

Ralph J. Stephenson P.E. P.C.  
Consulting Engineer

March 26, 1992

**To:** Jim Simons  
(with attachments)

**cc:** Dick Wever  
Joe Kavanagh  
(minus attachments)

**From:** Ralph J. Stephenson

**Re:** Sheet #04 network model for portion of A/C network computer run for issue #1, dated 01/27/92, data date 11/04/91. rjs issue #2a, dated March 26, 1992

Dear Jim:

Attached are four copies of a network model translation made from portions of the issue 1 computer run from Alberici/Clark. Sheet #04 includes the turbine generator, the power plant building close in, the electrical/chemical building and interior metal walls and caulking.

I would appreciate you reviewing the network since there are one or two items on which I have questions. One of these is the end date for close in of the power plant building, activity 00001. The date in the A/C listing appears to differ from the network date. It may be that there is some restraint I haven't picked up from the computer run. In any event a check by you would be appreciated. Of course you are free to share this network model with Alberici/Clark as you deem appropriate.

The network shows only early starts and early finishes since the A/C runs have set late finishes for end dates some of which are being discussed relative to the contract requirements. As with the previous network model issue of sheets #1 and #2, I suggest we omit the late starts and late finishes until the additional interrelations, and the authentic end dates are defined.

Also attached are two computer runs listing the tasks on sheet <sup>04</sup>#01. *Run A* is in early start, early finish sequence. *Run B* is a list by activity number, and within the activity number by early starts and early

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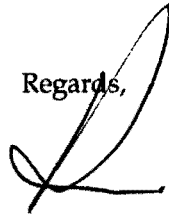
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finishes. Run B also gives the listing by responsibility since A/C used activity numbers to identify the various parties involved.

Would you please distribute the network and the computer listings to Dick Wever and Joe Kavanagh at your convenience.

I shall call Monday to see if you have received the material in good shape. You should also have monitoring report #13 by then. I would appreciate any of your observations on the activity comment listing.

Regards,

A handwritten signature in black ink, appearing to be 'Ralph J. Stephenson', written over the word 'Regards,'.

Ralph J. Stephenson, P. E.

	activity	sub title	earliest start	earliest finish	days
1	170001-IMC IMC - SET ACID TANK - 1	IMC-4	6/15/92	6/15/92	1
2	T/R TO IMC START SETTING ACID TANK - AM 06/15/92	IMC-4	6/15/92	6/15/92	0
3	170002-IMC IMC - PART SET AND PIPE CHEM / ELEC. EQUIPMENT - 5	IMC-4	6/16/92	6/22/92	5
4	022000-A/C A/C PART DEMO THREE WINDOWS & CURB - 0	A/C-4	6/23/92	6/23/92	0
5	080005-VAN PART DELIVER HOLLOW METAL CHEM / ELEC. BUILDING - 0	VAN-4	6/23/92	6/23/92	0
6	022000A - A/C A/C COMP DEMO THREE WINDOWS & CURB - 2	A/C-4	6/23/92	6/24/92	2
7	030030-SCH PART ELECT / CHEM BUILDING MASONRY - 2	SCH-4	6/23/92	6/24/92	2
8	080005A-VAN COMP DELIVER HOLLOW METAL CHEM / ELEC. BUILDING - 5	VAN-4	6/23/92	6/29/92	5
9	090005-ESS DELIVER HARDWARE CHEM / ELEC BUILDING - 5	ESS-4	6/23/92	6/29/92	5
10	119000-ALL DELIVER LOUVERS CHEM/ELEC. BUILDING - 5	ALL-4	6/23/92	6/29/92	5
11	170002-IMC IMC - COMP SET AND PIPE CHEM / ELEC. EQUIPMENT - 5	IMC-4	6/23/92	6/29/92	5
12	030030A-SCH COMP ELECT / CHEM BUILDING MASONRY - 3	SCH-4	6/25/92	6/29/92	3
13	022005-A/C A/C - INSTALL DOORS AND HARDWARE - 2	A/C-4	6/30/92	7/1/92	2
14	119005-ALL INSTALL LOUVERS CHEM/ELEC. BUILDING - 2	ALL-4	6/30/92	7/1/92	2
15	070002-WEST CHEM / ELEC. CAULKING - 5	WES-4	6/30/92	7/7/92	5
16	180001-DFIE DFI - SET MAJOR ELECT. EQUIPMENT - 1	DFIE-4	7/2/92	7/2/92	1
17	040005-GJOH SET ROOF STEEL - 5	GJOH-4	7/6/92	7/10/92	5
18	T/R TO 07/07/92 FOR START OF SCH INT MASONRY	4	7/7/92	7/7/92	0
19	T/R TO START OF GEC GENERAL ELECTRIC MOBILIZATION - 07/07/92	GEC-4	7/7/92	7/7/92	0
20	010005-GEC GENERAL ELECTRIC MOBILIZATION - 4	GEC-4	7/7/92	7/10/92	4
21	030005-SCH - INTERIOR MASONRY WALLS - 11	SCH-4	7/7/92	7/21/92	11
22	180002-DFIE DFI - PART ELECTRICAL - 0		7/13/92	7/13/92	0

