvantaged individuals" shall mean a small business concern--
    - i. which is at least 51 per centum owned by one or more socially and economically disadvantaged individuals; or in the case of any publicly owned business, at least 51 per centum of the stock of which is owned by one or more socially and economically disadvantaged individuals; and
    - ii. whose management and daily business operations are controlled by one or more of such individuals.

The contractor shall presume that socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, and other minorities, or any other individual found to be disadvantaged by the Small Business Administration pursuant to section 8(a) of the Small Business Act.

- (d) Contractors acting in good faith may rely on written representations by their subcontractors as either a small business concern or a small business concern owned and controlled by socially and economically disadvantaged individuals.

ARTICLE 5.16

SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS SUBCONTRACTING PLAN (NEGOTIATED)

- A. The offeror acknowledges that it is aware of the subcontracting plan requirements in this provision, and, if it is the apparent successful offeror, agrees to negotiate a plan which includes :
1. Percentage goals (expressed in terms of percentage of total planned subcontracting dollars) for the utilization as subcontractors of small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals; (For the purposes of the subcontracting plan, the contractor shall include all purchases which contribute to the performance of the contract, including a proportionate share of products, services, etc. whose costs are normally allocated as indirect or overhead costs.)
  - ✓ 2. The name of an individual within the employ of the offeror who will administer the subcontracting program of the offeror and a description of the duties of such individual;
  3. A description of the efforts the offeror will take to assure that small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals will have an equitable opportunity to compete for subcontracts;
  4. Assurances that the offeror will include the clause entitled Utilization of Small Business Concerns and Small Business Concerns Owned and Controlled by Socially and Economically Disadvantaged Individuals in all subcontracts which further subcontracting opportunities and to require all subcontractors (except small business concerns) who receive subcontracts in excess of \$500,000, or in the case of a contract for the construction of any public facility, \$1,000,000, to adopt a plan similar to the plan agreed to by the offeror;
  5. Assurances that the offeror will submit such periodic reports and cooperate in any studies or surveys as may be required by the contracting agency or the Small Business Administration in order to determine the extent of compliance by the offeror with the subcontracting plan; and
  6. A recitation of the types of records the offeror will maintain to demonstrate procedures which have been adopted to comply with the requirements and goals set forth in the plan, including the establishment of source lists of small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals; and efforts to identify and award subcontracts to such small business concerns.
- B. The offeror understands that:
1. No contract will be awarded unless and until an acceptable plan is negotiated with the contracting officer and that an acceptable plan will be incorporated into the contract, as a material part thereof.
  2. An acceptable plan must, in the determination of the contracting officer, provide the maximum practicable opportunity for small business concerns and small business concerns owned and controlled by socially and economically disadvantaged persons to participate in the performance of the contract.

3. If a subcontracting plan acceptable to the contracting officer is not negotiated within the time limits prescribed, the offeror shall be ineligible for an award. The contracting officer shall notify the contractor in writing of his reasons for determining a subcontracting plan to be unacceptable. Such notice shall be given early enough in the negotiation process to allow the contractor to modify the plan within the time limits prescribed.
4. Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the contracting officer in determining the responsibility of the offeror for award of the contract.
5. It is the offeror's responsibility to develop a satisfactory subcontracting plan with respect to both small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals and that each such aspect of the offeror's plan will be judged independently of the other.

C. Subcontracting plans are not required of small business concerns.

D. The failure of any contractor or subcontractor to comply in good faith with (1) the clause entitled Utilization of Small Business Concerns and Small Business Concerns Owned and Controlled by Socially and Economically Disadvantaged Individuals or (2) an approved plan required by this Small Business and Small Disadvantaged Business Subcontracting Plan (Negotiated) provision, will be a material breach of of such contract or subcontract.

E. Nothing contained in this provision supersedes the requirements of Defense Manpower Policy 4A or any successor policy.

F. If the prime contract is for a commercial product (defined below), the required subcontracting plan may relate to the company's production of the item generally (both for the Government contract and for regular commercial sale) rather than solely to the item being procured under the government contract. In such cases, the contractor shall be required to submit one company-wide, annual plan to be reviewed for approval by the first agency with which he enters into a prime contract (which requires a subcontracting plan) during the fiscal year. The approved plan will remain in effect for the entire fiscal year.

Commercial products are defined as products in regular production sold in substantial quantities to the general public and/or industry at established market or catalog prices.

G. In negotiating subcontracting plans, the contracting officer shall take into account a prime contractor's stated inability to subcontract due to an existing "make-or-buy" policy. A "make-or-buy" policy concerns the major subsystems, assemblies, and components which the contractor manufactures, develops, or assembles in his own facilities, and those which it obtains elsewhere by contract.

## Section 6.0 General Provisions

### Article 6.1 - General Provisions

The General Provisions of this contract are set forth in full in Appendix A entitled, "General Provisions Cost-Type Contracts With Concerns Other Than Educational Institutions".

