

1. NRC-05-82-241 2. EFFECTIVE DATE 2/22/82 3. AWARD/CONTRACT REQUEST/PROJECT NO. 4. CERTIFIED FOR NATIONAL DEFENSE UNDER POS. REG. 2 AND/OR DMS REG. 1, RATING.

5. ISSUED BY U. S. Nuclear Regulatory Commission Division of Contracts Washington, DC 20555 6. ADMINISTERED BY (If other than block 5) 7. DELIVERY FOR DESTINATION NATION OTHER (See below)

8. CONTRACTOR NAME AND ADDRESS C-E Power Systems Combustion Engineering, Inc. 1000 Prospect Hill Road Windsor, CT 06095 9. DISCOUNT FOR PROMPT PAYMENT NET 10. SUBMIT INVOICES (4 copies unless otherwise specified) TO ADDRESS SHOWN IN BLOCK

11. SHIP TO/MARK FOR U. S. Nuclear Regulatory Commission ATTN: Ed Fox Reactor Training Center Osborne Office Center Chattanooga, TN 37411 12. PAYMENT WILL BE MADE BY U. S. Nuclear Regulatory Commission Office of the Controller Division of Accounting Washington, DC 20555

13. THIS PROCUREMENT WAS [] ADVERTISED, [X] NEGOTIATED, PURSUANT TO: [] 10 U.S.C. 2304 (a)(1) [X] 41 U.S.C. 252 (c)(1)

14. ACCOUNTING AND APPROPRIATION DATA 31X0200.302 B&R No. 30-19-03-03 FIN No. B1301 \$21,280.00

15. ITEM NO.	16. SUPPLIES/SERVICES	17. QUANTITY	18. UNIT	19. UNIT PRICE	20. AMOUNT
	THE COMMISSION HEREBY ACCEPTS YOUR OFFER TO PRESENT "COURSES IN COMBUSTION ENGINEERING FACILITY DESIGN AND OPERATION" IN ACCORDANCE WITH YOUR PROPOSALS DATED APRIL 27, 1981 AND MARCH 15, 1982, AS MODIFIED HEREIN.				

21. TOTAL AMOUNT OF CONTRACT \$42,560.00 CONTRACTING OFFICER WILL COMPLETE BLOCK 22 OR 26 AS APPLICABLE

22. [] CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 4 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.) 26. [] 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.

23. NAME OF CONTRACTOR COMBUSTION ENGINEERING, INC. BY [Signature] (Signature of person authorized to sign) 27. UNITED STATES OF AMERICA BY [Signature] (Signature of Contracting Officer)

24. NAME AND TITLE OF SIGNER (Type or print) D. E. LeClair Manager-Contract Administration 25. DATE SIGNED JUL 8 1982 28. NAME OF CONTRACTING OFFICER (Type or print) Kellogg V. Morton 29. DATE SIGNED 7-15-82

ARTICLE I - STATEMENT OF WORK

A. OBJECTIVE

The objective of this contract is to provide NRC/IE Inspectors technical training in the design and operation of Combustion Engineering Nuclear Steam Supply Systems (NSSS). This training is necessary to permit NRC/IE Inspectors to conduct indepth inspections at PWR Nuclear Power Facilities utilizing Combustion Engineering NSSS.

B. SCOPE

Training will consist of classroom and simulator instruction emphasizing, where applicable, differences between Combustion Engineering and Westinghouse NSSS designs. Systems and/or component problem areas and the approved corrective action (if any) along with applicable technical specifications, will be covered during classroom presentations and reinforced with the use of the Combustion Engineering power plant simulator.

C. WORK STATEMENT

1. Course Title and Description

"Combustion Engineering Facility Operations Course"

A ten-day course of instruction consisting of 40 hours of classroom instruction and 40 hours of simulator instruction. The course instructors shall highlight the differences between the Combustion Engineering and Westinghouse PWR designs. They shall also cover applicable technical specifications in both the classroom and simulator presentations.

A course text covering the basic material being taught will be furnished to each student.

2. Task Statement

The Contractor shall furnish the necessary qualified personnel, facilities, materials, texts and services to prepare and teach the course as outlined in Attachment A.

3. Examinations

On the 10th day of the course, a simulator static evaluation and a written examination will be given to each student.

The simulator static evaluation shall be approximately one-hour in length. For this evaluation, each student will be required to define the power plant status and technical specifications violations as displayed on the simulator control boards.

