PMD 79-3111

Industrial Fuel Gas Demonstration Plant Program

DOE/ET/13046--T72

PROCUREMENT SCHEDULE

FOR

MASTER

LONG-LEAD ITEMS

DELIVERABLE NO. 48

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Prepared For
The Department of Energy
Under Contract ET-77-C-01-2582

MASTER

MEMPHIS LIGHT, GAS AND WATER DIVISION
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In Association with
FOSTER WHEELER ENERGY CORPORATION
INSTITUTE OF GAS TECHNOLOGY
DELTA REFINING COMPANY

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MEMPHIS INDUSTRIAL FUEL GAS
DEMONSTRATION PLANT PROJECT

PROCUREMENT SCHEDULE FOR LONG-LEAD ITEMS
(Deliverable #40)

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PREPARED FOR THE
U. S. DEPARTMENT OF ENERGY
ASSISTANT SECRETARY OF FOSSIL ENERGY

UNDER CONTRACT DE-AC02-77ET13406
(FORMERLY CONTRACT ET-77-C-01-2582)

MLGW/DOE INDUSTRIAL FUEL GAS
DEMONSTRATION PLANT PROGRAM

FW FOSTER WHEELER
PROCUREMENT SCHEDULE FOR
LONG-LEAD ITEMS
DELIVERABLE NO. 48

PROCUREMENT SCHEDULE

FOR

LONG-LEAD ITEMS

DELIVERABLE NO. 48

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MLGW/DOE INDUSTRIAL FUEL GAS
DEMONSTRATION PLANT PROGRAM

FW FOSTER WHEELER
PROCUREMENT SCHEDULE FOR
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Section 1.0

INTRODUCTION

The United States Department of Energy (DOE) awarded a contract to Memphis Light, Gas and Water Division (MLGW) which requires MLGW to perform evaluation of a plant which will demonstrate the feasibility of converting high sulfur bituminous coal to industrial fuel gas with a heating value of 300 ± 30 Btu per standard cubic foot (SCF). The demonstration plant is to be based on the U-Gas process, with its product gas to be used in commercial applications in Memphis, Tennessee.

In order to perform this work, MLGW has established an industrial team, which includes:

MLGW - Memphis Light, Gas and Water Division, Memphis, Tenn.
The prime contractor and distributor of the industrial fuel gas.

FWEC - Foster Wheeler Energy Corporation, Livingston, N.J.
The engineer-construction manager.

IGT - Institute of Gas Technology, Chicago, Illinois
The process developer.

DRC - Delta Refining Company, Memphis, Tenn.
To provide operating experience.

The contract specifies that the work is to be conducted in three phases. The phases are:

Phase I - Program Development and Conceptual Design

Phase II - Demonstration Plant Final Design, Procurement
and Construction

Phase III - Demonstration Plant Operation

Included within Task X (Long-Lead Items), Phase I activities was the preparation of procurement schedule for long-lead items. This document identifies long-lead items, their procurement schedule, and engineering support requirements.

MLGW/DOE INDUSTRIAL FUEL GAS
DEMONSTRATION PLANT PROGRAM

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LONG-LEAD ITEMS
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Section 2.0

LONG-LEAD ITEM IDENTIFICATION

The long-lead items required for the Industrial Fuel Gas Demonstration Plant are listed below:

LONG DELIVERY ITEMS

<u>Section</u>	<u>Equipment No.</u>	<u>Description</u>	<u>Requisition</u>	<u>Delivery in Months</u>
2231	C-3101A (Turbine Drive)	Air Compressor	1321A	20-24
2231	C-3101B (Motor Drive)	Air Compressor	1321A	20-24
2231	C-3102	Oxygen Compressor	1321B	18-20
2231	A-3101	Air Separation Plant	1919A	24-28
2236	T-3601	Hydrogen Sulfide Absorber	2151A	18
2241	A-4101	Barge Unloading System	1362A	18-20

Item requisitions for these pieces of equipment may be found within the appropriate volumes of the "Demonstration Plant Mechanical Design."

Utilizing the Construction Plan (Deliverable No. 37), which is based upon 48 months to the completion of Phase II, the delivery requirements for each equipment item were determined. Required delivery dates were ascertained from the erection sequence for IFG Demonstration Plant units and equipment items. Lead times established by FWEC procurement personnel were then applied to arrive at a date when procurement action must be initiated. Procurement schedules for all equipment items are included within Tab A at the end of this document. Also evaluated was the activities required prior to actual placement of the order. Appropriate time has been included at the front end for receipt of vendor quotes, evaluation, and the recommendation for award to DOE & DOE approval (if required). The first milestone indicated on these schedules is the issuance

**MLGW/DOE INDUSTRIAL FUEL GAS
DEMONSTRATION PLANT PROGRAM**

FW FOSTER WHEELER

PROCUREMENT SCHEDULE FOR
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of bid packages to prospective vendors. This is the required month to begin procurement activities to maintain the program time table.

To support the issuance of bid packages, both Engineering and Drafting Schedules were prepared. These schedules may be found within Tabs B & C respectively.

As listed above, six (6) items have been determined to be long-lead time procurement items. The complete engineering, drafting, and procurement schedules for such items can be determined by referring to respective equipment numbers on the enclosed schedules.

A

SHEET 1 OF 2

①

FORM 131-6

DETAIL SCHEDULE PROCUREMENT

SHEET 2 OF 2

CONTRACT NO.		CUSTOMER MLGW/D.O.E.		UNIT CREDIT GENERATION-SECTION 220		LOCATION MEMPHIS, TENNESSEE																															
CLASS	ITEM NO.	DESCRIPTION	REQ'N NO.	LEAD TIME MO.	MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED																																REMARKS
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
PUMPS																																					
P	2231A	REGENERATION REFLUX	1311A	10																																	
P	2231B	SPARE FOR 2231A	1311A																																		
P	2232A	CARBONATE SOLUTION	1311B																																		
P	2232B	CARBONATE SOLUTION	1311B																																		
P	2232C	SPARE FOR 2232 A/B	1311B																																		
P	2233A	CARB. SOL'N MOTOR & TURB.	1311C																																		
P	2233B	MOTOR & TURBINE	1311C																																		
P	2233C	MOTOR ONLY	1311C																																		
P	2233D	SPARE FOR 2232C	1311C																																		
COMPRES.																																					
C	2201A	FEED GAS	1322A	14																																	
C	2201B	SPARE FOR C-2201A	1322A																																		
C	2261A	RECYCLE GAS	1322B																																		
C	2261B	SPARE FOR C-2261A	1322B																																		
C	2291	AIR BOOSTER	1321A	12																																	
PKG. UNITS																																					
A	2231	ANTI-FOAM INJECTION	1315A	6																																	
A	2261	RICH GAS DRYING	1313A	4																																	
A	2262	RICH GAS ODORIZATION	1311A	14																																	
A	2263	PHOSPHATE INJECTION	1315B	6																																	
A	2291	AIR DRYER	1313B	4																																	
DSP. HEAT																																					
DS	2201	HR STEAM DESUPERHEATER	1292A	10																																	
FILTER																																					
F	2231	CARBONATE SOLUTION	1349A	6																																	
MIXER																																					
	2231	CARBONATE MIXER	1391A	6																																	

△ BID PACKAGE TO POTENTIAL VENDOR
 RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
 (P) PLACE PURCHASE ORDER

RS Jacey 12/12/79

(2)