### Article 6.2 - Alterations to General Provisions

The following clauses are deleted:

1. Clause No. 23
2. Clause No. 55
3. Clause No. 57
4. Clause No. 59

The following clauses are added by

The following clauses are added by reference to the contract:

- Clause No. 62 - Women-Owned Business Concerns (Over \$10,000.00) Temp FPR Reg. 54
- Clause No. 63 - Women-Owned Business Concerns - Subcontracting Program  
(Over \$500,000 or \$1,000,000 for Construction on any public facility) Temp FPR Reg. 54

## Section 7.0 Contract Documents

### Article 7.1 - Documents Incorporated Physically

The following listed documents are physically incorporated in this contract:

Cover Sheet	Award/Contract - SF26
Listing of Contract Articles	
Contract Articles	The Schedule
Attachment A	Backlog Licensing Actions
Attachment B	Staff Position For Degraded Voltage Reviews
Attachment C	Award Fee Determination Plan
Attachment D	USNRC Letter of Credit Procedures
Attachment E	Contractor Organizational Conflict of Interest
Appendix A	General Provisions
Appendix B	Subcontracting Plan for Utilization of Small, Women Owned, Labor Surplus, Socially and Economically Disadvantaged Businesses



ATTACHMENT C<sup>1</sup>

AWARD FEE DETERMINATION PLAN FOR  
CONTRACT NO. NRC-03-79-118 WITH THE FRANKLIN INSTITUTE  
FOR THE PERIOD October 1, 1980 THROUGH September 30, 1982

Contents

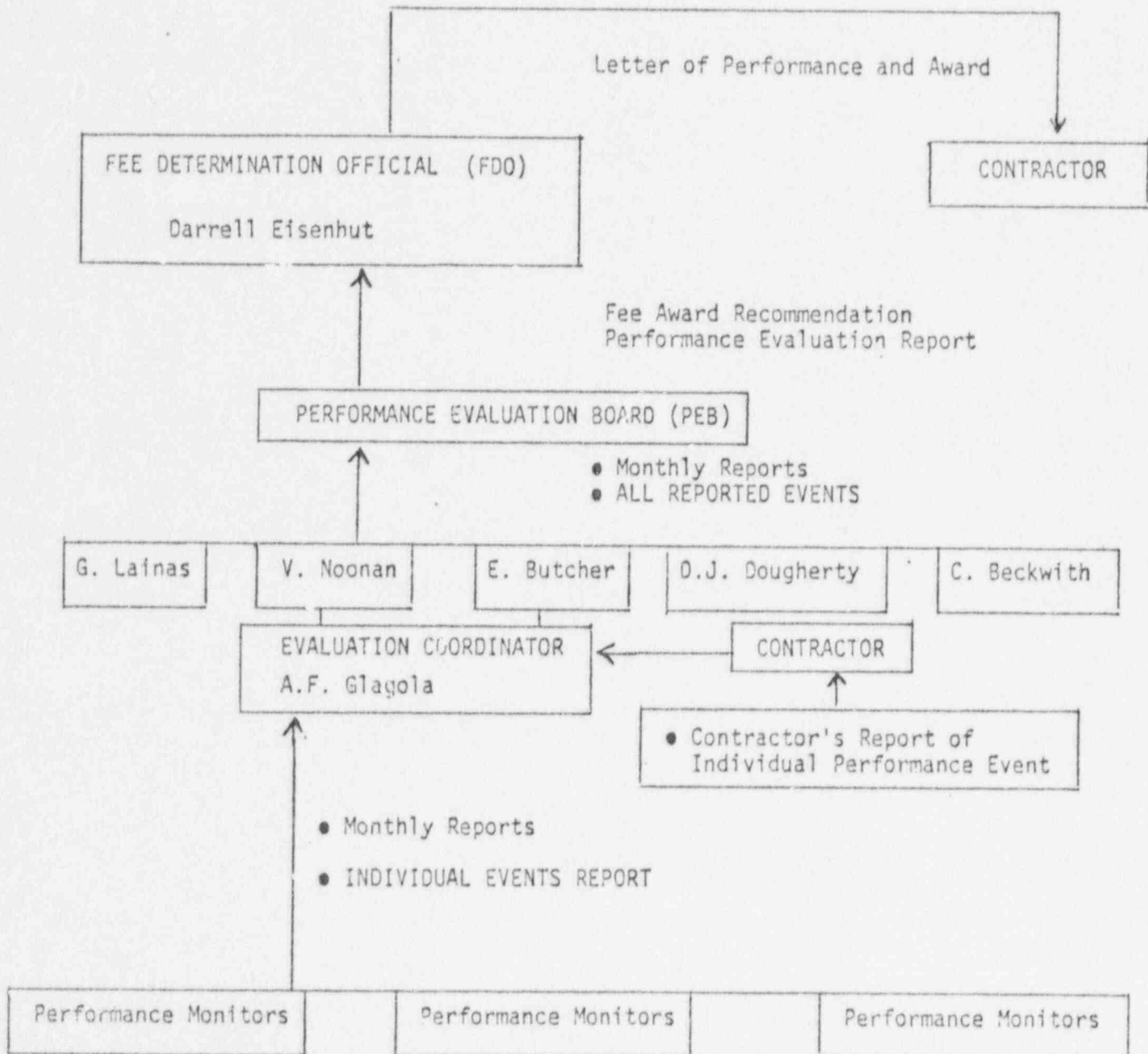
Part

- A. Introduction
- B. Organization Structure for Award Fee Administration
- C. Evaluation Requirements
- D. Methods for Determining Award Fee
- E. Change in Plan Coverage

#### A. Introduction

1. This plan covers the administration of the award fee provisions of Contract No. NRC-03-79-118 with The Franklin Institute for the evaluation period starting October 1, 1980 through September 30, 1982.
2. The following matters, among others, are covered in the contract.
  - a. The contractor is required to manage and review a backlog of approximately 500 operating reactor licensing actions as determined by the Nuclear Regulatory Commission (NRC).
  - b. This plan covers the option period from October 1, 1980 through September 30, 1982.
  - c. The estimated cost of performing the work under the option period is \$3,826,000.00.
  - d. The base fee is \$103,800.00.
  - e. The award fee pool is \$415,200.00.
  - f. The estimated cost, base fee and award fee pool are subject to equitable adjustments on account of changes or other contract modifications.
  - g. The award fee earned and payable will be determined as specified elsewhere in this plan by the Fee Determination Official (FDO) in accordance with this plan. The FDO is Mr. Darrell Eisenhut.
  - h. Award fee determinations are not subject to the Disputes clause of the contract.
  - i. Alterations, if any, of the award fee plan during the course of this contract will be the subject of negotiations, and this plan will be modified accordingly. Any agreed upon alterations must be made thirty days prior to the start of the quarterly period to be effective.
3. The objective of the award fee provisions of the contract is to afford the contractor an opportunity to earn increased fee commensurate with the achievement of optimum performance in pursuit of contract objectives and goals. Optimum performance is not necessarily equated with the highest level of performance achievable in all incentivized areas. Rather, it represents the most favorable degree of performance obtainable considering the achievement of contract objectives in light of the contractor's most effective utilization of available resources.