In early start, early finish sequence

	activity	sub title	earliest start	earliest finish	days
2 3	190005-QUAL QUALITY - PART ELECT MACHINERY HOOK-UP - 0	QUAL-4	7/13/92	7/13/92	0
2 4	060005-CEI PART CHEM/ELECTRICAL BUILDING ROOFING - 0	CEI-4	7/13/92	7/13/92	0
2 5	T/R TO START INTERIOR BUILDING CAULKING & SEALING - 07/13/92	WES-4	7/13/92	7/13/92	0
2 6	T/R TO START OF ZACK COMPANY MOBILIZATION - 07/13/92	ZAC-4	7/13/92	7/13/92	0
2 7	040010-GJOH INSTALL INTERIOR MISC. STEEL - 2	GJOH-4	7/13/92	7/14/92	2
2 8	060005-CEI CHEM / ELECTRICAL BUILDING ROOFING - 4	CEI-4	7/13/92	7/16/92	4
2 9	060005A-CEI COMP CHEM/ELECTRICAL BUILDING ROOFING - 4	CEI-4	7/13/92	7/16/92	4
3 0	050001-ZAC ZACK COMPANY MOBILIZATION - 5	ZAC-4	7/13/92	7/17/92	5
3 1	010010-GEC TURBINE - PART INSTALL SOLE PLATES - 10	GEC-4	7/13/92	7/24/92	10
3 2	180002-DFIE DFIE - COMP ELECTRICAL - 10	DFIE-4	7/13/92	7/24/92	10
3 3	190005A-QUAL QUALITY - COMP ELECT MACHINERY HOOK-UP - 10	QUAL-4	7/13/92	7/24/92	10
3 4	070010-WES INTERIOR BUILDING CAULK & SEALANT - 50	WES-4	7/13/92	9/21/92	50
3 5	115002-GMID CHEM/ELEC. PAINTING & SEAL FLOOR - 15	GMID-4	7/15/92	8/4/92	15
3 6	050002-ZAC PART INTERIOR METAL WALL ELEV. 875 & 891 - 6	ZAC-4	7/20/92	7/27/92	6
3 7	030010-SCH EAST ELEV MASONRY 851 TO 905 - 2	SCH-4	7/22/92	7/23/92	2
3 8	030015-SCH EAST ELEV STONE 851 TO 905 - 2	SCH-4	7/24/92	7/27/92	2
3 9	030020-SCH EAST ELEV MASONRY 851 TO 967 - 2	SCH-4	7/24/92	7/27/92	2
4 0	010010A-GEC TURBINE - COMP INSTALL SOLE PLATES - 5	GEC-4	7/27/92	7/31/92	5
4 1	010015-PART GEC TURBINE - SETUP AND INSTALL TB GENERATOR - 10	GEC-4	7/27/92	8/7/92	10
4 2	030025-SCH EAST ELVE STONE 851 TO 967 - 2	SCH-4	7/28/92	7/29/92	2
4 3	030055-SCH WEST ELEVATION MASONRY F-K - 10	SCH-4	7/28/92	8/10/92	10
4 4	050002-ZAC COMP INTERIOR METAL WALL ELEV. 875 & 891 - 11	ZAC-4	7/28/92	8/11/92	11

In early start, early finish sequence

	activity	sub title	earliest start	earliest finish	days
4 5	050004-ZAC INTERIOR METAL WALL ELEV. 894 & 912 - 11	ZAC-4	7/28/92	8/11/92	11
4 6	030035-SCH SOUTH ELEVATION MASONRY - 12	SCH-4	7/28/92	8/12/92	12
4 7	000002-MILE CHEM/ELECTRICAL BUILDING COMPLETE - 1	MILE-4	8/5/92	8/5/92	1
4 8	010020-GEC TURBINE - INSTALL M.S.V. - 5	GEC-4	8/10/92	8/14/92	5
4 9	010015A-COMP GEC TURBINE - SETUP AND INSTALL TB GENERATOR - 5	GEC-4	8/10/92	8/14/92	5
5 0	030060-SCH WEST ELEVATION STONE F-K - 9	SCH-4	8/11/92	8/21/92	9
5 1	030065-SCH WEST ELEVATION MASONRY A-F - 20	SCH-4	8/11/92	9/8/92	20
5 2	050006-ZAC INTERIOR METAL WALL ELEV. 930 & 945 - 8	ZAC-4	8/12/92	8/21/92	8
5 3	030040-SCH SOUTH ELEVATION STONE - 13	SCH-4	8/13/92	8/31/92	13
5 4	010025-GEC TURBINE - SET LUBE OIL TANK - 2	GEC-4	8/17/92	8/18/92	2
5 5	010030-PART GEC TURBINE - INSTALL STEAM PIPING - 5	GEC-4	8/19/92	8/25/92	5
5 6	050008-ZAC INTERIOR METAL WALL ELEV. 955 & 963 - 24	ZAC-4	8/24/92	9/25/92	24
5 7	030070-SCH WEST ELEVATION STONE A-F - 26	SCH-4	8/24/92	9/29/92	26
5 8	010035-PART GEC TURBINE - INSTALL LUBE OIL PIPING - 5	GEC-4	8/26/92	9/1/92	5
5 9	010030A-COMP GEC TURBINE - INSTALL STEAM PIPING - 15	GEC-4	8/26/92	9/16/92	15
6 0	010040-GEC TURBINE - PART ALIGN TO GENERATOR - 10	GEC-4	9/2/92	9/16/92	10
6 1	010035A-COMP GEC TURBINE - INSTALL LUBE OIL PIPING - 15	GEC-4	9/2/92	9/23/92	15
6 2	T/R TO START OF NORTH ELEVATION MASONRY 851 TO 967 - 09/03/92	SCH-4	9/3/92	9/3/92	0
6 3	030045-SCH NORTH ELEVATION MASONRY 851 TO 967 - 12	SCH-4	9/3/92	9/21/92	12
6 4	030075-SCH WEST ELEVATION MASONRY A-AA - 2	SCH-4	9/9/92	9/10/92	2
6 5	050010-ZAC EAST ELEVATION METAL WALL PANELS - 10	ZAC-4	9/9/92	9/22/92	10
6 6	010040A-GEC TURBINE - CONT(1) ALIGN TO GENERATOR - 5	GEC-4	9/17/92	9/23/92	5