FORM 131-69

DETAIL SCHEDULE PROCUREMENT

SHEET 1 OF 1

CONTRACT NO.			CUSTOMER		UNIT		LOCATION																																	
			MLGW/D.O.E.		AIR SEPARATION (SECTION 310)		MEMPHIS, TENNESSEE																																	
CLASS	ITEM NO.	DESCRIPTION	REQ'N NO.	LEAD TIME MO.	MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED																																			REMARKS
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
DRUMS																																								
D	3101 A	1ST STAGE INTERCOOLER K.O.	1131 A	9										△	-----																									
D	3101 B	1ST STAGE INTERCOOLER K.O.	1131 A											△	-----																									
D	3102	AFTERCOOLER K.O.	1131 B											△	-----																									
D	3103	2ND STAGE INTERCOOLER K.O.	1131 C											△	-----																									
TANKS																																								
TK	310	LIQUID NITROGEN STORAGE	1919 B	16					△	-----																														
TK	3102	LIQUID OXYGEN STORAGE	1919 D	16					△	-----																														
EXCHANGERS																																								
E	310 A	AIR COMP 1ST STAGE INTERCOOLER	1211 G	10										△	-----																									
E	310 B	AIR COMP 1ST STAGE INTERCOOLER	1211 G											△	-----																									
E	3102	AIR COMP. AFTERCOOLER	1211 B											△	-----																									
E	3103	OXYGEN COMP 1ST STAGE INTERCOOLER	1211 C											△	-----																									
E	3104	OXYGEN COMP 2ND STAGE INTERCOOLER	1211 D											△	-----																									
E	3105	OXYGEN COMP 3RD STAGE INTERCOOLER	1211 E											△	-----																									
E	3106	OXYGEN COMP RECIRCULATION COOLER	1211 F											△	-----																									
E	3107 A	AIR COMP 2ND STAGE INTERCOOLER	1211 H											△	-----																									
E	3107 B	AIR COMP 2ND STAGE INTERCOOLER	1211 H											△	-----																									
COMPRESSORS																																								
C	3101 A	AIR COMPRESSOR A	1321 A	21					△	-----																														
C	3101 B	AIR COMPRESSOR B	1321 A	21																																				
C	3102	OXYGEN COMPRESSOR	1321 B	18					△	-----																														
C	3103 A	NITROGEN COMPRESSOR	1321 C	14																																				
C	3103 B	NITROGEN COMPRESSOR	1321 C	14																																				
MISC																																								
A	3101	AIR SEPARATION PACKAGE	1919 A	24					△	-----																														
A	3102	LIQUID NITROGEN VAPORIZATION PKG.	1919 B	15																																				
A	3103	LIQUID NITROGEN VAPORIZATION PKG.	1919 B	15																																				
A	3104	LIQUID OXYGEN VAPORIZATION PKG.	1919 D	15																																				
F	3101 A	AIR FILTER	1397 A	6																																				
F	3101 B	AIR FILTER	1397 A	6																																				
SL	3101	WASTE NITROGEN SILENCER	1919 D	6																																				
SL	3102 A	C-3101A INLET SILENCER	1397 A																																					
SL	3102 B	C-3101B INLET SILENCER																																						
SL	3103 A	C-3101A DISCHARGE SILENCER	1397 A																																					
SL	3103 B	C-3101B DISCHARGE SILENCER	1397 A																																					
SL	3104 A	C-3101A VENT SILENCER	1397 A																																					
SL	3104 B	C-3101B VENT SILENCER	1397 A																																					

△ BID PACKAGE TO POTENTIAL VENDOR

..... RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)

Ⓟ PLACE PURCHASE ORDER

R. L. Tracy 12/12/79

3

FORM 131-69

SHEET 1 OF 4

△ BID PACKAGE TO POTENTIAL VENDOR
..... RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
Ⓟ PLACE PURCHASE ORDER

RS Jones 12/12/79

SHEET 2 OF 3

<p>△ BID PACKAGE TO POTENTIAL VENDOR</p> <p>..... RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)</p> <p>Ⓟ PLACE PURCHASE ORDER</p>	<p>R. J. Tracy 12/12/79</p>	<p>⑤</p>
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DETAIL SCHEDULE PROCUREMENT

SHEET 3 of 4

CONTRACT NO.			CUSTOMER		UNIT		LOCATION																																		
			MLGW/D.O.E.		COAL AND COKE TREATING & FEED (SECTION 320)		MEMPHIS, TENNESSEE																																		
CLASS	ITEM NO.	DESCRIPTION	REQ'N NO.	LEAD TIME MO.	MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED																																				REMARKS
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
FEEDERS																																									
FD	3208-20	GASIFIER FEEDER	1369 A	10																																					
FD	3208-21	GASIFIER FEEDER	1369 A																																						
FD	3208-22	GASIFIER FEEDER	1369 A																																						
FD	3208-2F	GASIFIER FEEDER	1369 A																																						
FD	3208-3	GASIFIER FEEDER	1369 A																																						
FD	3208-32	GASIFIER FEEDER	1369 A																																						
FD	3208-33	GASIFIER FEEDER	1369 A																																						
FD	3208-34	GASIFIER FEEDER	1369 A																																						
FD	3208-35	GASIFIER FEEDER	1369 A																																						
FD	3208-36	GASIFIER FEEDER	1369 A																																						
FD	3208-37	GASIFIER FEEDER	1369 A																																						
FD	3208-38	GASIFIER FEEDER	1369 A																																						
FD	3208-39	GASIFIER FEEDER	1369 A																																						
FD	3208-40	GASIFIER FEEDER	1369 A																																						
FD	3208-41	GASIFIER FEEDER	1369 A																																						
FD	3208-42	GASIFIER FEEDER	1369 A																																						
FD	3208-43	GASIFIER FEEDER	1369 A																																						
FD	3208-44	GASIFIER FEEDER	1369 A																																						
FD	3208-45	GASIFIER FEEDER	1369 A																																						
FD	3208-46	GASIFIER FEEDER	1369 A																																						
FD	3209-1	VENT. FILTER DISCHARGE	1369 A	4																																					
FD	3209-2	VENT. FILTER DISCHARGE																																							
FD	3209-3	VENT. FILTER DISCHARGE																																							
FD	3209-4	VENT. FILTER DISCHARGE																																							
FD	3210-A	FURNACE COAL			PART OF A-3201																																				
FD	3210-B	FURNACE COAL			PART OF A-3201																																				
FD	3211	COKE DRYER DISCHARGE			PART OF A-3202																																				
FD	3213	COAL/COKE DUST COLL.			PART OF A-3201																																				
HEATER																																									
H	3201-A	DRYER MILL			PART OF A-3201																																				
H	3201-B	DRYER MILL			PART OF A-3201																																				
SEPARATORS																																									
S	3201-A	TREATED COAL			PART OF A-3201																																				
S	3201-B	TREATED COAL			PART OF A-3201																																				
S	3202	COKE DRYER EXHAUST			PART OF A-3202																																				
S	3203-A	GASIFIER FEED MAGNETIC			PART OF REQ'N NO. 2241-1343A																																				
S	3203-B	GASIFIER FEED MAGNETIC			PART OF REQ'N NO. 2241-1343A																																				
SCREEN																																									
SN	3201	COKE SCREEN	1355 A	6																																					
SIZE REDUCTION EQUIPMENT																																									
SR	3201-A	DRYER MILL			PART OF A-3201																																				
SR	3201-B	DRYER MILL			PART OF A-3201																																				
SAMPLER																																									
SS	3201	TREATED COAL SAMPLER			PART OF REQ'N NO. 2241-1343A																																				
BINS AND HOPPERS																																									
TK	3201-A	DRYER MILL SURGE			PART OF REQ'N NO. 2241-1343A																																				
TK	3201-B	COAL SILO		10																																					
TK	3202	COKE SILO	1345 A	10																																					
TK	3203	GASIFIER FEED RECEIVING	1345 A	11																																					
TK	3204-1	GASIFIER FEED RECEIVING	1369 A																																						
TK	3204-2	GASIFIER FEED RECEIVING	1369 A																																						
TK	3204-3	GASIFIER FEED RECEIVING	1369 A																																						
TK	3204-4	GASIFIER FEED RECEIVING	1369 A																																						
TK	3205	DRYER MILL FURNACE SURGE BIN	1369 A	10																																					