The written examination shall be approximately three hours in length. It is to consist of essay type questions which stress

concepts and design bases, system and component functions, technical specifications, and system operation. Questions involving specific numbers should not be used.

4. Report Requirements

A letter report (4 copies), including one copy to the Contracting Officer, upon completion of each course conducted to include as a minimum:

- 1) Recommended changes in the course curriculum, pre-course study, etc.
- 2) Results of the simulator evaluation and the written examination.

ARTICLE II - PERIOD OF PERFORMANCE

The period of performance under this contract is from February 22, 1982 through February 22, 1985.

ARTICLE III - CONSIDERATION AND PAYMENT

1. In full consideration of the Contractor's presentation of the following Combustion Engineering Facility Design and Operation Courses, NRC shall pay the Contractor the sums delineated below in accordance with Article 7 of the General Provisions entitled "Payments":
 - A. CE Facility Design and Operation Course (February 22-March 5, 1982) - \$21,280.00
 - B. CE Facility Design and Operation Course (August 16-27, 1982) - \$21,280.00
2. Payment will be made on a per course basis at the completion of each course. The NRC will render payment to the Contractor in approximately thirty (30) days after receipt of proper and correct invoices or vouchers; provided however, that said payment shall not be deemed to prejudice any rights which the NRC may have by law or under other provisions of this contract.

ARTICLE IV - TECHNICAL DIRECTION

- A. Performance of the work under this contract shall be subject to the technical direction of the NRC Project Officer named in ARTICLE V of this contract. The term "Technical Direction" is defined to include the following:
 1. Technical direction to the Contractor which shifts work emphasis between areas of work or tasks, requires pursuit of certain lines of inquiry, fills in details or otherwise services to accomplish the contractual scope of work.

2. Providing assistance to the Contractor in the preparation of drawings, specifications or technical portions of the work description.
 3. Review and where required by the contract, approval of technical reports, drawings, specifications and technical information to be delivered by the Contractor to the Government under the contract.
- 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 SUCH PERSON IN WRITING WITHIN TEN (10) WORKING DAYS AFTER VERBAL ISSUANCE. A copy of said written direction shall be submitted to the Contracting Officer.

The Contractor shall proceed promptly with the performance of technical directions duly issued by the Project Officer in the manner prescribed by this ARTICLE and within such person's authority under the provisions of this ARTICLE.

If, in the opinion of the Contractor, any instruction or direction issued by the Project Officer is within one of the categories as defined in B(1) through (4) above, the Contractor shall not proceed but shall notify the Contracting Officer in writing within five (5) working days after the receipt of any such instruction or direction and shall request the Contracting Officer to modify the contract accordingly. Upon receiving such notification from the Contractor, the Contracting Officer shall issue an appropriate contract modification or advise the Contractor in writing that, in the Contracting Officer's opinion, the technical direction is within the scope of this ARTICLE and does not constitute a change under the Changes Clause.

- D. 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 funds for unallowable costs under the contract.

- E. A failure of the parties to agree upon the nature of the instruction or direction or upon the contract action to be taken with respect thereto shall be subject to the provisions of the contract clause entitled "Disputes."

ARTICLE V - PROJECT OFFICER

Edwin F. Fox, Jr. is hereby designated as the Contracting Officer's authorized representative (hereinafter called Project Officer) for technical aspects of this contract. The Project Officer is not authorized to approve or request any action which results in or could result in an increase in contract cost; or terminate, settle any claim or dispute arising under the contract; or issue any unilateral directive whatever.

The Project Officer is responsible for: (1) monitoring the Contractor's technical progress, including surveillance and assessment of performance, and recommending to the Contracting Officer changes in requirements; (2) interpreting the scope 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 Project Officer is authorized to review all costs requested for reimbursement by Contractors and submit recommendations for approval, disapproval, or suspension for supplies, services required under the contract. The Contracting Officer is responsible for directing or negotiating any changes in terms, conditions, or amounts cited in the contract.

For guidance from the Project Officer to the Contractor to be valid, it must: (1) be consistent with the description of work set forth in the 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; and, as stated above, (4) not constitute a basis for any increase in the contract cost.

ARTICLE VI - OPTION FOR ADDITIONAL COURSES

This contract has an option for the presentation of additional courses in Combustion Engineering Facility Design and Operation as described in ARTICLE I - Statement of Work. The dates for presentation of these courses shall be (as mutually agreed to by the parties.) The consideration to be provided the Contractor for performance of the work set forth in this option shall be (as agreed upon by the parties).

This option shall be exercised by the Contracting Officer who will provide notice of same to the Contractor in writing prior to the scheduled date for presentation of the course.