In early start, early finish sequence

	activity	sub title	earliest start	earliest finish	days
67	010045-PART GEC TURBINE - INSTALL J-BOS, PT & SCT CABINETS - 5	GEC-4	9/17/92	9/23/92	5
68	030050-SCH NORTH ELEVATION STONE 851 TO 967 - 14	SCH-4	9/22/92	10/9/92	14
69	070015-WES CAULK EXTERIOR EAST ELEVATION - 5	WES-4	9/23/92	9/29/92	5
70	050015-ZAC SOUTH ELEVATION METAL WALL PANELS - 7	ZAC-4	9/23/92	10/1/92	7
71	010040B-GEC TURBINE - COMP ALIGN TO GENERATOR - 5	GEC-4	9/24/92	9/30/92	5
72	010045A-COMP GEC TURBINE - INSTALL J-BOS, PT & SCT CABINETS - 5	GEC-4	9/24/92	9/30/92	5
73	010065-GEC TURBINE - HARDWIRE PT & CTS - 30	GEC-4	9/24/92	11/4/92	30
74	030080-SCH WEST ELEVATION STONE A-AA - 2	SCH-4	9/30/92	10/1/92	2
75	010050-GEC TURBINE - INSTALL MOTOR CONTROL CENTER - 5	GEC-4	10/1/92	10/7/92	5
76	01055-GEC TURBINE - INSTALL PIPING AND VALVES - 5	GEC-4	10/1/92	10/7/92	5
77	010060-PART GEC TURBINE - HARDWIRE CONTROL SYSTEM - 15	GEC-4	10/1/92	10/21/92	15
78	070020-WES CAULK EXTERIOR SOUTH ELEVATION - 5	WES-4	10/2/92	10/8/92	5
79	050025-ZAC WEST ELEVATION METAL WALL PANELS - 10	ZAC-4	10/2/92	10/15/92	10
80	T/R TO START INSTALL EXTERIOR WINDOWS EAST ELEVATION - 10/05/92	ABP-4	10/5/92	10/5/92	0
81	T/R TO START OF ROOFING MOBILIZATION - 10/05/92	CEI-4	10/5/92	10/5/92	0
82	060001-CEI CEI ROOFING MOBILIZATION - 5	CEI-4	10/5/92	10/9/92	5
83	100005-ABP INSTALL EXTERIOR WINDOWS EAST ELEVATION - 5	ABP-4	10/5/92	10/9/92	5
84	100010-ABP INSTALL EXTERIOR WINDOWS SOUTH ELEVATION - 5	ABP-4	10/12/92	10/16/92	5
85	060010-CEI GENERAL BUILDING ROOF COL. F - K @ 922.5 - 6	CEI-4	10/12/92	10/19/92	6
86	070030-WES CAULK EXTERIOR WEST ELEVATION - 5	WEX-4	10/16/92	10/22/92	5
87	050020-ZAC NORTH ELEVATION METAL WALL PANELS - 7	ZAC-4	10/16/92	10/26/92	7
88	100015-ABP INSTALL EXTERIOR WINDOWS NORTH ELEVATION - 5	ABP-4	10/19/92	10/23/92	5

In early start, early finish sequence

	activity	sub title	earliest start	earliest finish	days
89	060015-CEI GENERAL BUILDING ROOF COL. E - F @ 967 - 3	CEI-4	10/20/92	10/22/92	3
90	010060A-COMP GEC TURBINE - HARDWIRE CONTROL SYSTEM - 5	GEC-4	10/22/92	10/28/92	5
91	010070-PART GEC TURBINE - PIPE FOR STEAM BLOW DOWN / BLOW DOWN - 10	GEC-4	10/22/92	11/4/92	10
92	060020-CEI GENERAL BUILDING ROOF COL. E - A @ 977-9 - 7	CEI-4	10/23/92	11/2/92	7
93	100020-ABP INSTALL EXTERIOR WINDOWS WEST ELEVATION - 5	ABP-4	10/26/92	10/30/92	5
94	070025-WES CAULK EXTERIOR NORTH ELEVATION - 5	WES-4	10/27/92	11/2/92	5
95	060025-CEI GENERAL BUILDING ROOF COL. A - AA @ 904 - 1	CEI-4	11/3/92	11/3/92	1
96	000001- MILE BUILDING ENCLOSURE COMPLETE - 1	MILE-4	11/4/92	11/4/92	1
97	010070A-COMP GEC TURBINE - PIPE FOR STEAM BLOW DOWN / BLOW DOWN - 5	GEC-4	11/5/92	11/11/92	5
98	010075-GEC TURBINE - PIPE COOLING WATER - 10	GEC-4	11/5/92	11/18/92	10
99	010080-GEC TURBINE - SYSTEMS CHECK OUT - 30	GEC-4	11/19/92	1/4/93	30

