

DOE/ET/10815--179

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**CONTRACT STATUS REPORT
FOR
MHD RESEARCH AND DEVELOPMENT
AND
OPERATION OF THE MHD
COAL FIRED FLOW FACILITY**

For The Month Ending

July 31, 1995

Work Performed Under Contract No. DE-AC02-79ET10815

Prepared by
The University of Tennessee
Space Institute
Energy Conversion Research & Development Programs

For

The United States Department of Energy

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MASTER

PROJECT STATUS REPORT

1. CONTRACT OBJECTIVE - No change since last report.
2. TECHNICAL APPROACH CHANGES - None
3. CONTRACT TASKS - In this report, UTSI reports on the status/progress by program tasks identified in Chapter 3 (Work Plan) of the draft Contract Management Plan for the FY95 period, which was submitted to DOE February 17, 1995.

TASK I - CONTRACT MANAGEMENT AND CLOSEOUT

In response to a DOE/PETC letter of 5/23/95, a follow-on contract proposal package for "UTSI/CFFF MHD Program Completion and Related Activity" was submitted to DOE/PETC.

According to latest cost accounting data, UTSI consumed its total funding as of the end of July 1995 and has hereby ceased work and charges on the contract. Residual actions remaining on the contract will be resumed on a follow-on contract with DOE/PETC should it be consummated.

The contract status report for June 1995 was issued to DOE.

Personnel staffing for the month was 19.2 equivalent full-time (EFT) personnel versus a planned level of 26.3 EFT.

TASK II - FACILITY AND PROPERTY DISPOSITION

Facility activities this month were confined to the continuation of preventative maintenance and repairs required to maintain the Coal-Fired Flow Facility (CFFF) in a standby condition.

The reconditioning of the CFFF process water cooling tower continued. An interior protective polyurethane coating was applied on the bottom of each cooling tower quadrant.

Semi-annual maintenance on the fire protection system was initiated.

Control of government property and the maintenance of records were continuing.

TASK III - DATA REPORTING AND ARCHIVING

Preparation of topical reports pertaining to the MHD POC test program continued.

Preparation of a topical report on the findings for measurements and evaluations of corrosion from superheater test module tube samples from test section 1 and 2 continued.

All data and documentation developed thus far on the MHD/CFFF project and identified for archiving continued to be maintained for archiving storage.

TASK IV - SITE ENVIRONMENTAL COMPLIANCE AND REMEDIATION

Under a subcontract for the first round of groundwater samples which will be used as a screening technique to verify what parameters must be analyzed in the other six wells that will be installed. This technique will save funds by eliminating all groundwater pollutants except those detected above drinking water standards.

Groundwater compliance monitoring work has basically come to a halt due to severe funding limitations.

Monitoring of the holding pond effluent continued in order to comply with the UTSI water discharge permit. Water is checked for pH, temperature, flow rate, oil and grease content, total dissolved solids, and total suspended solids. All parameters continue to be measured by the UTSI chemistry lab. Any changes in CFFF operation might require monitoring of additional parameters.

4. OPEN ITEMS

A. DOE: The following reports/documents were in DOE review for comments and/or approval as of July 31, 1995.

FY1995 Management Plan

UTSI ltr 02/17/95

B. UTSI: The following actions were in process or preparation as of July 31, 1995.

Superheater/Air Heater Tube Corrosion Studies Est. Completion 09/30/95

NO_x Formation and Control, Topical Report Est. Completion 10/31/95

Western Coal Processing System, Topical Report Est. Completion 08/31/95

Western Coal 1,000 Hr POC & Final Summary Report Est. Completion 10/31/95

5. SUMMARY STATUS ASSESSMENT AND FORECAST

The CFFF continues in standby condition and efforts on the preparation of topical reports are being held in abeyance pending the consummation of the follow-on contract with DOE/PETC.

No further monthly status reports on this contract are anticipated.

DISCLAIMER

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Milestone Schedule and Status Report

MS-0067

MILESTONE LOG

I.D. NO.	DESCRIPTION	ACTUAL COMPLETION DATE	PLANNED COMPLETION DATE	EXPECTED COMPLETION DATE	COMMENTS
	TASK I - CONTRACT MANAGEMENT & CLOSE OUT				
I A	Issue Management Plan for FY95	Feb 95	Feb 95		Completed
I B	Issue Monthly Reports	Apr 95	As Indicated		Completed Jun '95 report
I C	Issue Quarterly Reports	Apr 95	As Indicated		Completed Jan-Mar 95 report
	TASK II - FACILITY & PROPERTY DISPOSITION				
II A	Semi-Annual Government-Owned Property Report	Oct 94	Oct 94		Completed
II B	Complete all Engineering Drawings	Dec 94	Dec 94		All drawings completed/updated
II C	Annual Government Property Inventory	Dec 94	Dec 94		Completed
	TASK III - DATA REPORTING & ARCHIVING				
III A	Identify Data for Archiving	Nov 94	Nov 94		Completed
III B	Prepare data/documentation for archiving	Feb 95	Feb 95		Completed
III C	Issue Superheater/Air Heater Tube Corrosion Studies		Mar 95	Sep 95	
III D	Issue Topical Report - Western Coal Processing System		Apr 95	Aug 95	Limited resources
III E	Issue Topical Report - NO _x /SO _x Formation & Control		Apr 95	Oct 95	Limited resources
III F	Issue Western Coal 1000 Hr POC & Final Program Summary Report		May 95	Oct 95	Limited resources
	TASK IV - SITE ENVIRONMENTAL COMPLIANCE & REMEDIATION				
IV A	Complete Removal of Asbestos in the CFFF Cooling Tower	Feb 95	Mar 95		Completed
IV B	Install additional groundwater wells for monitoring		May 95	Aug 95	Postponed due to funding
IV C	Issue Monthly Water Discharge Monitoring Reports		As Indicated		

