

2. CONTRACT (Proc. Inst. Ident.) NO. **NRC-04-90-085** 3. EFFECTIVE DATE **SEP 18 1990** 4. REQUISITION/PURCHASE REQUEST/PROJECT NO. **RS-RES-90-085**

5. ISSUED BY **US Nuclear Regulatory Commission** CODE **SEP 10 1990** 6. ADMINISTERED BY (If other than Item 5) CODE
 Division of Contracts & Property Mgmt
 Contract Negotiation Branch No. 2, P-1042
 Washington, DC 20555

7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, State and ZIP Code)
Westinghouse Electric Corporation
Research and Development Center
1310 Beulah Road
Pittsburgh, PA 15225

8. DELIVERY FOB ORIGIN OTHER (See below)
 9. DISCOUNT FOR PROMPT PAYMENT
Net

10. SUBMIT INVOICES (If copies unless otherwise specified) TO THE ADDRESS SHOWN IN **See Atch 1**

11. SHIP TO/MARK FOR CODE **Refer to Section F.5 herein** FACILITY CODE
 12. PAYMENT WILL BE MADE BY CODE **US Nuclear Regulatory Commission**
Division of Accounting & Finance GOV/COM Section
Washington, DC 20555

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:
 10 U.S.C. 2304(c)(1) 41 U.S.C. 253(c)(1)

14. ACCOUNTING AND APPROPRIATION DATA
B&R No.: 0601922040 FIN: L15050
APPN No.: 31X0200.600 OBLIGATED AMT: \$150,000

15A ITEM NO	15B SUPPLIES/SERVICES	15C QUANTITY	15D UNIT	15E UNIT PRICE	15F AMOUNT
The U.S. Nuclear Regulatory Commission hereby accepts Westinghouse Electric Corporation's technical proposal dated July 26, 1990 as revised August 21, 1990 all of which are incorporated herein by reference, to perform the services entitled "Modeling Cognitive Behavior of Nuclear Power Plant Personnel" as specified herein. This is a cost-plus-fixed-fee type contract which is incrementally funded.					
	9010160163 900918				
	PDR CONTR				
	NRC-04-90-085 PNU				

15G. TOTAL AMOUNT OF CONTRACT **\$ 398,598.00**

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CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 3 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)

18. AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____ including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. NAME AND TITLE OF SIGNER (Type or print)
Mick Zaharoff, Manager
Proposal & Contracts Department

20A. NAME OF CONTRACTING OFFICER
Mary H. Mace

19B. NAME OF CONTRACTOR
 BY **[Signature]**
 (Signature of person authorized to sign)

19C. DATE SIGNED
9/14/90

20B. UNITED STATES OF AMERICA
 BY **[Signature]**
 (Signature of Contracting Officer)

20C. DATE SIGNED
9/18/90

1. Section "B.3 CONSIDERATION AND OBLIGATION--COST PLUS FIXED FEE (JUNE 1988) ALTERNATE I (JUNE 1988)
 - a. The total estimated cost to the Government for full performance of this contract is \$398,598.00, of which the sum of \$386,988.00 represents the total estimated reimburseable costs, and of which \$11,610.00 represents the fixed fee.
 - b. There shall be no adjustment in the amount of the Contractor's fixed fee by reason of differences between any estimate of cost for performance of this contract and the actual cost for performance of that work.
 - c. The amount presently obligated by the Government with respect to this contract is \$150,000.00.
 - d. It is estimated that the amount currently allotted will cover performance of Tasks 1, 2, and 3; Task 4 (1) Conversion of the existing version of the cognitive processor to a more widely available computer; Task 5 (1) Conversion of the CES cognitive processor code currently running on a Symbolics computer to make it able to run on the computer selected in Task 1; and purchase of the computer system.

(End of Clause)"

2. Section F.5, "PLACE OF DELIVERY," is completed as follows:

"a. Project Officer (Four copies)

U.S. Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Human Factors Branch, DSR
Attn: Dr. Paul M. Lewis, Mail Stop: NLN-316
Washington, DC 20555

b. Contracting Officer (1 copy)

U.S. Nuclear Regulatory Commission
Contract Number: NRC-04-90-085
Division of Contracts and Property Management
Contract Administration Branch, Mail Stop P-902
Washington, DC 20555"

3. Under Section F.6, "DURATION OF CONTRACT PERIOD," the first sentence is completed as follows:

"This contract shall commence on the effective date and shall expire eighteen months thereafter."

4. Paragraph a. under Section G.1 - INDIRECT COST RATES are completed as follows:

"a. Pending the establishment of final indirect rates which shall be negotiated based on audit of actual costs, the Contractor shall be reimbursed for allowable indirect costs, during the duration of this contract period, as follows:

Rate	Base	Period
Overhead - 125.4%	Direct Labor	1/1/90-12/31/90
General and Administrative - 18.53%	Total Costs	1/1/90-12/31/90
Facilities Capital Cost of Money		
Engineering Overhead - .09174	Total Labor	1/1/90-12/31/90
Corp Assets/G&A - .00168	Total Direct Costs	1/1/90-12/31/90

5. Paragraph a. under Section G.2 - PROJECT OFFICER AUTHORITY is completed as follows:

"a. The Contracting Officer's authorized representative hereinafter referred to as the Project Officer for this contract is:

Name: Dr. Paul M. Lewis
 Address: U.S. Nuclear Regulatory Commission
 Office of Nuclear Regulatory Research
 Division of Systems Research
 Human Factors Branch
 Washington, DC 20555
 Telephone Number: (301) 492-3552"

6. Section G.4 - REMITTANCE ADDRESS is completed as follows:

"Address: (W) Electric Corporation
 P.O. Box 65933
 Charlotte, NC 28265"

I.2 PAYMENT FOR OVERTIME PREMIUMS (FAR 52.222-2) (JUL 1990)

(a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed \$0 or the overtime premium is paid for work--

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall--

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

(End of Clause)

I.3 DRUG-FREE WORKPLACE (FAR 52.223-6) (JUL 1990)

(a) Definitions. As used in this clause, "Controlled Substances" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11-1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall--within 30 calendar days after award (unless a longer period is agreed to in writing for contracts of 30 calendar days or more performance duration); or as soon as possible for contracts of less than 30 calendar days performance duration--

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about-

(i) The dangers of drug abuse in the workplace;

(ii) The contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violation occurring in the workplace.

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause, that as a condition of continued employment on this contract, the employee will-

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

(5) Notify the Contracting Officer in writing within 10 calendar days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subparagraph (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in the performance of this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.

(End of Clause)