In early start, early finish sequence

	activity	sub title	earliest start	earliest finish	days
1	000001- MILE BUILDING ENCLOSURE COMPLETE - 1	MILE-4	11/4/92	11/4/92	1
2	000002-MILE CHEM/ELECTRICAL BUILDING COMPLETE - 1	MILE-4	8/5/92	8/5/92	1
3	010005-GEC GENERAL ELECTRIC MOBILIZATION - 4	GEC-4	7/7/92	7/10/92	4
4	010010-GEC TURBINE - PART INSTALL SOLE PLATES - 10	GEC-4	7/13/92	7/24/92	10
5	010010A-GEC TURBINE - COMP INSTALL SOLE PLATES - 5	GEC-4	7/27/92	7/31/92	5
6	010020-GEC TURBINE - INSTALL M.S.V. - 5	GEC-4	8/10/92	8/14/92	5
7	010025-GEC TURBINE - SET LUBE OIL TANK - 2	GEC-4	8/17/92	8/18/92	2
8	010030-PART GEC TURBINE - INSTALL STEAM PIPING - 5	GEC-4	8/19/92	8/25/92	5
9	010030A-COMP GEC TURBINE - INSTALL STEAM PIPING - 15	GEC-4	8/26/92	9/16/92	15
10	010035-PART GEC TURBINE - INSTALL LUBE OIL PIPING - 5	GEC-4	8/26/92	9/1/92	5
11	010035A-COMP GEC TURBINE - INSTALL LUBE OIL PIPING - 15	GEC-4	9/2/92	9/23/92	15
12	010040-GEC TURBINE - PART ALIGN TO GENERATOR - 10	GEC-4	9/2/92	9/16/92	10
13	010040A-GEC TURBINE - CONT(1) ALIGN TO GENERATOR - 5	GEC-4	9/17/92	9/23/92	5
14	010040B-GEC TURBINE - COMP ALIGN TO GENERATOR - 5	GEC-4	9/24/92	9/30/92	5
15	010045-PART GEC TURBINE - INSTALL J-BOS, PT & SCT CABINETS - 5	GEC-4	9/17/92	9/23/92	5
16	010045A-COMP GEC TURBINE - INSTALL J-BOS, PT & SCT CABINETS - 5	GEC-4	9/24/92	9/30/92	5
17	010050-GEC TURBINE - INSTALL MOTOR CONTROL CENTER - 5	GEC-4	10/1/92	10/7/92	5
18	010060-PART GEC TURBINE - HARDWIRE CONTROL SYSTEM - 15	GEC-4	10/1/92	10/21/92	15
19	010060A-COMP GEC TURBINE - HARDWIRE CONTROL SYSTEM - 5	GEC-4	10/22/92	10/28/92	5
20	010065-GEC TURBINE - HARDWIRE PT & CTS - 30	GEC-4	9/24/92	11/4/92	30
21	010070-PART GEC TURBINE - PIPE FOR STEAM BLOW DOWN / BLOW DOWN - 10	GEC-4	10/22/92	11/4/92	10
22	010070A-COMP GEC TURBINE - PIPE FOR STEAM BLOW DOWN / BLOW DOWN - 5	GEC-4	11/5/92	11/11/92	5