CPAF CONTRACT PERFORMANCE REPORTING  
REVIEW AND EVALUATION PROCEDURE



### B. ORGANIZATIONAL STRUCTURE FOR AWARD FEE ADMINISTRATION

The following organizational structure is established for administering the award fee provisions of the contract.

#### 1. Fee Determination Official (FDO)

a. The FDO is Mr. Darrell Eisenhower

b. Primary FDO responsibilities are:

(1) Determining the award fee earned and payable for each evaluation period as addressed in Part D.

(2) Changing the matters covered in this plan as addressed in Part E, as appropriate.

#### 2. Performance Evaluation Board (PEB)

a. A Chairman of the PEB will be established from the following following voting members:

Mr. D.J. Dougherty  
Mr. C. Beckwith  
Mr. E. Butcher  
Mr. G. Lainas  
Mr. V. Noonan

b. The Chairman may recommend the appointment of non-voting members to assist the Board in performing its functions.

c. Primary responsibilities of the Board are:

(1) Conducting ongoing evaluations of contractor performance and the submission of a Performance Evaluation Board Report (PEBR) to the FDO covering the Board's findings and recommendations for each evaluation period, as addressed in Part D.

(2) Considering proposed changes in this plan and recommending those it determines appropriate for adoption by the FDO, as addressed in Part E.

#### 3. Performance Monitors (PMs)

a. A PM will be assigned to each performance area to be evaluated. The assignment will be made by the PEB Chairman as addressed in Part D.

b. Each PM will be responsible for complying with the General Instructions for Performance Monitors, Attachment D-2, and any specific instructions of the PEB Chairman as addressed in Part D. Primary PM responsibilities are:

(1) Monitoring, evaluating and assessing contractor performance in assigned areas.

(2) Periodically preparing a Performance Monitor Report (PMR) for the PEB, or others, as appropriate.

(3) Recommending appropriate changes in this plan for consideration, as addressed in Part E.



### C. EVALUATION REQUIREMENTS

In order for the Contractor to be eligible for the maximum award fee, the contractor must be assigned a minimum of 30 tasks during the proceeding evaluation period or the number of active tasks (actions not on hold) plus the number of completed tasks at the end of the period must be at least the number listed below:

<u>Period</u>	<u>Number of Tasks</u>
December 31, 1980	226
June 30, 1981	286
December 31, 1981	346
June 30, 1982	406
September 30, 1982	436

If the criteria for any evaluation period is not met, the available award fee dollars for that period shall be \$10,000.

The above criteria may be waived for any particular period if the Contracting Officer determines in writing that such waiver for that period is in the best interests of the Government.

The applicable evaluation requirements are attached as indicated below.

<u>Requirement</u>	<u>Attachment</u>
1. Evaluation Periods and Maximum Available Award Fee for Each	C-1
2. Performance Areas and Evaluation Criteria	C-2
3. Grading Table	C-3
4. Award Fee Conversion Chart	C-4

The percentage weights indicated in Attachment C-2, the Attachment C-3 grading table, and the Attachment C-4 award fee conversion chart are quantifying devices. Their sole purpose is to provide guidance in arriving at a general indication of the amount of award fee earned. In no way do they impute an arithmetical precision to any judgmental determination of the contractor's overall performance and amount of award fee earned.

#### D. METHOD FOR DETERMINING AWARD FEE

A determination of the award fee earned for each evaluation period will be made promptly by the FDO after the end of the period. The method to be followed in monitoring, evaluating and assessing contractor performance during the period, as well as for determining the award fee earned, is described below.

1. The PEB Chairman will assign a PM for each performance area to be evaluated under the contract. PMs will be selected on the basis of their expertise relative to prescribed performance area emphases. PM personnel administration will be in addition to, or an extension of, regular responsibilities. The PEB Chairman may change PM assignments at any time without advance notice to the contractor. The Contracting Officer will notify the contractor promptly of all PM assignments.

2. The PEB Chairman will require that each PM receives the following:

- A copy of the contract and all modifications.
- A copy of this plan along with any changes made in accordance with Part E.
- Appropriate orientation and guidance.
- Specific instructions applicable to PM-assigned performance at

3. PMs will monitor, evaluate and assess contractor performance in accordance with the General Instructions for Performance Monitors, Attachment 1, and the specific instructions and guidance furnished by the PEB Chairman.

4. PMs will submit monthly PMRs and, if required, make verbal presentations to the PEB.

5. As appropriate, the PEB Chairman will request and obtain performance information from other units or personnel normally involved in observing contractor performance.

6. Periodically, the PEB will consider PMRs and other performance information it obtains and discuss the reports and information with PMs or other personnel, as appropriate.