△ BID PACKAGE TO POTENTIAL VENDOR

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Ⓟ PLACE PURCHASE ORDER

RJ Tracy 12/12/79

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FORM 131-69

SHEET 4 OF 4

FORM 121-69

DETAIL SCHEDULE PROCUREMENT

SHEET 1 OF 2

CONTRACT NO.			CUSTOMER		UNIT COAL GASIFICATION (SECTION 330)																		LOCATION: ON MEMPHIS, TENNESSEE																	
CLASS	ITEM NO.	DESCRIPTION	REQ'N NO.	LEAD TIME MO.	MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED																															REMARKS				
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		32	33	34	35
DRUMS																																								
	D 3301-1	FINES RECEIVING HOPPER	1131 A	9																																				
	D 3301-2																																							
	D 3301-3																																							
	D 3301-4																																							
	D 3302-1	FINES INJECTION HOPPER	1131 B	6																																				
	D 3302-2																																							
	D 3302-3																																							
	D 3302-4																																							
	D 3303	FINES SILO	2151 A	15																																				
	D 3304-1	SEAL POT	1131 C	6																																				
	D 3304-2																																							
	D 3304-3																																							
	D 3304-4																																							
	D 3305-1	ASH QUENCH DRUM	1131 D	9																																				
	D 3305-2																																							
	D 3305-3																																							
	D 3305-4																																							
COOLER																																								
	E 3301-1	ROTARY COOLER	1379 A	6																																				
	E 3301-2																																							
	E 3301-3																																							
	E 3301-4																																							
	E 3302-1	BOILER FEED WATER COOLER	1211 A	8																																				
	E 3302-2																																							
	E 3302-3																																							
	E 3302-4																																							
BAG FILTER																																								
	F 3301	FILTER BAG	1356 A	12																																				
	F 3302	SILO BAG FILTER	1356 A	12																																				
HEATERS																																								
	H 3301-1	VENTURI GAS HEATER	1249 A	12																																				
	H 3301-2																																							
	H 3301-3																																							
	H 3301-4																																							
	H 3302-1	GRID GAS HEATER	1249 A	12																																				

△ BID PACKAGE TO POTENTIAL VENDOR
 RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
 ⊖ PLACE PURCHASE ORDER

P. J. Tracy 12/12/79

⑧

FORM 131-69

SNEY 2 OF 2

FORM 131-69

SHEET 1 OF 2

LEX 1-21-02

PROCUREMENT

HEET 2 OF 2

[illegible]

RS. Tracey 12/12/79

DETAIL SCHEDULE PROCUREMENT

CONTRACT NO.			CUSTOMER MLGW/D.O.E.										UNIT GAS COMPRESSION SECTION 350										LOCATION MEMPHIS, TENNESSEE																			
CLASS	ITEM NO.	DESCRIPTION	REQ'N NO.	LEAD TIME MO.	MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED																															REMARKS						
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		32	33	34	35	36	
DRUMS																																										
D	3501	1st INTERCOOLER K.O.	1131A	7																																						
D	3502	2nd INTERCOOLER K.O.	1131B																																							
D	3503	SCRUBBED GAS K.O.	1131C																																							
D	3504	COMPRESSED GAS K.O.	1131D																																							
EXCHANGERS																																										
E	3501	SCRUBBED GAS AIR COOLER	1231A	8																																						
E	3502	SCRUBBED GAS COOLER	1211A																																							
E	3503	1st COMPRESSOR INTERCOOLER	1211B																																							
E	3504	2nd COMPRESSOR INTERCOOLER	1211C																																							
E	3505	COMPRESSOR AFTERCOOLER	1211D																																							
E	3506	RECYCLE GAS AFTERCOOLER	1211E																																							
E	3507	RAW GAS COMPRESSOR INTERCOOLER	1211F																																							
PUMPS																																										
P	3501A	SOUR CONDENSATE	1311A	8																																						
P	3501B	SOUR CONDENSATE SPARE	1311A	8																																						
COMPRESSORS																																										
C	3501	RAW GAS COMPRESSOR	1321A	15																																						
C	3502A	HP RECYCLE GAS COMPRESSOR	1322A																																							
C	3502B	HP RECYCLE GAS COMPRESSOR SPARE	1322A																																							
C	3503A	LP RECYCLE GAS COMPRESSOR	1323A																																							
C	3503B	LP RECYCLE GAS COMPRESSOR SPARE	1323A																																							

△ BID PACKAGE TO POTENTIAL VENDOR
..... RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & DOE APPROVAL (IF REQUIRED)
Ⓟ PLACE PURCHASE ORDER

RJ Tracey 12/12/79

HEET 1 OF 2

R. L. Tracy 12/12/79

PROCUREMENT

[illegible]

FORM 131-69

DETAIL SCHEDULE PROCUREMENT

SHEET 1 of 1

CONTRACT NO.			CUSTOMER		UNIT		SECTION		LOCATION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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△ BID PACKAGE TO POTENTIAL VENDOR
..... RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
Ⓟ PLACE PURCHASE ORDER

RS Lacey 12/12/79

DETAIL SCHEDULE PROCUREMENT

SHEET / OF /

CONTRACT NO.			CUSTOMER M.L.G.W/D.O.E.		UNIT SULFUR RECOVERY UNIT (SECTION 380)																				LOCATION MEMPHIS, TENN.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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△ BID PACKAGE TO POTENTIAL VENDOR
 RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
 (P) PLACE PURCHASE ORDER

R. J. Tracey 12/12/79

PROCUREMENT

SHEET / OF /

[illegible]

FORM 131-69

PROCUREMENT

SHEET 4 OF 2

[illegible]

△ BID PACKAGE TO POTENTIAL VENDOR
..... RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
Ⓟ PLACE PURCHASE ORDER

R. J. Incey 12/12/79

PROCUREMENT

SHEET / OF /

△ BID PACKAGE TO POTENTIAL VENDOR
----- RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
Ⓟ PLACE PURCHASE ORDER

QJ Tracey 12/12/79

DETAIL SCHEDULE PROCUREMENT

SHEET 1 OF 3

CONTRACT NO.			CUSTOMER M.L.G.W./D.O.E.		UNIT UTILITY AREA (SECTION 430)		LOCATION MEMPHIS TENN.																																	
CLASS	ITEM NO.	DESCRIPTION	REQ'N NO.	LEAD TIME MO.	MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED																																			REMARKS
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
DRUMS																																								
D	4301	SULPHURIC ACID STORAGE	1131 A	10																																				
D	4302	CAUSTIC STORAGE	1131 B	10																																				
D	4303	CONTINUOUS BLOWDOWN	1131 C	8																																				
D	4307	INTERMITTENT BLOWDOWN	1131 D	8																																				
TANKS																																								
TK	4301	CITY WTR./FIRE WTR.STOR.	2142 A	8																																				
TK	4302	DEMINERALIZED WTR.STOR.	2142 B																																					
TK	4303 A	NEUTRALIZATION	1141 A																																					
TK	4303 B	"	1141 B																																					
TK	4304	CONDENSATE STORAGE	2142 C																																					
EXCHANG																																								
E	4301	COND./DEMINERALIZED WTR.	1211 A	8																																				
E	4301	"	1211 B	8																																				
PUMPS																																								
P	4301 A	CITY WATER	1311 A	5																																				
P	4301 B	SPARE	1311 A																																					
P	4302 A	DEMINERALIZED WATER	1311 B																																					
P	4302 B	SPARE	1311 B																																					
P	4303 A	HP BFW	1311 C	6																																				
P	4303 B	SPARE	1311 C																																					
P	4304 A	LP BFW	1311 D																																					
P	4304 B	SPARE	1311 D																																					
P	4307 A	CONDENSATE	1311 E	5																																				
P	4307 B	SPARE	1311 E																																					
P	4311 A	CHAR FINES FILTRATE	1311 J																																					
P	4311 B	SPARE	1311 J																																					
P	4312 A	CLARIFIER WTR.	1311 F																																					
P	4312 B	SPARE	1311 F																																					
P	4313 A	SLURRY WTR	1311 G																																					
P	4313 B	SPARE	1311 G																																					
P	4314 A	CLARIFIER DECANT	1311 H	6																																				
P	4314 B	SPARE	1311 H																																					
P	4321 A	COOLING TWR. MAKE-UP	1311 K																																					
P	4321 B	SPARE	1311 K																																					
P	4322 A	FIREWATER		5																																				
P	4322 B	SPARE																																						
P	4322 C	SPARE																																						
P	4323	FIREWATER JOCKEY																																						
MISC.																																								
BP	4301	BACKFLOW PREVEN. DEV.		8																																				
CR	4301	COAL FEED CONVEYER	2241 361 A	12																																				
CR	4302	"	1361 A																																					
CR	4303 A	CHAR TRANSFER CONV.	2232 1361 B																																					
CR	4303 B	"	2232 1361 B																																					
CR	4304 A	FLY ASH CONVEYER	1356 A	14																																				
CR	4304 B	"	1356 A	14																																				
CR	4307	FILTER CAKE DISCH. CONV.	2221 1361 A	12																																				
DC	4301 A	DUST COLLECTOR	2232 1356 A	10																																				
DC	4301 B	"	2232 1356 A	10																																				
F	4303	FINES BIN FILTER	2232 1356 A	6																																				

Δ BID PACKAGE TO POTENTIAL VENDOR
 RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
 (P) PLACE PURCHASE ORDER

R. L. Tracey 12/12/79

(21)