U.S. DEPARTMENT OF ENERGY
COST MANAGEMENT REPORT

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Form Approved
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FORM DOE 533M
(1/78)

PRELIMINARY

1. Contract Identification Operation of the MHD Coal-Fired Flow Facility		2. Reporting Period July 1-31, 1995		3. Contract Number DE-AC02-79ET10815					
4. Contractor (Name and Address) The University of Tennessee Space Institute B. H. Goethert Parkway Tullahoma, Tennessee 37388-8897		5. Cost Plan Date February 1995		6. Contract Start Date October 1, 1978 7. Contract Completion Date September 30, 1995					
8. Government Funding \$105,842,540.00	9. Contractor Funding -0-	10. Number of Invoices Billed Letter of Credit	11. Frequency N/A	12. Number of Invoices Paid N/A	13. Total Invoice Amounts Billed \$105,679,132.70				
15. Identification Number	16. Reporting Category (e.g. contract line item or work breakdown structure element)	17. Accrued Cost Cash Basis**		18. Estimated Accrued Costs a. Subsequent Reporting Period Aug 95	b. Balance of Fiscal Year 1995	c. Total Contract thru 9/30/95	19. Total Contract Value	20. Variance	21. Unfilled Orders Outstanding
		a. Actual	b. Planned						
	DIRECT LABOR	0	102	54,185,379.09	54,269	0	54,301	54,170	95
	FRINGE BENEFITS	0	25	10,790,901.42	10,816	0	10,821	10,792	25
	EQUIPMENT	0	0	6,038,121.54	6,038	0	6,038	6,038	0
	EXPENDABLE MATERIAL	276.00	6	9,594,302.31	9,716	0	9,596	9,710	2
	OUTSIDE CONTRACTS	3,982.95	5	7,452,497.66	7,489	0	7,479	7,485	26
	TRAVEL	270.00	1	1,019,004.94	1,024	0	1,019	1,023	0
	COMPUTER USAGE	0	0	2,127,942.34	2,129	0	2,128	2,129	0
	TOTAL DIRECT COSTS	4,508.95	139	91,208,149.30	91,481	0	91,382	91,347	148
	OVERHEAD *	811.61	24	14,470,983.40	14,518	0	14,502	14,495	26
	GRAND TOTAL	5,320.56	163	105,679,132.70	105,999	0	105,884	105,842	174
B&R	AA701030	0	0	65,787,381.00	65,787	0	65,787	65,787	0
B&R	AA701035	0	0	516,868.00	517	0	517	517	0
B&R	AA701010	0	0	9,187,000.00	9,187	0	9,187	9,187	0
B&R	AA701020	0	0	179,000.00	179	0	179	179	0
B&R	AA7010105	0	0	26,425,000.00	26,425	0	26,425	26,425	0
B&R	AA7010251	0	0	2,000,000.00	2,000	0	2,000	2,000	0
B&R	AW01	0	0	65,000.00	65	0	65	65	0
B&R	AW02	0	0	195,000.00	195	0	195	195	0
B&R	AW05	5,320.56	163	1,323,883.70	1,644	0	1,529	1,487	174

23. REMARKS: * Overhead rate effective 7/1/94 is 18% of TDC less capital equipment, outside contracts over \$25,000, and GRA maintenance fees.
** Actual costs are on cash basis and do not include outstanding costs listed in column 21.
*** Includes orders outstanding costs listed in column 21.

THIS IS A PRELIMINARY REPORT PENDING FINAL CERTIFICATION OF COSTS BY THE CONTROLLER'S OFFICE
FOR THE UNIVERSITY'S ACCOUNTING YEAR ENDING JUNE 30, 1995.

25. Signature of Contractor's Project Manager and Date <i>J. W. Muehlhauser</i> 8/22/95 J. W. Muehlhauser, PhD, Administrator	26. Signature of Contractor's Authorized Financial Representative & Date	27. Signature of Government Technical Representative and Date
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24. Dollars Expressed In:
THOUSANDS

PRELIMINARY

[illegible]