In ascending activity number, early start, early fin sequence



	activity	sub title	earliest start	earliest finish	days
2 3	010075-GEC TURBINE - PIPE COOLING WATER - 10	GEC-4	11/5/92	11/18/92	10
2 4	010080-GEC TURBINE - SYSTEMS CHECK OUT - 30	GEC-4	11/19/92	1/4/93	30
2 5	022000-A/C A/C PART DEMO THREE WINDOWS & CURB - 0	A/C-4	6/23/92	6/23/92	0
2 6	022000A - A/C A/C COMP DEMO THREE WINDOWS & CURB - 2	A/C-4	6/23/92	6/24/92	2
2 7	022005-A/C A/C - INSTALL DOORS AND HARDWARE - 2	A/C-4	6/30/92	7/1/92	2
2 8	030005-SCH - INTERIOR MASONRY WALLS - 11	SCH-4	7/7/92	7/21/92	11
2 9	030010-SCH EAST ELEV MASONRY 851 TO 905 - 2	SCH-4	7/22/92	7/23/92	2
3 0	030015-SCH EAST ELEV STONE 851 TO 905 - 2	SCH-4	7/24/92	7/27/92	2
3 1	030020-SCH EAST ELEV MASONRY 851 TO 967 - 2	SCH-4	7/24/92	7/27/92	2
3 2	030025-SCH EAST ELVE STONE 851 TO 967 - 2	SCH-4	7/28/92	7/29/92	2
3 3	030030-SCH PART ELECT / CHEM BUILDING MASONRY - 2	SCH-4	6/23/92	6/24/92	2
3 4	030030A-SCH COMP ELECT / CHEM BUILDING MASONRY - 3	SCH-4	6/25/92	6/29/92	3
3 5	030035-SCH SOUTH ELEVATION MASONRY - 12	SCH-4	7/28/92	8/12/92	12
3 6	030040-SCH SOUTH ELEVATION STONE - 13	SCH-4	8/13/92	8/31/92	13
3 7	030045-SCH NORTH ELEVATION MASONRY 851 TO 967 - 12	SCH-4	9/3/92	9/21/92	12
3 8	030050-SCH NORTH ELEVATION STONE 851 TO 967 - 14	SCH-4	9/22/92	10/9/92	14
3 9	030055-SCH WEST ELEVATION MASONRY F-K - 10	SCH-4	7/28/92	8/10/92	10
4 0	030060-SCH WEST ELEVATION STONE F-K - 9	SCH-4	8/11/92	8/21/92	9
4 1	030065-SCH WEST ELEVATION MASONRY A-F - 20	SCH-4	8/11/92	9/8/92	20
4 2	030070-SCH WEST ELEVATION STONE A-F - 26	SCH-4	8/24/92	9/29/92	26
4 3	030075-SCH WEST ELEVATION MASONRY A-AA - 2	SCH-4	9/9/92	9/10/92	2
4 4	030080-SCH WEST ELEVATION STONE A-AA - 2	SCH-4	9/30/92	10/1/92	2

In ascending activity number, early start, early fin sequence

	activity	sub title	earliest start	earliest finish	days
4 5	040005-GJOH SET ROOF STEEL - 5	GJOH-4	7/6/92	7/10/92	5
4 6	040010-GJOH INSTALL INTERIOR MISC. STEEL - 2	GJOH-4	7/13/92	7/14/92	2
4 7	050001-ZAC ZACK COMPANY MOBILIZATION - 5	ZAC-4	7/13/92	7/17/92	5
4 8	050002-ZAC COMP INTERIOR METAL WALL ELEV. 875 & 891 - 11	ZAC-4	7/28/92	8/11/92	11
4 9	050002-ZAC PART INTERIOR METAL WALL ELEV. 875 & 891 - 6	ZAC-4	7/20/92	7/27/92	6
5 0	050004-ZAC INTERIOR METAL WALL ELEV. 894 & 912 - 11	ZAC-4	7/28/92	8/11/92	11
5 1	050006-ZAC INTERIOR METAL WALL ELEV. 930 & 945 - 8	ZAC-4	8/12/92	8/21/92	8
5 2	050008-ZAC INTERIOR METAL WALL ELEV. 955 & 963 - 24	ZAC-4	8/24/92	9/25/92	24
5 3	050010-ZAC EAST ELEVATION METAL WALL PANELS - 10	ZAC-4	9/9/92	9/22/92	10
5 4	050015-ZAC SOUTH ELEVATION METAL WALL PANELS - 7	ZAC-4	9/23/92	10/1/92	7
5 5	050020-ZAC NORTH ELEVATION METAL WALL PANELS - 7	ZAC-4	10/16/92	10/26/92	7
5 6	050025-ZAC WEST ELEVATION METAL WALL PANELS - 10	ZAC-4	10/2/92	10/15/92	10
5 7	060001-CEI CEI ROOFING MOBILIZATION - 5	CEI-4	10/5/92	10/9/92	5
5 8	060010-CEI GENERAL BUILDING ROOF COL. F - K @ 922.5 - 6	CEI-4	10/12/92	10/19/92	6
5 9	060015-CEI GENERAL BUILDING ROOF COL. E - F @ 967 - 3	CEI-4	10/20/92	10/22/92	3
6 0	060020-CEI GENERAL BUILDING ROOF COL. E - A @ 977-9 - 7	CEI-4	10/23/92	11/2/92	7
6 1	060025-CEI GENERAL BUILDING ROOF COL. A - AA @ 904 - 1	CEI-4	11/3/92	11/3/92	1
6 2	070002-WES CHEM / ELEC. CAULKING - 5	WES-4	6/30/92	7/7/92	5
6 3	070010-WES INTERIOR BUILDING CAULK & SEALANT - 50	WES-4	7/13/92	9/21/92	50
6 4	070015-WES CAULK EXTERIOR EAST ELEVATION - 5	WES-4	9/23/92	9/29/92	5
6 5	070025-WES CAULK EXTERIOR NORTH ELEVATION - 5	WES-4	10/27/92	11/2/92	5
6 6	070030-WES CAULK EXTERIOR WEST ELEVATION - 5	WEX-4	10/16/92	10/22/92	5