PROCUREMENT

[illegible]

R. L. Tracey 12/12/79

22

SHEET 3 OF 3

△ BID PACKAGE TO POTENTIAL VENDOR
----- RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
Ⓟ PLACE PURCHASE ORDER

R. J. Tracey

SHEET 1 OF 2

RJ. Tracey 12/12/79

PROCUREMENT

SHEET 2 OF 3

[illegible]

☐ BID PACKAGE TO POTENTIAL VENDOR
☒ RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
☐ PLACE PURCHASE ORDER

RJ Tracey 12/12/79

25

FORM 131-69

SHEET 3 OF 3

26

FORM 131-69

DETAIL SCHEDULE PROCUREMENT

CONTRACT NO.			CUSTOMER MLGW D.O.E.										UNIT COOLING TOWER SECTION 450										LOCATION MEMPHIS, TENNESSEE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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△ BID PACKAGE TO POTENTIAL VENDOR
..... RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & D.O.E. APPROVAL (IF REQUIRED)
Ⓟ PLACE PURCHASE ORDER

R. J. Tracey 12/12/79

DETAIL SCHEDULE PROCUREMENT

SHEET 1 OF 1

CONTRACT NO.		CUSTOMER MLGW/DOE		UNIT GENERAL FACILITIES (SECT. 470) & FLARE (SECT. 460)		LOCATION MEMPHIS, TENN.																																
CLASS	ITEM NO.	DESCRIPTION	REQ'N NO.	LEAD TIME MO.	MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED																																	REMARKS
					2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
GENERAL FACILITIES (SECTION 470)																																						
PUMPS																																						
P	4703A	COOL PILE RAIN RUNOFF		5																																		
P	4703B	COOL PILE RAIN RUNOFF		5																																		
P	4704A	ASH PILE RAIN RUNOFF		5																																		
P	4704B	ASH PILE RAIN RUNOFF		5																																		
MISC.																																						
A	4701	ODORIZATION PACKAGE	1911A	14																																		
FLARE (SECTION 460)																																						
DRUMS																																						
D	4601	FLARE K.O.	1131 A	10																																		
D	4602	STEAM SEPARATOR	1131 B	10																																		
D	4603	PILOT GAS K.O.	1131 C	10																																		
PUMPS																																						
P	4601A	FLARE K.O. DRUM PUMP OUT	1131 A	6																																		
P	4601B	FLARE K.O. DRUM P.O. (SPARE)	1131 A	6																																		
FLARE																																						
FL	4601	ELEVATED FLARE	1928A	12																																		

△ BID PACKAGE TO POTENTIAL VENDOR
 RECEIVE QUOTES, EVALUATE, RECOMMENDATIONS & DOE. APPROVAL (IF REQUIRED)
 (P) PLACE PURCHASE ORDER

R. J. Hacey 12/12/79

B

FW CONTRACT NO. 15-2212

MASTER PROJECT SCHEDULE
SUMMARY PROJECT ENGINEERING #1

UNIT NO.

UNIT DESCRIPTION

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETE220
CREDIT GENERATIONS
A
R

ff 29

310
AIR SEPARATIONS
A
R320 FEED
COAL/COKE TREATING &S
A
R

ff 26

330
COAL GASIFICATIONS
A
R

ff 26

340
GAS COOLING & SCRUBB'GS
A
R

ff 28

350
GAS COMPRESSIONS
A
R

ff 27

360
GAS TREATMENTS
A
R370
SOUR WATER STRIPPINGS
A
R380
SULFUR RECOVERYS
A
R390
TAIL GAS TREATMENTS
A
R410
COAL & COKE HANDLINGS
A
R420
ASH TREATMENTS
A
R430
UTILITY AREAS
A
R440
WASTE WATER TREATM'NTS
A
R

ff 29

450
COOLING TOWERS
A
R

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGENDS: S - SCHEDULED - - - - -
A - ACTUAL - - - - -
R - REVISED SCHEDULE - - - - -

PREPARED BY

PLANNING ENGINEER: K. Koscinski

APPROVED BY

PROJECT MANAGER: _____

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 07033

1

PROJ. CONTROL FORM NO. 131-778

MASTER PROJECT SCHEDULE
SUMMARY PROJECT ENGINEERING #2

UNIT NO.

UNIT DESCRIPTION

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETE

460

FLARE

S

A

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470

GENERAL FACILITIES

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A

R

480

BUILDINGS

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A

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490 SITE PREPARATION

& DOCK FACILITIES

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ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGENDS: S - SCHEDULED - - - - -

A - ACTUAL - - - - -

R - REVISED SCHEDULE - - - - -

PREPARED BY

PLANNING ENGINEER: K. M. S. S. S.

APPROVED BY

PROJECT MANAGER: _____

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

FW CONTRACT NO. 15 - 2212

MASTER PROJECT SCHEDULE
PROJECT ENGINEERING

UNIT 220

CREDIT GENERATION

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

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ELICIT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTO
PERCENT
COMPLETEPLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATIONS
A
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10

FLOW SHEETS

S
A
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1

BUILDINGS & SUBCONTRACTS

S
A
R

3

MISC. EQUIPMENT

S
A
R

5

VESSEL ENGINEERING

S
A
R

4

HEAT TRANSFER ENGINEERING

S
A
R

5

MECHANICAL ENGINEERING

S
A
R

11

INSTRUMENT ENGINEERING

S
A
R

20

ELECTRICAL ENGINEERING

S
A
R

11

TECHNICAL SERVICES

S
A
R

5

TOTAL BASIC ENGINEERING

S
A
R

75

COORDINATION

S
A
R

25

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGEND S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY

PLANNING ENGINEER:

K. Kucinski

APPROVED BY

PROJECT MANAGER:

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

3

FW CONTRACT NO. 15-2212

UNIT 310

AIR SEPARATION

MASTER PROJECT SCHEDULE
PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

PLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATIONS
A
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10

FLOW SHEETS

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A
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1

BUILDINGS & SUBCONTRACTS

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A
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3

MISC. EQUIPMENT

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A
R

5

VESSEL ENGINEERING

S
A
R

4

HEAT TRANSFER ENGINEERING

S
A
R

5

MECHANICAL ENGINEERING

S
A
R

11

INSTRUMENT ENGINEERING

S
A
R

20

ELECTRICAL ENGINEERING

S
A
R

11

TECHNICAL SERVICES

S
A
R

3

TOTAL BASIC ENGINEERING

S
A
R

73

COORDINATION

S
A
R

27

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

FW CONTRACT #

DATE OF ISSUE:

LEGEND . S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY

PLANNING ENGINEER: *K. K. K. K.*

APPROVED BY

PROJECT MANAGER: _____

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

4

FW CONTRACT NO. 15-2212

UNIT 320

COAL/COKE TREATING & FEED

MASTER PROJECT SCHEDULE
PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETEPLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATION:S
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FLOW SHEETS

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BUILDINGS & SUBCONTRACTS

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MISC. EQUIPMENT

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VESSEL ENGINEERING

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HEAT TRANSFER ENGINEERING

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MECHANICAL ENGINEERING

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INSTRUMENT ENGINEERING

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ELECTRICAL ENGINEERING

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11

TECHNICAL SERVICES

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4

TOTAL BASIC ENGINEERING

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A
R

70

COORDINATION

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A
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29

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TOTAL ENGINEERING

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ISSUE NO:

FW CONTRACT #

DATE OF ISSUE:

LEGEND: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY

PLANNING ENGINEER:

K. W. [Signature]

APPROVED BY

PROJECT MANAGER:

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, N.J. 07033

5

FW CONTRACT NO. 15-2212

MASTER PROJECT SCHEDULE
PROJECT ENGINEERINGUNIT 330
COAL GASIFICATION

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETEPLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATIONS
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FLOW SHEETS

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BUILDINGS & SUBCONTRACTS

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MISC. EQUIPMENT

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VESSEL ENGINEERING

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6

HEAT TRANSFER ENGINEERING

S
A
R

MECHANICAL ENGINEERING

S
A
R

12

INSTRUMENT ENGINEERING

S
A
R

20

ELECTRICAL ENGINEERING

S
A
R

11

TECHNICAL SERVICES

S
A
R

5

TOTAL BASIC ENGINEERING

S
A
R

71

COORDINATION

S
A
R

29

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

FW CONTRACT #

DATE OF ISSUE:

LEGEND . S - SCHEDULED - - - - -
A - ACTUAL - - - - -
R - REVISED SCHEDULE - - - - -

PREPARED BY

PLANNING ENGINEER: K. W. Schindler

APPROVED BY

PROJECT MANAGER: _____

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 6

FW CONTRACT NO. 15-2212

UNIT 350
GAS COMPRESSION

MASTER PROJECT SCHEDULE PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RELATIVE
WEIGHT
SCHEDULE/ACTUAL

ESTIMATED
PERCENT
COMPLETE

WTD
PERCENT
COMPLETE

PLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATION

S
A
R

10

FLOW SHEETS

S
A
R

2

BUILDINGS & SUBCONTRACTS

S
A
R

MISC. EQUIPMENT

S
A
R

VESSEL ENGINEERING

S
A
R

6

HEAT TRANSFER ENGINEERING

S
A
R

1

MECHANICAL ENGINEERING

S
A
R

11

INSTRUMENT ENGINEERING

S
A
R

20

ELECTRICAL ENGINEERING

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11

TECHNICAL SERVICES

S
A
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5

TOTAL BASIC ENGINEERING

S
A
R

66

COORDINATION

S
A
R

34

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

FW CONTRACT #

DATE OF ISSUE:

LEGEND S - SCHEDULED - - - - -
A - ACTUAL - - - - -
R - REVISED SCHEDULE - - - - -

PREPARED BY
PLANNING ENGINEER: K. M. [Signature]

APPROVED BY
PROJECT MANAGER: _____

FOSTER WHEELER ENERGY CORP.
110 CO. STANLEY AVENUE
LIVELY, PEN JERSEY 8

PROJ. CONTROL FORM NO. 131- 770

FW CONTRACT NO. 15-2212

UNIT 360
GAS TREATMENT

MASTER PROJECT SCHEDULE PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RELATIVE
RISK
SCHEDULE/ACTUAL

ESTIMATED
PERCENT
COMPLETE

WTD
PERCENT
COMPLETE

PLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATION

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FLOW SHEETS

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2

BUILDINGS & SUBCONTRACTS

S
A
R

MISC. EQUIPMENT

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1

VESSEL ENGINEERING

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R

5

HEAT TRANSFER ENGINEERING

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A
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MECHANICAL ENGINEERING

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INSTRUMENT ENGINEERING

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ELECTRICAL ENGINEERING

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A
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11

TECHNICAL SERVICES

S
A
R

5

TOTAL BASIC ENGINEERING

S
A
R

65

COORDINATION

S
A
R

35

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGEND
S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY
PLANNING ENGINEER:

APPROVED BY
PROJECT MANAGER:

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

9

FW CONTRACT NO. 15-2212

UNIT 370

SOUR WATER STRIPPING

MASTER PROJECT SCHEDULE
PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

PLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATIONS
A
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FLOW SHEETS

S
A
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2

BUILDINGS & SUBCONTRACTS

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A
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MISC. EQUIPMENT

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VESSEL ENGINEERING

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HEAT TRANSFER ENGINEERING

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MECHANICAL ENGINEERING

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INSTRUMENT ENGINEERING

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20

ELECTRICAL ENGINEERING

S
A
R

11

TECHNICAL SERVICES

S
A
R

5

TOTAL BASIC ENGINEERING

S
A
R

53

COORDINATION

S
A
R

47

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

FW CONTRACT #

DATE OF ISSUE:

LEGEND S - SCHEDULED - - - - -
A - ACTUAL - - - - -
R - REVISED SCHEDULE - - - - -

PREPARED BY

PLANNING ENGINEER: W. M. Livingston

APPROVED BY

PROJECT MANAGER: _____

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, N.J. 07033

FW CONTRACT NO. 15-2212

UNIT 380
SULFUR RECOVERYMASTER PROJECT SCHEDULE
PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

PLANT
SCHEDULE/ACTUAL
ESTIMATED
PLANT
COMPLETE
WTD
PERCENT
COMPLETEPLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATIONS
A
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8

FLOW SHEETS

S
A
R

2

BUILDINGS & SUBCONTRACTS

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A
R

MISC. EQUIPMENT

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A
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VESSEL ENGINEERING

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4

HEAT TRANSFER ENGINEERING

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MECHANICAL ENGINEERING

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INSTRUMENT ENGINEERING

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20

ELECTRICAL ENGINEERING

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A
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11

TECHNICAL SERVICES

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A
R

5

TOTAL BASIC ENGINEERING

S
A
R

61

COORDINATION

S
A
R

39

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

FW CONTRACT #

DATE OF ISSUE:

LEGEND S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY

PLANNING ENGINEER: K. H. [Signature]

APPROVED BY

PROJECT MANAGER: _____

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

11

FW CONTRACT NO. 15-2212

UNIT 390

TAIL GAS TREATMENT

MASTER PROJECT SCHEDULE
PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETEPLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATIONS
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FLOW SHEETS

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BUILDINGS & SUBCONTRACTS

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MISC. EQUIPMENT

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VESSEL ENGINEERING

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HEAT TRANSFER ENGINEERING

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MECHANICAL ENGINEERING

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INSTRUMENT ENGINEERING

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ELECTRICAL ENGINEERING

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TECHNICAL SERVICES

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A
R

5

TOTAL BASIC ENGINEERING

S
A
RS
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R

5

COORDINATION ONLY

S
A
R

95

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

FW CONTRACT #

DATE OF ISSUE:

LEGEND S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY

PLANNING ENGINEER: W. M. M. M. M.

APPROVED BY

PROJECT MANAGER: W. M. M. M. M. FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

12

FW CONTRACT NO. 15-2212

UNIT 410

COAL/COKE HANDLING

MASTER PROJECT SCHEDULE
PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETEPLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATIONS
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FLOW SHEETS

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2

BUILDINGS & SUBCONTRACTS

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A
R

MISC. EQUIPMENT

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6

VESSEL ENGINEERING

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R

4

HEAT TRANSFER ENGINEERING

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A
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MECHANICAL ENGINEERING

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11

INSTRUMENT ENGINEERING

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R

20

ELECTRICAL ENGINEERING

S
A
R

11

TECHNICAL SERVICES

S
A
R

4

TOTAL BASIC ENGINEERING

S
A
R

68

COORDINATION

S
A
R

32

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT

13

LEGEND S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY

PLANNING ENGINEER:

APPROVED BY

PROJECT NUMBER:

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

UNIT 420
ASH TREATMENT

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

RELATIVE WEIGHT SCHEDULE/ACTUAL

[illegible]

WTD
PERCENT
COMPLETE

[illegible]

DATE OF ISSUE:

FW CONTRACT #

LEGEND . S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY

PLANNING ENGINEER: K. M. [Signature]

APPROVED BY

PROJECT MANAGER: _____

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY (14)

FW CONTRACT NO. 15-2212

UNIT 430
UTILITY AREA

MASTER PROJECT SCHEDULE PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RELATIVE
ELICIT
SCHEDULE/ACTUAL
ESTIMATED
PERCENT
COMPLETE
WTD
PERCENT
COMPLETE

PLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATION

S
A
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10

FLOW SHEETS

S
A
R

3

BUILDINGS & SUBCONTRACTS

S
A
R

3

MISC. EQUIPMENT

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R

5

VESSEL ENGINEERING

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A
R

6

HEAT TRANSFER ENGINEERING

S
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R

2

MECHANICAL ENGINEERING

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A
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11

INSTRUMENT ENGINEERING

S
A
R

20

ELECTRICAL ENGINEERING

S
A
R

11

TECHNICAL SERVICES

S
A
R

5

TOTAL BASIC ENGINEERING

S
A
R

76

COORDINATION

S
A
R

24

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

FW CONTRACT #

DATE OF ISSUE:

LEGEND S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY
PLANNING ENGINEER: *K. V. Srinivasan*

APPROVED BY
PROJECT MANAGER: _____

FOSTER WHEELER ENERGY CORP.
115 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