7. Promptly after the end of each evaluation period, the PEB will meet with the Contractor and discuss overall performance during the period. Prior to this meeting the Contractor shall submit to the Evaluation Co-ordinator a written self assessment of its performance during the evaluation period including the amount of award fee it feels it has earned. As requested by the PEB chairman, PM's and other personnel involved in performance evaluations will attend the meetings and participate in discussions.
8. After meeting with the contractor, the PEB will consider matters presented by the contractor and establish its findings and recommendations for the PEBR.
9. The PEB Chairman will prepare the PEBR for the period and submit it to the FDO for use in determining the award fee earned. The report will include a recommended range of award fee with supporting documentation. When submitting the report, the Chairman will inform the FDO whether or not the contractor desires to present any matters to the FDO before the award fee determination is made.
10. The FDO will consider the PEBR and discuss it with the PEB Chairman or other personnel, as appropriate. If requested by the contractor, or if the FDO considers it appropriate, the FDO will meet with the contractor for discussions. If requested by the FDO, the PEB Chairman and any other personnel involved in performance evaluation may be required to attend the meeting with the contractor.
11. The FDO will determine the amount of award fee earned during the period. The amount determined will not result solely from mathematical summing, averaging or the application of a formula. The FDO's determination of the amount of award fee earned and the basis for this determination will be stated in the Award Fee Determination Report (AFDR). The report will be signed by the FDO and given to the contractor for attachment to its voucher requesting payment of the award fee.

## E. CHANGES IN PLAN COVERAGE

### 1. Right to Make Changes

Any matters covered in this plan may be changed by mutual agreement of the parties prior to the beginning of an evaluation period by timely notice to the contractor in writing. The changes will be made by formal modification of the contract.

### 2. Method for Changing Plan Coverage

The method to be followed for changing plan coverage is described below.

a. Personnel involved in the administration of the award fee provisions of the contract are encouraged to recommend changes in plan coverage with a view toward changing management emphases, motivating higher performance levels, or improving the award fee determination process. Recommended changes should be sent to the PEB for consideration and drafting.

b. The PEB will coordinate proposed changes with the contractor.

c. Prior to the end of each evaluation period, the PEB will submit changes applicable to the next evaluation period for approval by the FDO with appropriate comments and justification, or inform the FDO that no changes are recommended for the next period.

## ATTACHMENT C-1 TO AFDP FOR

Contract No. NRC-03-79-118 With The Franklin InstituteEVALUATION PERIODS AND MAXIMUM  
AVAILABLE AWARD FEE FOR EACH

<u>No.</u>	<u>Duration</u>	<u>Ending</u>	<u>Base Fee</u>	<u>Max. Avail. Award Fee</u>
1	3 months	December 31, 1980	\$ 12,975.00	\$ 51,900.00
2	6 months	June 30, 1981	\$ 25,950	\$103,800.00
3	6 months	December 31, 1981	\$ 25,950.00	\$103,800.00
4	6 months	June 30, 1982	\$ 25,950.00	\$103,800.00
5	3 months	September 30, 1982	\$ 12,975.00	\$ 51,900.00



ATTACHMENT C-2.1 to AFDP FOR  
CONTRACT NO. NRC-03-79-118 WITH THE FRANKLIN INSTITUTE  
EVALUATION CRITERIA FOR PERFORMANCE AREA NO. 1  
(AREA IDENTIFICATION PER ATTACHMENT C-2)  
AREA WEIGHT 50

Description of Area:

I. Technical - 50 Points

To what extent does the contractor consistently produce high quality technical products without requiring excessive technical or administrative direction from the N.R.C.

- a) Thoroughness and Accuracy of Work 20 pts.

To what extent does the contractor submit technical work products which are thorough, accurate and do not require rework by either the contractor or the N.R.C.

- b) Independence and Initiative 20 pts.

To what extent does the contractors technical effort exhibit independence and initiative that does not require day-to-day technical or administrative direction by the N.R.C.

- c. Clairity and Consiseness 10 pts.

To what extent does the contractor consistently submit work products that are clear and concise; to what extent do they provide staff action.

Basis or Standard for Measuring Performance:

Superior (96 - 100)

Excellent (86 - 95)

Good ((76 - 85)

Satisfactory (66 - 75)

Fair (60 - 65)

Unsatisfactory (0 - 59)

ATTACHMENT C-2.2 TO AFDP FOR  
CONTRACT NO. NRC-03-79-118 WITH THE FRANKLIN INSTITUTE

EVALUATION CRITERIA FOR PERFORMANCE AREA NO. 2  
(AREA IDENTIFICATION PER ATTACHMENT C-2)  
AREA WEIGHT 30

II. Management and Schedule

To what extent does the contractor produce technical products in a timely manner that meet the needs of the NRC effectively by utilizing resources and work efficient methods.

- a) Ability to Meet Schedule Milestones 10 pts.

To what extent does the contractor meet schedule milestones and completion dates in developing technical work products.

- b) Program Improvement 10 pts.

To what extent does the contractor demonstrate program improvements in such areas as the efficiency of the review process, and the effectiveness of program management liaison and communications.

- c) Ability to Adjust to Changing Needs 5 pts.

To what extent does the contractor exhibit the ability to adjust to the changing needs of the N.R.C.

- d) Effectiveness of Liaison Effort 5 pts.

To what extent does the contractor provide effective liaison with the N.R.C., licensees and others in order to efficiently manage the program and to facilitate the development of technical products.

Basis or Standard for Measuring Performance:

Superior	(96 - 100)
Excellent	(86 - 95)
Good	((76 - 85)
Satisfactory	(66 - 75)
Fair	(60 - 65)
Unsatisfactory	(0 - 59)

ATTACHMENT C. 2.3 TO AFDP FOR  
CONTRACT NO. NRC-03-79-113 WITH THE FRANKLIN INSTITUTE

EVALUATION CRITERIA FOR PERFORMANCE AREA NO. 3  
(AREA IDENTIFICATION PER ATTACHMENT C-2)  
AREA WEIGHT 20

III. Cost And Contract Administration

To what extent does the contractor conduct the work in a cost effective manner and to what extent has he effected improvements to further reduce the cost of developing technical work products. To what extent is the contract administration effective.