In ascending activity number, early start, early fin sequence

	activity	sub title	earliest start	earliest finish	days
67	080005-VAN PART DELIVER HOLLOW METAL CHEM / ELEC. BUILDING - 0	VAN-4	6/23/92	6/23/92	0
68	080005A-VAN COMP DELIVER HOLLOW METAL CHEM / ELEC. BUILDING - 5	VAN-4	6/23/92	6/29/92	5
69	090005-ESS DELIVER HARDWARE CHEM / ELEC BUILDING - 5	ESS-4	6/23/92	6/29/92	5
70	100005-ABP INSTALL EXTERIOR WINDOWS EAST ELEVATION - 5	ABP-4	10/5/92	10/9/92	5
71	100010-ABP INSTALL EXTERIOR WINDOWS SOUTH ELEVATION - 5	ABP-4	10/12/92	10/16/92	5
72	100015-ABP INSTALL EXTERIOR WINDOWS NORTH ELEVATION - 5	ABP-4	10/19/92	10/23/92	5
73	100020-ABP INSTALL EXTERIOR WINDOWS WEST ELEVATION - 5	ABP-4	10/26/92	10/30/92	5
74	115002-GMID CHEM/ELEC. PAINTING & SEAL FLOOR - 15	GMID-4	7/15/92	8/4/92	15
75	119000-ALL DELIVER LOUVERS CHEM/ELEC. BUILDING - 5	ALL-4	6/23/92	6/29/92	5
76	119005-ALL INSTALL LOUVERS CHEM/ELEC. BUILDING - 2	ALL-4	6/30/92	7/1/92	2
77	170001-IMC IMC - SET ACID TANK - 1	IMC-4	6/15/92	6/15/92	1
78	170002-IMC IMC - COMP SET AND PIPE CHEM / ELEC. EQUIPMENT - 5	IMC-4	6/23/92	6/29/92	5
79	170002-IMC IMC - PART SET AND PIPE CHEM / ELEC. EQUIPMENT - 5	IMC-4	6/16/92	6/22/92	5
80	180001-DFIE DFIE - SET MAJOR ELECT. EQUIPMENT - 1	DFIE-4	7/2/92	7/2/92	1
81	180002-DFIE DFIE - COMP ELECTRICAL - 10	DFIE-4	7/13/92	7/24/92	10
82	180002-DFIE DFIE - PART ELECTRICAL - 0	DFIE-4	7/13/92	7/13/92	0
83	190005-QUAL QUALITY - PART ELECT MACHINERY HOOK-UP - 0	QUAL-4	7/13/92	7/13/92	0
84	190005A-QUAL QUALITY - COMP ELECT MACHINERY HOOK-UP - 10	QUAL-4	7/13/92	7/24/92	10
85	010015-PART GEC TURBINE - SETUP AND INSTALL TB GENERATOR - 10	GEC-4	7/27/92	8/7/92	10
86	010015A-COMP GEC TURBINE - SETUP AND INSTALL TB GENERATOR - 5	GEC-4	8/10/92	8/14/92	5
87	01055-GEC TURBINE - INSTALL PIPING AND VALVES - 5	GEC-4	10/1/92	10/7/92	5
88	060005-CEI CHEM / ELECTRICAL BUILDING ROOFING - 4	CEI-4	7/13/92	7/16/92	4

In ascending activity number, early start, early fin sequence

	activity	sub title	earliest start	earliest finish	days
89	O60005-CEI PART CHEM/ELECTRICAL BUILDING ROOFING - 0	CEI-4	7/13/92	7/13/92	0
90	O60005A-CEI COMP CHEM/ELECTRICAL BUILDING ROOFING - 4	CEI-4	7/13/92	7/16/92	4
91	O70020-WES CAULK EXTERIOR SOUTH ELEVATION - 5	WES-4	10/2/92	10/8/92	5
92	T/R TO 07/07/92 FOR START OF SCH INT MASONRY	4	7/7/92	7/7/92	0
93	T/R TO IMC START SETTING ACID TANK - AM 06/15/92	IMC-4	6/15/92	6/15/92	0
94	T/R TO START INSTALL EXTERIOR WINDOWS EAST ELEVATION - 10/05/92	ABP-4	10/5/92	10/5/92	0
95	T/R TO START INTERIOR BUILDING CAULKING & SEALING - 07/13/92	WES-4	7/13/92	7/13/92	0
96	T/R TO START OF GEC GENERAL ELECTRIC MOBILIZATION - 07/07/92	GEC-4	7/7/92	7/7/92	0
97	T/R TO START OF NORTH ELEVATION MASONRY 851 TO 967 - 09/03/92	SCH-4	9/3/92	9/3/92	0
98	T/R TO START OF ROOFING MOBILIZATION - 10/05/92	CEI-4	10/5/92	10/5/92	0
99	T/R TO START OF ZACK COMPANY MOBILIZATION - 07/13/92	ZAC-4	7/13/92	7/13/92	0

In ascending activity number, early start, early fin sequence

**Ralph J. Stephenson P.E. P.C.**  
Consulting Engineer  
March 8, 1992

**To:** Jim Simons  
(with attachments)

**cc:** Dick Wever  
Joe Kavanagh  
(minus attachments)

**From:** Ralph J. Stephenson

**Re:** Sheets #01 and #02 network model for portion of A/C network computer run for issue #2, dated 02/27/92, data date 11/04/91. rjs issue #2a, dated February 27, 1992

Dear Jim:

Attached is the preliminary check package of network models for the issue 2 computer run from Alberici/Clark. The run includes much of the early field work and procurement for the project. I am completing the remainder of the network now from the material you provided me.

The networks in the package are three copies each of sheets #01 and #02, issue 2a, which corresponds to the A/C runs 29 and 30, dated February 22, 1992 and February 27, 1992.