15

PROJ. CONTROL FORM NO. 131- 178

FW CONTRACT NO. 15-2212

UNIT 440

WASTE WATER TREATMENT

PROJECT SCHEDULE

MONTHS AFTER PHASE I AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

ADJUSTIVE
SCHEDULE/ACTUAL
ESTIMATED
PERCENT
COMPLETE
WTD
PERCENT
COMPLETE

PLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATION

S
A
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10

FLOW SHEETS

S
A
R

2

BUILDINGS & SUBCONTRACTS

S
A
R

MISC. EQUIPMENT

S
A
R

4

VESSEL ENGINEERING

S
A
R

4

HEAT TRANSFER ENGINEERING

S
A
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11

MECHANICAL ENGINEERING

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A
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INSTRUMENT ENGINEERING

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A
R

20

ELECTRICAL ENGINEERING

S
A
R

11

TECHNICAL SERVICES

S
A
R

4

TOTAL BASIC ENGINEERING

S
A
R

66

COORDINATION

S
A
R

20 MONTHS

34

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGEND S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY
PLANNING ENGINEER: *K. K. W. S. S. S.*

APPROVED BY
PROJECT MANAGER:

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 16

PROJ. CONTROL FORM NO. 131- 178

MASTER PROJECT SCHEDULE PROJECT ENGINEERING

DATE	FILE NO.	SYMBOL	STATUS	REMARKS	DATE	FILE NO.	SYMBOL	STATUS	REMARKS
MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED									

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	21	203	203
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----

[illegible][illegible]

WTG
PEACE
PEOPLE

[illegible]

8

[illegible]

L

[illegible][illegible]

1.

[illegible]

1

[illegible][illegible]

1

[illegible]

42

[illegible]

4

[illegible]

1

[illegible]

4	
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[illegible]

3

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A
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1	
---	--

FW CONTRACT #

LEGEND . S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PLANNING ENGINEER: K. Kozminsky

附錄 2 表 2-1

FOSTER WHEELER ENERGY CORP.
210 20. ORANGE AVENUE
LIVINGSTON, NEW JERSEY (17)

FW CONTRACT NO. 15-2212

UNIT 470

GENERAL FACILITIES

MASTER PROJECT SCHEDULE
PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETEPLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATIONS
A
R

10

FLOW SHEETS

S
A
R

2

BUILDINGS & SUBCONTRACTS

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A
R

MISC. EQUIPMENT

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A
R

VESSEL ENGINEERING

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A
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6

HEAT TRANSFER ENGINEERING

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MECHANICAL ENGINEERING

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11

INSTRUMENT ENGINEERING

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20

ELECTRICAL ENGINEERING

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11

TECHNICAL SERVICES

S
A
R

5

TOTAL BASIC ENGINEERING

S
A
R

65

COORDINATION

S
A
R

35

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

FW CONTRACT #

DATE OF ISSUE:

LEGEND S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY

PLANNING ENGINEER:

APPROVED BY

PROJECT MANAGER:

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 08859

18

PROJ. CONTROL FORM NO. 191- 770

MASTER PROJECT SCHEDULE

PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

RELATIVE WEIGHT	SCHEDULE/ACTUAL
-----------------	-----------------

[illegible]

WTM
PERCENT
COMPLETE.

[illegible]

FW CONTRACT #

LEGEND S - SCHEDULE
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY
PLANNING ENGINEER: K. S. Srinivasan

APPROVED BY _____
PROJECT NUMBER: _____

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIMESTON, NEW JERSEY (19)

FW CONTRACT NO.15-2212

UNIT 460/490
FLARE & DOCK FACILITIESMASTER PROJECT SCHEDULE
PROJECT ENGINEERING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

PLOT PLAN DEVELOPMENT
EQUIP. LIST, MATERIAL REVIEW
JOB SPECIFICATIONS
A
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10

FLOW SHEETS

S
A
R

2

BUILDINGS & SUBCONTRACTS

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MISC. EQUIPMENT

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VESSEL ENGINEERING

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HEAT TRANSFER ENGINEERING

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MECHANICAL ENGINEERING

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11

INSTRUMENT ENGINEERING

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R

20

ELECTRICAL ENGINEERING

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A
R

11

TECHNICAL SERVICES

S
A
R

5

TOTAL BASIC ENGINEERING

S
A
R
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A
R
S

62

COORDINATION

S
A
R

33

TOTAL ENGINEERING

S
A
R

100

ISSUE NO:

FW CONTRACT #

DATE OF ISSUE:

LEGEND S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULEPREPARED BY
PLANNING ENGINEER: R PorcelliAPPROVED BY
PROJECT MANAGER: FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

(20)

C

UNIT 220
CREDIT GENERATION

MASTER PROJECT SCHEDULE

DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

RELATIVE
WEIGHT
SCHEDULE/ACTUAL
ESTIMATED
PERCENT
COMPLETE
WTD.
PERCENT
COMPLETE

VESSELS

S 5 20 40 60 80 95 100
A
R

4

FOUNDATIONS

S 15 40 65 90 100
A
R

7

STRUCTURAL STEEL

S 10 30 50 70 90 100
A
R

8

PIPE SUPPORTS

S 20 50 80 100
A
R

4

ABOVE GROUND PIPING

S 5 10 20 40 60 80 90 95 100
A
R

44

U/G FACILITIES

S 10 30 50 70 90 100
A
R

3

INSTRUMENTATIONS

S 5 10 20 40 60 80 95 100
A
R

4

ELECTRICALS

S 5 10 20 40 60 80 95 100
A
R

11

REQUISITION & GENERAL

S 5 10 25 45 65 80 90 95 100
A
R

15

TOTAL DRAFTING

S 0.2 2 5 13 22 32 48 65 80 90 96 100
A
R

100

MODEL

S
A
R

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGENDS: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULEPREPARED BY
PLANNING ENGINEER:APPROVED BY
PROJECT MANAGER: FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

FW CONTRACT NO. 15-2231

UNIT 310
AIR SEPARATIONMASTER PROJECT SCHEDULE
DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	RELATIVE WEIGHT SCHEDULE/ACTUAL	ESTIMATED PERCENT COMPLETE	WTD. PERCENT COMPLETE
VESSELS	S	25	50	75	100																					2		
	A																											
	R																											
FOUNDATIONS	S			25	50	75	100																			10		
	A																											
	R																											
STRUCTURAL STEEL	S				25	50	75	100																		7		
	A																											
	R																											
PIPE SUPPORTS	S							20	30	100																4		
	A																											
	R																											
ABOVE GROUND PIPING	S				5	10	25	50	75	90	100															44		
	A																											
	R																											
U/G FACILITIES	S				25	50	75	100																		5		
	A																											
	R																											
INSTRUMENTATIONS	S					10	25	45	65	85	100															3		
	A																											
	R																											
ELECTRICALS	S					10	25	45	65	85	100															10		
	A																											
	R																											
REQUISITION & GENERAL	S			5	15	35	55	75	90	95	100															15		
	A																											
	R																											
	S																											
	A																											
	R																											
	S																											
	A																											
	R																											
	S																											
	A																											
	R																											
TOTAL DRAFTING	S	0.5	1	5	15	27	44	64	82	93	100															100		
	A																											
	R																											
MODEL	S																											
	A																											
	R																											

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGENDS: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULEPREPARED BY
PLANNING ENGINEER:APPROVED BY
PROJECT MANAGER: FOSTER WHEELER ENERGY CORP.
110 30. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 2

MASTER PROJECT SCHEDULE DRAFTING

UNIT 320
COAL/COKE TREATING & FEED

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	RELATIVE WEIGHT SCHEDULE/ACTUAL	ESTIMATED PERCENT COMPLETE	WTD. PERCENT COMPLETE
VESSELS	S	10	25	55	85	100																				4		
	A																											
	R																											
FOUNDATIONS	S		10	25	55	85	100																			7		
	A																											
	R																											
STRUCTURAL STEEL	S			25	50	75	100																			6		
	A																											
	R																											
PIPE SUPPORTS	S					25	50	75	100																	4		
	A																											
	R																											
ABOVE GROUND PIPING	S			5	15	35	55	75	80	95	100															44		
	A																											
	R																											
U/G FACILITIES	S			10	40	80	100																			4		
	A																											
	R																											
INSTRUMENTATIONS	S				5	10	25	50	75	90	100															5		
	A																											
	R																											
ELECTRICALS	S				5	10	25	50	75	90	100															12		
	A																											
	R																											
REQUISITION & GENERAL	S		5	10	20	35	50	65	80	90	100															14		
	A																											
	R																											
	S																											
	A																											
	R																											
	S																											
	A																											
	R																											
	S																											
	A																											
	R																											
TOTAL DRAFTING	S	0.4	2	7	17	30	46	61	77	88	96	100														100		
	A																											
	R																											
MODEL	S																											
	A																											
	R																											