It is expressly understood and agreed by the parties hereto that regardless of custom and usage in administration of this contract, only the Contracting Officer may give notice exercising the option as prescribed by this ARTICLE.

ARTICLE VII - LIMITATION OF LIABILITY

Any other provisions of this Agreement to the contrary, notwithstanding, the Contractor's total liability to the NRC for all claims of any kind, whether based on contract, warranty, tort (including negligence), strict liability, or otherwise, for any loss or damage arising out of, connected with, or resulting from the services performed by the Contractor hereunder, shall in no event exceed the contract price of the services covered by this Agreement.

In no event, whether as a result of breach of contract, breach of any applicable express or implied warranties, negligence or otherwise, shall the Contractor, its employees, suppliers, or subcontractors be liable to the NRC for damages caused by reason of unavailability of plant, plant shutdowns or service interruptions, including loss of anticipated profits or revenue, loss of use of equipment, inventory or use charges, cost of purchased or replacement power, cost of capital or claims of customers or other special, incidental, or consequential damages of any nature.

This LIMITATION OF LIABILITY Article shall prevail over any conflicting or inconsistent provision contained in any of the documents comprising this Agreement except as may be expressly provided to the contrary.

ARTICLE VIII - FORCE MAJEURE

The Contractor shall not be liable for loss or damage resulting from any delay or failure to perform its contractual obligations within the time specified due to acts of God; war; acts of the public enemy; riot, civil commotion, sabotage; federal, state, or municipal action or regulation including delays or failure to act by any regulatory or other agency in granting permits or licenses; strikes or other labor troubles, fire, flood; accidents; epidemics; quarantine restrictions; embargoes or other transportation delays; damage to or destruction in whole or in part of the equipment or any other causes, contingencies, or circumstances within or without the United States not subject to the Contractor's control, whether of a similar or dissimilar nature, which prevent or hinder the furnishing of services hereunder. Any such causes of delay, even though existing on the date of the contract, shall extend the time of performance by the length of delays occasioned thereby including a reasonable time for the resumption of normal performance.

ARTICLE IX - GENERAL PROVISIONS

The General Provisions of this contract consist of the "General Provisions Fixed Price Supply Contract," dated April 1, 1982 attached hereto, and by the reference, made a part hereof.

NRC
TRAINING SCHEDULE

Week of

<u>TIME</u>	<u>SUBJECT</u>	<u>C-S</u>	<u>D-P-E</u>	<u>INSTRUCTOR</u>
<u>Monday</u>	Reactor Coolant Sys. & RV Inter.	C		
	Orientation	S		
	Plant Startup PS-3	S		
<u>Tuesday</u>	Chemical & Volume Control System	C		
	Reactor Regulating System	C		
	Reactor Startups PS-31	S		
<u>Wednesday</u>	Nuclear Instrumentation	C		
	CEDS - Feedwater	C		
	Plant Startup PS-6	S		
	Plant Measuring PS-26	S		
<u>Thursday</u>	Tech Specs	C		
	SG Tube Rupture	C		
	SG Tube Rupture	S		
	Plt Manv. PS-36/Natural Cir. Demo	S		
<u>Friday</u>	Natural Circulation	C		
	Reactor Protection System	C		
	Accident Demonstration	S		
	Plant Maneuvering	S		

LEGEND

C = Classroom S = Simulator D - Demonstration P = Practice E = Exercise

NRC
TRAINING SCHEDULE

Week of

<u>TIME</u>	<u>SUBJECT</u>	<u>C-S</u>	<u>D-P-E</u>	<u>INSTRUCTOR</u>
<u>Monday</u>	CPC Functional Design	C		
	Plant Maneuvering PS-27	S	P	
	Plant Maneuvering PS-14	S	P	
<u>Tuesday</u>	COLSS Functional Design	C		
	Engineered Safety Features	C		
	Plant Maneuvering PS-44	S	P	
	Plant Maneuvering PS-15	S	P	
<u>Wednesday</u>	Hands on CPC	C		
	Small Break LOCA	C		
	CVCS Rupture PS-19	S		
	Surveillance	S		
<u>Thursday</u>	Setpoints MDS			
	Fuel Preconditioning Guidelines	S		
	Hot Leg Rupture PS-20	S	P	
	Tech Specs Problems	S		
<u>Friday</u>	Written Exam	C		
	Ejected CEA PS-18	S	P	
	Simulator Static Evaluation	S	E	

LEGEND

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