This is a preliminary graphic network since it should still should be reviewed by you and, if you feel appropriate, by Alberici/Clark. Note that no late starts and late finishes are shown. I suggest we leave these off the runs until the additional interrelations are defined between other contractors and other related portions of the building.

I have shown the structural steel and the supported floor pours on sheet #01. These may change but I have no official word on the nature of the revisions as yet. Thus they are duplicated from the rjs issue #1e, dated February 18, 1992.

Also attached is a packet of computer runs showing the activity, the responsibility and sheet number, the early start and early finish, the activity type, and the duration. These have been listed in various

**Ralph J. Stephenson P.E. P.C.**  
Consulting Engineer  
March 8, 1992

sequences.

*Packet A* is the run for network model sheets #01 and #02 listed in ascending order of early starts and early finishes. *Packet B* shows the activities on sheets #01 and #02 listed in ascending order of their activity numbers.

*Packet C* shows the activities on sheet #01 listed in responsibility, sheet #, and early start sequence. *Packet D* is the same listing for sheet #02 activities.

I shall call you Monday or Tuesday to make certain you have received the material in good shape, and to see if you have any questions.

We should set a meeting soon to review the material and establish the procedures to be used to monitor the project.

Regards,

A handwritten signature in black ink, appearing to be 'R. Stephenson', written in a cursive style.

Ralph J. Stephenson, P. E.

3/8/92

iss 2a data for msu pp4 a/c iss #2

3/8/92  
%  
conv

	activity	sub title	earliest start	earliest finish	type	d
1	000010-T/R TO AWARD CONTRACT TO ALBERICI/CLARK - 11/04/91	A/C-1	11/4/91	11/4/91	Task	0
2	000015-A/C MOBILIZATION - 5	A/C-1	11/4/91	11/8/91	Task	5
3	T/R TO START OF ALMET ERECT STRUCT STEEL - 01/06/92	ALMET-1	1/6/92	1/6/92	Task	0
4	000035-ALMET ERECT SEQUENCE 1 STRUCT STEEL - 5	ALMET-1	1/6/92	1/10/92	Task	5
5	000040-ALMET ERECT SEQUENCE 2 STRUCT STEEL - 5	ALMET-1	1/13/92	1/17/92	Task	5
6	000045- ALMET ERECT SEQUENCE 3 STRUCT STEEL - 6	ALMET-1	1/20/92	1/27/92	Task	6
7	000050-ALMET ERECT SEQUENCE 4 STRUCT STEEL - 5	ALMET-1	1/28/92	2/3/92	Task	5
8	000055-ALMET ERECT SEQUENCE 5 STRUCT STEEL - 6	ALMET-1	2/4/92	2/11/92	Task	6
9	000060-ALMET ERECT SEQUENCE 6 STRUCT STEEL - 6	ALMET-1	2/12/92	2/19/92	Task	6
10	000065- ALMET ERECT SEQUENCE 7 STRUCT STEEL - 2	ALMET-1	2/20/92	2/21/92	Task	2
11	000070-ALMET ERECT SEQUENCE 8 STRUCT STEEL - 3	ALMET-1	2/24/92	2/26/92	Task	3
12	000075-ALMET ERECT SEQUENCE 9 STRUCT STEEL - 5	ALMET-1	2/27/92	3/4/92	Task	5
13	T/R TO TAMPILLA START MOBILIZATION - AM 03/02/92	TAM-1	3/2/92	3/2/92	Milestone	0
14	140432-TAM DELIVER - AIR HEATER TO PLENUM DUCT - 02/28/92 PM - TO 140010	TAM-1	3/2/92	3/2/92 (553)	Milestone	0
15	140000- TAMPILLA MOBILIZATION - 15	TAM-1	3/2/92	3/20/92	Task	15
16	140434-TAM DELIVER - FLUOSEAL - 03/02/92 PM - TO 140026	TAM-1	3/3/92	3/3/92	Milestone	0
17	140436-TAM DELIVER - FURNACE LOWER HEADERS - 03/04/92 PM - TO 140018	TAM-1	3/5/92	3/5/92 (557)	Milestone	0
18	000080-ALMET ERECT SEQUENCE 10 STRUCT STEEL - 2	ALMET-1	3/5/92	3/6/92	Task	2
19	140438-TAM DELIVER - FURNACE FLOOR TUBES - 03/05/92 PM - TO 140020	TAM-1	3/6/92	3/6/92	Milestone	0
20	140442-TAM DELIVER - FRAMING STEEL - 03/06/92 PM - TO 140022, 038, 046, 084, 104, 164	TAM-1	3/9/92	3/9/92 (558)	Milestone	0
21	140440-TAM DELIVER - FURNACE BUCKSTAYS - 03/06/92 PM - TO 140024	TAM-1	3/9/92	3/9/92	Milestone	0
22	140442-TAM DELIVER - FRAMING STEEL - 03/06/92 PM - TO 140022, 038, 046, 084, 104, 164	TAM-1	3/9/92	3/9/92	Milestone	0
23	140442-TAM DELIVER - FRAMING STEEL - PM 03/06/92	TAM-2	3/9/92	3/9/92	Milestone	0
24	000085- ALMET ERECT SEQUENCE 11 STRUCT STEEL - 4	ALMET-1	3/9/92	3/12/92	Task	4
25	140444-TAM DELIVER - ASH CLASSIFIER - 03/09/92 - TO 140180	TAM-2	3/10/92	3/10/92	Milestone	0
26	140446-TAM DELIVER - COAL FEEDERS - 03/12/92 PM - TO 140028	TAM-1	3/13/92	3/13/92	Milestone	0
27	000090-ALMET ERECT SEQUENCE 12 STRUCT STEEL - 2	ALMET-1	3/13/92	3/16/92	Task	2