- a) Business Management 15 pts.

To what extent does the contractor effect improvements and efficiencies in his program which are reflected in lower cost of developing technical work products.

- b) Contract Administration 5 pts.

To what extent is the contract administration to be most cost effective to the NRC including purchasing and subcontractor system, award fee administration, and report procedures.



Basis or Standard for Measuring Performance:

Superior (96 - 100)

Excellent (86 - 95)

Good ((76 - 85)

Satisfactory (66 - 75)

Fair (60 - 65)

Unsatisfactory (0 - 59)

FIGURE 4-1

CPAF SUPPORT CONTRACT RATING TABLE

<u>Adjective Rating Range</u>	<u>Numerical Rating (60 to 100)</u>	<u>Specific Adjective Rating</u>
Superior	100	Superior
	99	
	98	
	97	Superior Minus
	96	
Excellent	95	
	94	Excellent Plus
	93	
	92	
	91	
	90	Excellent
	89	
	88	
Good (Median)	87	Excellent Minus
	86	
	85	
	84	Good Plus
	83	
	82	
	81	
	80	Good - - - - -
Satisfactory	79	
	78	
	77	Good Minus
	76	
	75	
	74	Satisfactory Plus
	73	
	72	
Fair	71	
	70	Satisfactory
	69	
	68	
	67	Satisfactory Minus
Unsatisfactory	66	
	65	
	64	Fair Plus
	63	
	62	
	61	
	60	Fair
	59-0	Unsatisfactory

ATTACHMENT D-1 TO AFDP FOR

Contract No. \_\_\_\_\_ With \_\_\_\_\_

GENERAL INSTRUCTIONS FOR PERFORMANCE MONITORS

a.. PMs will conduct all assessments in an open, objective and cooperative spirit so that a fair and accurate evaluation is obtained. This will enhance contractor receipt of information from which to plan improvements in performance. Positive performance accomplishments should be emphasized just as readily as negative ones.

b.. After an assessment, the PM will discuss the results with appropriate PEB personnel, noting any observed deficiencies and/or accompanying recommendations. Adverse items or areas of poor performance will be covered to afford the contractor an opportunity to clarify possible misunderstandings and to correct or resolve deficiencies.

c.. PMs must remember that contacts and visits with contractor personnel are to be accomplished within the context of official contractual relationships. PMs will avoid any activity or association which might cause, or give the appearance of causing, a conflict of interest.

d.. PM discussions with contractor personnel are not to be used to instruct, to direct, to supervise, or as an attempt to control these personnel in the performance of the contract. The role of the PM is to monitor, assess and evaluate, not to manage the contractor's effort.

2. Documenting Evaluation/Assessment

Evaluations and assessments conducted, results obtained, and discussions with contractor personnel will be documented as follows:

(Specify format and minimum information requirements)

3. Evaluation/Assessment Reports

PMs will prepare a formal PMR in accordance with the following instructions and submit it to the PEB, or others, if appropriate, at the end of each month:

(Specify format and minimum information requirements)

4. Verbal Reports

PMs will be prepared to make verbal reports as required by the PEB Chairman.

## PROPOSED EVALUATION GRADES

Adjective Grade	Numerical Grade	Definition
Superior	96 to 100	Performance is outstanding in essentially all respects, and represents the very best which could be expected of any contractor. This grade represents a practical goal, to be awarded for a degree of performance which is real and attainable, not theoretical.
Excellent	86 to 95	Performance ranges from substantially better than average to outstanding. In this range the contractor has improved all facets of his operation beyond that level described for in the range below. The contractor has greatly exceeded the schedules, output, and overall performance which would be expected of an average contractor. Areas of deficiencies are few and overall are considered relatively unimportant. Contractor shows initiative in executing the job and in invoking improvements. The degree to which the contractor exceeds schedules, achieves objectives, eliminates areas of deficiency, etc., determines his grade in this range.
Good	80 to 85	This grade, the top of the good range, represents average performance and the point of reference for the grading system. The contractor at this point has met most needs, schedules, expectations in a fashion which corresponds to average or standard performance by a qualified contractor. Areas of below-average performance are about balanced by areas of above-average performance.
	76 to 80	In this range the contractor is below, but approaching, average performance. The degree to which the contractor has slipped below performance, has missed schedules, or shown uncompensated deficiencies determines the grade in this range.
Satisfactory	70 to 75	Performance is below the average or standard performance expected of a qualified contractor. The contractor at this point is halfway between average performance and performance which is considered unsatisfactory.
	66 to 70	In this area the contractor is deficient in a significant number of areas, and these deficiencies are not offset by areas of above-average performance. The contractor's grade in this area will be determined by the extent of the deficiencies and his proximity to unsatisfactory performance.

Numerical Grade

Definition

60 to 65

Performance is deficient in substantial areas of effort, and is sufficiently far below performance as to be overall unsatisfactory. Immediate improvement is required in order to permit continuation of the contract.

Below 59

There is zero award fee for performance below this rating.



FRANKLIN RESEARCH CENTER CORPORATE SUBCONTRACTING PLAN

Prepared for

U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

U.S. NRC CONTRACT NO. NRC-03-079-118

#### SUMMARY

The Franklin Research Center (FRC) has established a formal Small, Minority and Women Owned Business Subcontracting program. This program is structured to ensure that FRC fully complies with the Small Business utilization requirements and Minority Business subcontracting provisions in P.L. 95-507 and executive order number 12138 dated May 9, 1979.