ISSUE NO: _____ FW CONTRACT # _____
DATE OF ISSUE: _____

LEGENDS: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY
PLANNING ENGINEER: _____

APPROVED BY
PROJECT MANAGER: _____

FOSTER WHEELER ENERGY CORP.
110 20. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 3

UNIT 330
COAL GASIFICATIONMASTER PROJECT SCHEDULE
DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

RELATIVE
WEIGHT
SCHEDULE/ACTUAL
ESTIMATED
PERCENT
COMPLETE
WTD
PERCENT
COMPLETE

VESSELS

S
A
R

5 20 40 60 80 95 100

3

FOUNDATIONS

S
A
R

5 15 25 40 60 85 100

3

STRUCTURAL STEEL

S
A
R

5 20 40 60 80 95 100

9

PIPE SUPPORTS

S
A
R

10 20 50 80 100

4

ABOVE GROUND PIPING

S
A
R

2 5 10 20 30 45 60 75 85 95 100

46

U/G FACILITIES

S
A
R

10 20 50 80 90 100

2

INSTRUMENTATIONS

S
A
R

5 15 20 25 35 50 70 90 95 100

4

ELECTRICALS

S
A
R

10 15 20 30 50 70 80 90 95 100

14

REQUISITION & GENERAL

S
A
R

5 10 15 20 30 40 50 60 70 80 85 90 95 100

15

TOTAL DRAFTING

S
A
R

1 2 4 9 16 24 35 44 59 72 85 90 96 100

100

MODEL

S
A
R

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGENDS: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULEPREPARED BY
PLANNING ENGINEER:APPROVED BY
PROJECT MANAGER: FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 4

FW CONTRACT NO. 15-2234

UNIT 340
GAS COOLING & SCRUBBING

MASTER PROJECT SCHEDULE DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	RELATIVE WEIGHT SCHEDULE/ACTUAL	ESTIMATED PERCENT COMPLETE	WTD PERCENT COMPLETE
VESSELS	S	10	20	50	80	90	100																			3		
	A																											
	R																											
FOUNDATIONS	S		10	20	50	80	90	100																		3		
	A																											
	R																											
STRUCTURAL STEEL	S		10	20	50	80	90	100																		9		
	A																											
	R																											
PIPE SUPPORTS	S						25	50	75	100																4		
	A																											
	R																											
ABOVE GROUND PIPING	S				2	5	10	20	30	50	70	90	100													46		
	A																											
	R																											
U/G FACILITIES	S			10	20	50	80	100																		2		
	A																											
	R																											
INSTRUMENTATIONS	S					5	15	30	50	70	90	95	100													4		
	A																											
	R																											
ELECTRICALS	S					5	15	30	50	70	90	95	100													14		
	A																											
	R																											
REQUISITION & GENERAL	S		5	10	20	30	40	50	60	70	80	90	100													15		
	A																											
	R																											
	S																											
	A																											
	R																											
	S																											
	A																											
	R																											
	S																											
	A																											
	R																											
TOTAL DRAFTING	S	0.2	3	6	13	21	30	41	52	67	81	93	100													100		
	A																											
	R																											
MODEL	S																											
	A																											
	R																											

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGEND: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY
PLANNING ENGINEER

APPROVED BY
PROJECT MANAGER

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

UNIT 350
GAS COMPRESSIONMASTER PROJECT SCHEDULE
DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

RELATIVE
WEIGHT
SCHEDULE/ACTUAL
ESTIMATED
PERCENT
COMPLETE
WTD
PERCENT
COMPLETE

VESSELS

S 10 20 50 90 100

A
R

4

FOUNDATIONS

S 5 20 55 85 100

A
R

7

STRUCTURAL STEEL

S 20 50 80 90 100

A
R

9

PIPE SUPPORTS

S 25 50 75 100

A
R

4

ABOVE GROUND PIPING

S 5 10 15 20 50 80 100

A
R

44

U/G FACILITIES

S 20 45 80 100

A
R

3

INSTRUMENTATIONS

S 5 10 30 50 70 90 100

A
R

4

ELECTRICALS

S 5 10 30 50 70 90 100

A
R

11

REQUISITION & GENERAL

S 10 20 30 40 50 60 80 90 100

A
R

14

TOTAL DRAFTING

S 0.4 3 7 20 31 41 50 70 88 100

A
R

100

MODEL

S
A
R

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGENDS: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULEPREPARED BY
PLANNING ENGINEER:APPROVED BY
PROJECT MANAGER: FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 6

FW CONTRACT NO. 15-2236

UNIT 360
GAS TREATINGMASTER PROJECT SCHEDULE
DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

RELATIVE
WEIGHT
SCHEDULE/ACTUAL
ESTIMATED
PERCENT
COMPLETE
WTD
PERCENT
COMPLETE

VESSELS

S 10 20 50 80 100

A
R

4

FOUNDATIONS

S 10 30 50 50 90 100

A
R

7

STRUCTURAL STEEL

S 10 25 45 65 85 100

A
R

9

PIPE SUPPORTS

S 25 50 75 100

A
R

4

ABOVE GROUND PIPING

S 5 10 20 30 40 60 80 90 100

A
R

44

U/G FACILITIES

S 5 15 30 50 70 90 95 100

A
R

3

INSTRUMENTATIONS

S 10 20 30 50 70 80 90 100

A
R

4

ELECTRICALS

S 10 20 30 50 70 80 90 100

A
R

11

REQUISITION & GENERAL

S 5 10 20 30 40 50 60 70 80 90 100

A
R

14

TOTAL DRAFTING

S 0.4 3 8 16 26 36 47 58 72 85 93 100

A
R

100

MODEL

S
A
R

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGENDS: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULEPREPARED BY
PLANNING ENGINEER:APPROVED BY
PROJECT MANAGER: FOSTER WHEELER ENERGY CORP.
110 80. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 7

UNIT 370
SOUR WATER TREATMENT

MASTER PROJECT SCHEDULE DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

	RELATIVE WEIGHT	SCHEDULE/ACTUAL
100	100	100
90	100	100
80	100	100
70	100	100
60	100	100
50	100	100
40	100	100
30	100	100
20	100	100
10	100	100
0	100	100

**ESTIMATED
PERCENT
COMPLETE**

WTD.
PERCENT
COMPLETE

[illegible]

DATE OF ISSUE:

FW CONTRACT 7

LEGEND: S - SCHEDULE
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY

FLASHING DISCERN:

APPROVED BY

PROJECT MANAGERS

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

UNIT 380
SULFUR RECOVERY

MASTER PROJECT SCHEDULE DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

	RELATIVE WEIGHT	SCHEDULE/ACTUAL
100	100	100
90	100	100
80	100	100
70	100	100
60	100	100
50	100	100
40	100	100
30	100	100
20	100	100
10	100	100
0	100	100

**ESTIMATED
PERCENT
COMPLETE**

**WTD
PERCENT
COMPLETE**

[illegible]

DATE OF ISSUE:

FBI CONTRACT #

LEGEND: S - SCHEDULE
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY
PLANNING ENGINEER:

APPROVED BY
PROJECT MANAGER:

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE 9
LIVINGSTON, NEW JERSEY

FW CONTRACT NO. 15-2241

UNIT 410
COAL & COKE HANDLING

MASTER PROJECT SCHEDULE DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

RELATIVE
WEIGHT
SCHEDULE/ACTUAL
ESTIMATED
PERCENT
COMPLETE
WTD
PERCENT
COMPLETE

VESSELS

S 10 20 50 80 100
A
R

4

FOUNDATIONS

S 10 20 50 80 100
A
R

7

STRUCTURAL STEEL

S 20 40 80 100
A
R

6

PIPE SUPPORTS

S 25 50 75 100
A
R

4

ABOVE GROUND PIPING

S 5 10 20 30 50 70 90 100
A
R

44

U/G FACILITIES

S 10 30 70 100
A
R

4

INSTRUMENTATIONS

S 10 15 30 50 70 85 100
A
R

5

ELECTRICALS

S 10 15 30 50 70 85 100
A
R

12

REQUISITION & GENERAL

S 10 20 30 40 50 60 70 80 90 100
A
R

14

TOTAL DRAFTING

S 0.4 3 7 17 24 40 50 64 79 93 100
A
R

100

MODEL

S
A
R

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGEND: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY
PLANNING ENGINEER