FRC's subcontracting plan, designed to provide opportunities for Small, Minority and Women Owned businesses for this particular contract, is enclosed for your review and response. The specific subcontracting procedures described in this plan for identifying (outreach), evaluating and selecting small, minority and woman owned firms for potential subcontracting and purchasing activities will be followed by The Franklin Research Center during the performance of this particular contract.

FRANKLIN RESEARCH CENTER CORPORATE SUBCONTRACTING PLAN

1. Contract Number: NRC-03-79-118
2. Contractor Name: Franklin Research Center  
Department: Engineering
3. Name of Individual Completing This Plan: Arthur D. Rogers  
Telephone Number: (301)565-4235
4. Dollars                      Total Estimated Cost                      Total Estimated Cost  
   of Prime Contract                      of Subcontract

<u>Dollars</u>	<u>\$3,826,000</u>	<u>\$982,775</u>
<u>Percentage Goals</u>		
Small Business	<u>9%</u>	<u>35%</u>
Small Disadvantaged Business	<u>4%</u>	<u>15%</u>
Women Owned Firms	<u>1%</u>	<u>5%</u>

5. Narrative statement relative to goals, justification for all subcontracting, past performance of the contractor, subcontracting with Small Business and Small Disadvantaged Business and women owned as they pertain to this particular contract:

During the performance of the first phase of this contract FRC implemented a Small and Minority business subcontracting plan. This plan was consistent with the small business utilization requirements and minority business subcontracting provisions in P. L. 95-507. This plan prescribed precise procedures for identifying (outreach), evaluating and selecting small and minority firms for subcontracting and purchasing opportunities.

Implementation of this plan by FRC resulted in the identification and selection of several minority\* firms to perform subcontracting tasks for \*and small this particular contract. A summary of these specific tasks and the business dollar amounts are described on attachment #1. Further, in accordance with this subcontracting plan, additional firms were identified to serve as potential subcontractors in the performance of tasks related to generic areas 2 and 3, Attachment #2. This process resulted in the identification of fourteen (14) small and minority businesses for consideration as potential subcontractors in the performance of the above reference contract tasks.

However, after a careful analysis and review of their existing technical capabilities relative to the specific technical requirements to this particular contract, the FRC project team was unable to identify either small or minority firms with the necessary technical capabilities for participating in the performance of specific contract tasks required by generic areas 2 and 3.

Therefore, in order to assist in developing the necessary technical skills to serve as subcontractors during the performance of the next two years of this particular contract, FRC will implement the "capacity building" provision in our subcontracting plan. The goal is develop to the necessary technical skills of small and minority firms to strengthen their technical capabilities for serving as subcontractors for this particular contract.

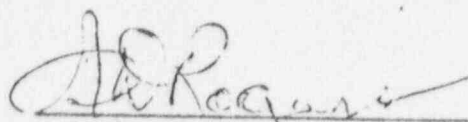
In developing this "capacity building" program FRC will attempt to utilize the support services provided by 7(j) provisions contained in P.L. 95-507 and the Incentive Subcontracting Program provisions of OMB, Office of Federal Procurement Policy regulations dated May 9, 1980. This effort will be developed and coordinated with the following individuals and organizations:

Nuclear Regulatory commission small and disadvantaged business representative  
Nuclear Regulatory Commission small and disadvantaged business utilization specialist  
American Consultant Engineering Council  
The Institute for Research, Development, and Engineering in Nuclear Energy  
National Association of Black Manufacturers  
National Technical Association  
American Association of Small Research Companies

After a technical review of this plan by the Nuclear Regulatory Commission and subsequent negotiations FRC will modify this plan to include a complete examination of the following items:

1. Percentage goals (expressed in subcontracting dollars) for the utilization as subcontractors of small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals and women owned: (for the purposes of the subcontracting plan, the FRC will include all purchases, including a proportionate share of products, services, etc., whose costs are normally allocated as indirect or overhead costs.).
2. A statement of: (a) total dollars planned to be subcontracted; (b) total dollars planned to be subcontracted to small business; and (c) total dollars planned to be subcontracted to small disadvantaged business; (d) total dollars planned to be subcontracted to women owned businesses.
3. A description of the principal product and service areas to be subcontracted and an identification to those areas where it is planned to use (i) small business subcontractors, and (ii) small disadvantaged business subcontractors (iii) women owned businesses.
4. A statement of the method used in developing proposed subcontracting goals for (i) small business, (ii) small disadvantaged business concerns (iii) women owned businesses.

5. The specific procedures which FRC will use for the implementation of the "capacity building" provision.



Arthur Rogers, Administrator  
Corporate Subcontracting Program

I. Administrator - Corporate Subcontracting Program: Arthur D. Rogers

A. Description of Duties:

1. Assist Project Director in resolving issues between FRC and Small, Minority and Women Owned subcontractors
2. Coordinate delivery of technical assistance ("capacity building") to small and minority subcontracts where appropriate.
3. Prepare and maintain detailed subcontractor selection procedures.
4. Ensure compliance with P.L. 95-507 (subcontracting provisions) and OMB implementation regulations.
5. Prepare and submit reports regarding FRC's small, minority and women owned business subcontracting plan progress.
6. Maintain small, minority and women owned business resources file.
7. Assist Project Director in selecting tasks for small, minority and women owned business subcontracting.
8. Assist Project Director in selecting tasks for small, minority and women owned firms for subcontracts.

B. Prepare and monitor detailed subcontracting plan, consisting of the following elements:

Name of small business(s)

Name of minority firm(s)

Women Owned

Specific tasks/assignments to be performed

Percentage of prime contract

Dollar value of subcontract

Technical assistance to be provided for subcontractor that will assist in the further development of their corporate capabilities

Subcontractor -- 1st tier -- plans.

1. Assist Project Director in monitoring small, minority and women owned business subcontract performance.
2. Continuing analysis of "Scope of Work" task to identify additional small, minority and women owned business for subcontract opportunities.



3. Ongoing review of small, minority and women owned business resources data file to match small, minority and women owned businesses with subcontract task opportunities.
4. Describe the efforts that will be taken to assure Small, Minority, and Women Owned Business and Small Business concerns owned and controlled by the socially and economically disadvantaged will have an equitable opportunity to compete for subcontracts as they pertain to this procurement:

II. Franklin Research Center's Small, Minority and Women Owned Business Subcontracting and Supplier Outreach Process.

- A. Request small, minority and women owned business source list from small, minority and women owned business professional organizations, small, minority and women owned business development organizations, private and public sector's sponsored small, minority and women owned business development programs.
- B. Send letter to selected small, minority and women owned firms explaining FRC's subcontracting program and request additional information about their corporate capabilities, including technical skill areas, available technical personnel, current and former contract areas, present and past clients, and references - name, address, and telephone number of specific individuals - from list of present and current clients, financial statements, and annual report.
- C. After receipt of small, minority and women owned businesses capability statements, select the firms which appear to have the capabilities in the skill areas in each of FRC's most frequent contract areas.
- C. Schedule a "Field Visit" as required to the selected firms and prepare a corporate profile consisting of the following information:
  1. Basic Data
    - a. Name of firm
    - b. Address
    - c. City and county
    - d. Key personnel
  2. Equipment and Capabilities
    - a. Major items of equipment
    - b. Technical personnel - qualifications
    - c. Technical skill areas
    - d. Available technical personnel
  3. Performance Record
    - a. Current and former contract areas
    - b. Present and past clients

- c. Specific references
    - names
    - addresses
    - telephone numbers
  - d. Categories of current and former contract effort performed
  - e. Product(s) produced or results
- 4. Financial Capacity
    - a. Annual volume
    - b. Number projects
    - c. Largest project
  - 5. Select the small, minority and women owned firms that have the technical capability and acceptable record of performance for FRC's small and minority business subcontracting resources file.

III. Franklin Research Center's Small, Minority and Women Owned Business Subcontracting and Supplier Selection Procedures.

- A. Develop and maintain current/updated small, minority and women owned business profiles consisting of firms with capabilities in each of FRC's most frequent contract areas.
- B. After a decision (assignment of proposal number) has been made by FRC to submit a proposal in response to a procurement announcement (RFP), analyze "Scope of Work" tasks and designate specific tasks for subcontracting to small, minority and women owned businesses which have the capabilities in each specific skill areas.
- C. Select a minimum of two firms from resources file in each skill area required by the "Scope of Work" tasks.
- D. Notify each firm within the next twenty-four (24) hours about the proposed procurement, which will include the following specific information:
  - Federal Agency
  - Procurement Announcement - RFP number of references
  - Skill areas required by "Scope of Work" tasks
  - Percentage goal of total contract effort to be subcontracted
  - Estimated dollar amount of proposed subcontract(s) (if practical)
- E. Request additional information about firm's capabilities, interest, references, etc.

- F. Schedule technical briefing within three days for the firms who have the required technical capabilities and interest necessary to perform tasks required by "Scope of Work." This briefing will deal with the following issues:

- Procurement (RFP) "Scope of Work" requirements
- Proposal development timetable
- Specific "Scope of Work" to be assigned to subcontractors
- Explanation of technical capability requirements
- Determining if technical assistance is required by subcontractor(s) for "capacity building."

- G. Selection of firm(s) to be given subcontracting assignments after receipt of proposals based on following criteria:

- Demonstrated interest
- Technical and management capability
- Availability of technical personnel
- Cost in addition to criteria of the RFP.

- H. Notify other firm(s) not selected within the next working day (8 hours)

- I. Determine schedule for the provision of technical assistance as required.

IV. Small, Minority and Women Owned Business Subcontracting and Supplier Records.

The Franklin Research Center will maintain the following records relative to our corporate subcontracting program, and other specific records that may be required by the sponsoring Federal agency or the Small Business Administration, such as Optional Form 61 Subcontracting Program-Quarterly Report of Participating Large Company on Subcontract Commitments to Small Business Concerns and Minority Business Enterprises.

- A. Small, minority and women owned and disadvantaged business source lists, guide and other data identifying SB/SDB/WOB/MB vendors
- B. Organizations Contracted for small, minority and women owned and disadvantaged business sources
- C. Records on all subcontract solicitations over \$10,000 indicating on each solicitation
  - 1. Whether small business was solicited, and if not why not
  - 2. Whether small disadvantaged business was solicited, and if not, why not
  - 3. Whether women owned businesses were solicited, and if not why not

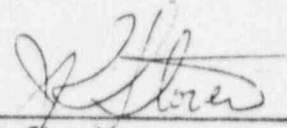
4. Reasons for the failure of solicited small business or small disadvantaged business to receive the subcontract award.
- D. Records to support other outreach efforts such as contact with small, minority and women owned Business Trade associations, business development organizations and attendance at minority business procurement conferences and trade affairs
- E. Records to support internal activities to guide and encourage buyers such as workshops, seminars, training programs and monitoring activities to evaluate compliance
- F. Records to support award data submitted on standard forms to include name and address of subcontractor
- G. Name of minority business firms  
Subcontracting totals  
Technical support services rendered  
Performance of subcontractors  
Statistical profile  
Outreach program  
Subcontract competitive bidding process.
- V. The Franklin Research Center will include the following policy statement as a part of each corporate subcontracting plan.
  - A. It is the policy of the United States that Small Business concerns and Small Business concerns owned and controlled by socially and economically disadvantaged individuals shall have the maximum practicable opportunity to participate in the performance of contracts let by any Federal agency.
  - B. The contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with the efficient performance of this contract. The contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the contractor's compliance with this clause.
  - C. As used in this contract, the term "small business concern" shall mean a small business as defined pursuant to section promulgated pursuant thereto. The term "small business concerns owned and controlled by socially and economically disadvantaged individuals" shall mean a small business concern--
    - (i) which is at least 51 per centum owned by one or more socially and economically disadvantaged individuals; or in the case of any publicly owned business, at least 51 per cent of the stock of which is owned by one or more socially and economically disadvantaged individuals; and

55

(ii) whose management and daily business operations are controlled by one or more of such individuals. The contractor shall presume that socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, and other minorities, or any other individual found to be disadvantaged by the Administration pursuant to section 8(a) of the Small Business Act.