APPROVED BY
PROJECT MANAGER

FOSTER WHEELER ENERGY CORP.
110 SO. CHANCE AVENUE
LIVINGSTON, NEW JERSEY 10

FW CONTRACT NO. 15-2242

UNIT 420
ASH TREATMENTMASTER PROJECT SCHEDULE
DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD.
PERCENT
COMPLETE

VESSELS

S
A
R

30 70 100

4

FOUNDATIONS

S
A
R

30 70 100

7

STRUCTURAL STEEL

S
A
R

15 45 85 100

6

PIPE SUPPORTS

S
A
R

30 70 100

4

ABOVE GROUND PIPING

S
A
R

5 10 20 50 80 100

44

U/G FACILITIES

S
A
R

20 50 80 100

4

INSTRUMENTATIONS

S
A
R

10 30 60 90 100

5

ELECTRICALS

S
A
R

10 50 60 90 100

12

REQUISITION & GENERAL

S
A
R

10 20 40 60 80 90 100

14

TOTAL DRAFTING

S
A
R

1 6 15 24 33 42 51 60 69 78 87 96 100

100

MODEL

S
A
R

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGEND: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULEPREPARED BY
PLANNING ENGINEER:APPROVED BY
PROJECT MANAGER: FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY

FW CONTRACT NO. 15-2243

UNIT 430
UTILITY AREAMASTER PROJECT SCHEDULE
DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETE

VESSELS

S 10 30 50 90 100

A

R

4

FOUNDATIONS

S 15 30 50 80 100

A

R

7

STRUCTURAL STEEL

S 15 30 50 80 100

A

R

4

PIPE SUPPORTS

S 20 50 80 100

A

R

4

ABOVE GROUND PIPING

S 5 10 20 40 60 80 95 100

A

R

44

U/G FACILITIES

S 10 30 60 90 100

A

R

4

INSTRUMENTATIONS

S 5 10 20 50 80 90 100

A

R

4

ELECTRICALS

S 5 10 20 50 80 90 100

A

R

14

REQUISITION & GENERAL

S 10 20 30 40 50 60 70 80 90 100

A

R

15

TOTAL DRAFTING

S 0.4 4 9 17 25 36 50 67 84 96 100

A

R

100

MODEL

S

A

R

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGEND: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULEPREPARED BY
PLANNING ENGINEERAPPROVED BY
PROJECT MANAGER FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 12

UNIT 440
WASTE WATER TREATMENT

MASTER PROJECT SCHEDULE DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

[illegible]

ESTIMATED
PERCENT
CONVERSION

WTD
PERCENT
CONV ETC

[illegible]

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT

LEGENDS: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY
PLANNING ENGINEER:

APPROVED BY
PROJECT MANAGER

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 13

MASTER PROJECT SCHEDULE DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

RELATIVE WEIGHT	SCHEDULE/ACTUAL
ESTIMATED PERCENT COMPLETE	WTD PERCENT COMPLETE

[illegible]

FW CONTRACT #

LEGEND: S - SCHEDULED ~~XXXXXXXXXXXX~~
A - ACTUAL ~~XXXXXXXXXXXX~~
R - REVISED ~~XXXXXXXXXXXX~~ ~~XXXXXXXXXXXX~~

PREPARED BY
PLUMBING ENGINEERS

APPROVED BY
MANAGEMENT ENGINEER:

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 14

PROJ. CONTROL FORM NO. 131- 179

UNIT 460
FLARE & DOCK FACILITIES

MONTHS AFTER PHASE II	AUTHORIZATION TO PROCEED
1	
2	
3	
4	
5	
6	
7	
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92	
93	
94	
95	
96	
97	
98	
99	
100	

	RELATIVE WEIGHT	SCHEDULE/ACTUAL	ESTIMATED PERCENT COMPLETE	WTD PERCENT COMPLETE
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
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92				
93				
94				
95				
96				
97				
98				
99				
100				

		9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	SCHE	E-10	10
VESSELS	S	50	100																							3		
	A																											
	R																											
FOUNDATIONS	S		50	100																						7		
	A																											
	R																											
STRUCTURAL STEEL	S		20	50	100																					7		
	A																											
	R																											
PIPE SUPPORTS	S				50	100																				4		
	A																											
	R																											
ABOVE GROUND PIPING	S		5	10	50	80	100																			44		
	A																											
	R																											
U/G FACILITIES	S			30	50	100																				3		
	A																											
	R																											
INSTRUMENTATIONS	S			20	40	80	100																			4		
	A																											
	R																											
ELECTRICALS	S			20	50	80	100																			14		
	A																											
	R																											
REQUISITION & GENERAL	S		20	40	70	50	100																			14		
	A																											
	R																											
	S																											
	A																											
	R																											
	S																											
	A																											
	R																											
	S																											
	A																											
	R																											
TOTAL DRAFTING	S	2	13	33	62	85	100																			100		
	A																											
	R																											
MODEL	S																											
	A																											
	R																											

[illegible]

LEGENDS: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULE

PREPARED BY
PLANNING ENGINEER:

APPROVED BY
PROJECT MANAGER:

FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 15

PROJ. CONTROL FORM NO. 191-

FW CONTRACT NO. 15-2247

UNIT 470
GENERAL FACILITIESMASTER PROJECT SCHEDULE
DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETE

VESSELS

S
A
R

5 15 30 60 90 100

1

FOUNDATIONS

S
A
R

5 15 30 50 70 90 100

18

STRUCTURAL STEEL

S
A
R

10 30 50 70 90 95 100

8

PIPE SUPPORTS

S
A
R

20 40 60 100

5

ABOVE GROUND PIPING

S
A
R

2 5 10 15 25 35 50 65 80 90 100

35

U/G FACILITIES

S
A
R

10 20 40 60 80 100

8

INSTRUMENTATIONS

S
A
R

5 10 20 30 50 70 90 95 100

2

ELECTRICALS

S
A
R

5 10 20 30 50 70 90 95 100

9

REQUISITION & GENERAL

S
A
R

5 10 15 20 30 40 50 60 70 80 90 95 100

14

TOTAL DRAFTING

S
A
R

0.1 2 5 12 25 31 41 51 61 71 81 91 96 100

100

MODEL

S
A
R

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT 3

LEGEND: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULEPREPARED BY
PLANNING ENGINEERAPPROVED BY
PROJECT MANAGER FOSTER WHEELER ENERGY CORP.
110 SO. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 16

FW CONTRACT NO. 15-2248

UNIT 480
BUILDINGSMASTER PROJECT SCHEDULE
DRAFTING

MONTHS AFTER PHASE II AUTHORIZATION TO PROCEED

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

RELATIVE
WEIGHT
SCHEDULE/ACTUALESTIMATED
PERCENT
COMPLETEWTD
PERCENT
COMPLETE

VESSELS

S
A
R

FOUNDATIONS

S
A
R

STRUCTURAL STEEL

S
A
R

PIPE SUPPORTS

S
A
R

ABOVE GROUND PIPING

S
A
R

U/G FACILITIES

S
A
R

INSTRUMENTATIONS

S
A
R

ELECTRICALS

S
A
R

REQUISITION & GENERAL

S
A
R

BUILDINGS

S
A
R

TOTAL DRAFTING

S
A
R

MODEL

S
A
R

ISSUE NO:

DATE OF ISSUE:

FW CONTRACT #

LEGEND: S - SCHEDULED
A - ACTUAL
R - REVISED SCHEDULEPREPARED BY
PLANNING ENGINEER:APPROVED BY
PROJECT MANAGER: FOSTER WHEELER ENERGY CORP.
100 RD. ORANGE AVENUE
LIVINGSTON, NEW JERSEY 17

D

MASTER PROJECT SCHEDULE

PROGRESS CURVES

YEAR	1980							1981												1982											1983						
MONTHS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

ISSUE NO.

ISSUE DATE

LEGEND: PROCESS ENGINEERING :
PROJECT ENGINEERING :
DESIGN DRAFTING :
CONSTRUCTION :
PURCHASING :

PREPARED BY:
PLANNING ENGINEER:

APPROVED BY
PROJECT MANAGER:

FOSTER WHEELER ENERGY CORP.
110 SOUTH ORANGE AVENUE
LIVINGSTON, NEW JERSEY