I, the undersigned, a designated officer of Franklin Research Center, do herewith assure that this concern will include the clause required by this contract in all subcontracts which offer further subcontracting opportunities, and that as the prime contractor will require all subcontractors (except Small Business Concerns) who receive subcontracts in excess of \$1,000,000 in the case of a contract for construction of any public facility, or in excess of \$500,000 in the case of all other contracts, to adopt a plan similar to this plan. I further assure that as the prime contractor we will submit such periodic reports and cooperate in any studies or surveys as may be required by the Contracting Federal Agency or the small Business Administration in order to determine the extent of compliance of this plan.

The Franklin Research Center is also committed to fully complying with the women owned business mandates required by executive order number 12138 dated May 9, 1979.

  
\_\_\_\_\_  
John Stover  
Vice President

## Attachment #1

<u>FIRM</u>	<u>SUBCONTRACTING TASK</u>	<u>DOLLAR AMOUNT</u>
Portfolio Associates	Administrative Support Services	\$ 10,900
Synergic Resources	Engineering Support Services - Equipment Environment Qualification	40,000
Westec	Engineering Support Services - Entire Project	250,000



## ATTACHMENT 2

The Engineering Department of the Franklin Research Center, a Division of The Franklin Institute has been awarded a contract from the United States Nuclear Regulatory Commission for the Review and Evaluation of Operating Reactor Licensing Action. The purpose of this contract is to assist NRC with its review and evaluation of pending operator reactor licensing actions. Assistance is needed to: 1. review license submittal; 2. perform comparative evaluations relative to establish regulatory guides; 3. perform comparative documenting conclusions reached; and 4. provide a definition of additional information needed to complete an action.

### DESCRIPTION OF SCOPE OF WORK: GENERIC AREA 2

The overall scope of this task is to evaluate the environmental qualification of Class 1E equipment in eleven operating power plants included in the NRC deviations from NRC guidelines, which are to be refined as the activity progresses, and to provide recommendations for additional qualification work or plant equipment changes by the licensee.

#### Examples of Specific Activities and Areas of Expertise Which May Be Required to Support This Task

1. Evaluation of (a) the service conditions, including conditions during normal operations as well as those resulting from postulated Design Basis Events (DBE), and (b) plant functions of Class 1E equipment, will require an understanding of nuclear power plant systems and components, including in particular, the design and operating requirements for Engineered Safety Feature systems at both BWRs and PWRs designed by various NSSS vendors and architect engineers.

2. Assessment of the adequacy of the qualification documentation for Class 1E equipment will require a close familiarity with and direct experience in the field of qualification of safety-related equipment used in nuclear power plants, including familiarity with materials-aging phenomena.

### DESCRIPTION OF SCOPE OF WORK: GENERIC AREA 3

The objective of this task is to evaluate licensee provisions for the safe handling of crane-borne loads, through design and administrative controls, in the vicinity of spent fuel and equipment required for safe shutdown of, and continued decay heat removal from, selected operating power plants. In addition to plant-specific, detailed evaluations, the scope of the task includes the preparation of specific criteria to be satisfied in demonstration of compliance with generic staff positions.

Examples of Specific Activities and Areas of Expertise Which May Be  
Required to Support This Task

1. Plant arrangement review and the assessment of safe load paths designated by licensees will require an understanding of nuclear power plant systems and components, including, in particular, the design and operating requirements for Engineered Safety Feature systems at both BWRs and PWRs designed by various NSSS vendors and architect engineers.
2. Evaluation of proposed crane design features will require an understanding of electric overhead crane design and operation coupled with an understanding of failure modes and effects analysis as it relates to the need, or lack of need, for redundancy in the load train.
3. Evaluation of licensee demonstration of compliance with criticality criteria will require the knowledge of methods and assumptions associated with criticality analysis, including the ability to perform verification analysis using current public-domain or USNRC-approved computer codes.
4. Evaluation of licensee demonstration of crane seismic design will require an understanding of methods and assumptions associated with the seismic analysis of large mechanical systems, including the ability to perform limited verification analysis using appropriate analytical methods.

The above referenced contract tasks are required to be performed on-site at the Franklin Research Center facilities located at Twentieth & Parkway, Philadelphia, Pennsylvania. Therefore, if Unified Industries, Inc. is interested in participating as a subcontractor on this particular Nuclear Regulatory Commission contract, please forward a statement outlining your corporate capabilities in terms of your firm's qualifications to support the specific contract tasks described above. Please list the specific technical personnel to be assigned to this project and include information indicating their professional qualifications. A technical interview will be scheduled for your firm two weeks after a review of your statement by our technical personnel. If your firm is not selected for the technical interview for this particular project, we will inform you at the earliest possible date.

Please forward this information to my attention by May 16, 1980. Your affirmative response to this request will be greatly appreciated.

Sincerely,

Arthur D. Rogers, Administrator  
Corporate Subcontracting Program

ADR/jhk  
Enclosures