**A**

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probably not on site ✓  
no work  
Crane not on job ✓  
60% - no work  
100% 3/11/92 ✓  
Tables are on job. ✓  
On job  
Some floor (51) Fluroal Sand bin  
& situated on job 100%  
not on job ✓  
" ✓  
" ✓  
" ✓  
100% ✓  
not on site ✓  
no ✓  
in work ✓

In early start early finish sequence

	activity	sub title	earliest start	earliest finish	type	d
28	140452-TAM DELIVER - SUPPORTS & HANGERS - 03/16/92 PM - TO 140052	TAM-1	3/17/92	3/17/92	Milestone	0
29	140448-TAM DELIVER - BURNERS & RACKS - 03/16/92 PM - TO 140036	TAM-1	3/17/92	3/17/92	Milestone	0
30	140450-TAM DELIVER - BURNER INJECTOR & RACKS - 03/16/92 PM - TO 140036	TAM-1	3/17/92	3/17/92	Milestone	0
31	140452-TAM DELIVER SUPPORTS & HANGERS - PM 03/16/92	TAM-2	3/17/92	3/17/92	Milestone	0
32	000100-ALMET ERECT SEQUENCE 13 STRUCT STEEL - 2	ALMET-1	3/17/92	3/18/92	Task	2
33	000105-ALMET ERECT SEQUENCE 14 STRUCT STEEL - 3	ALMET-1	3/19/92	3/23/92	Task	3
34	140014-TAM ROUGH SET - FURN/DW LOWER HDR - 1	TAM-1	3/23/92	3/23/92	Task	1
35	140002-TAM INSTALL LIMESTONE SILO - 1	TAM-2	3/23/92	3/23/92	Task	1
36	140004-TAM - LIMESTONE FOUNDATION STRUCTURE - 1	TAM-2	3/23/92	3/23/92	Task	1
37	140012-TAM SET SAND BIN - 2	TAM-1	3/23/92	3/24/92	Task	2
38	140010-TAM ROUGH SET DUCT - AIR HEATER TO PLENUM - 2	TAM-1	3/23/92	3/24/92	Task	2
39	140180-TAM ROUGH SET - ASH CLASSIFIER - 2	TAM-2	3/23/92	3/24/92	Task	2
40	140008-TAM GROUND ASSEMBLE DUCT - ECON TO AH - 7	TAM-2	3/23/92	3/31/92	Task	7
41	TO 140190-TAM ERECT - FURN SW LOWER HDR - SHT #02	TAM-1	3/24/92	3/24/92	Milestone	0
42	140018-TAM ROUGH SET - FURN SW LOWER HDR - 1	TAM-1	3/24/92	3/24/92	Task	1
43	000110- ALMET ERECT SEQUENCE 15 STRUCT STEEL - 4	ALMET-1	3/24/92	3/27/92	Task	4
44	140020-TAM ROUGH SET - FLOOR/PLENUM - 1	TAM-1	3/25/92	3/25/92	Task	1
45	140016-TAM ROUGH SET DOWNCOMBERS - 2	TAM-1	3/25/92	3/26/92	Task	2
46	140022-TAM INSTALL FLUOSEAL SUPPORT STEEL - 3	TAM-1	3/25/92	3/27/92	Task	3
47	140186-TAM ERECT - ASH CLASSIFIER - 6	TAM-2	3/25/92	4/1/92	Task	6
48	140188-TAM ROUGH SET - ASH DUCT - 7	TAM-2	3/25/92	4/2/92	Task	7
49	140454-TAM DELIVER STEAM DRUM - AM 03/26/92	TAM-1	3/26/92	3/26/92	Milestone	0
50	140024-TAM ROUGH SET - BUCKSTAYS - 4	TAM-1	3/26/92	3/31/92	Task	4
51	140456-TAM DELIVER - AIR HEATER HOPPER - PM 03/27/92	TAM-2	3/30/92	3/30/92	Milestone	0
52	000115-ALMET ERECT SEQUENCE 16 STRUCT STEEL - 2	ALMET-1	3/30/92	3/31/92	Task	2
53	140026-TAM ROUGH SET - FLUOSEAL - 2	TAM-1	3/30/92	3/31/92	Task	2
54	140050-TAM GROUND ASSEMBLE - AIR HEATER HOPPER - 4	TAM-2	3/30/92	4/2/92	Task	4

Not  
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 Not started  
 on job not in wk  
 in wk.  
 on job not in 9  
 Steam down still in Pk.  
 - Ready to ship  
 Waiting for spurs  
 not started  
 on job?  
 3/25/92  
 not on project  
 On job



	activity	sub title	earliest start	earliest finish	type	d
55	000120-ALMET ERECT SEQUENCE 17 STRUCT STEEL - 2	ALMET-1	4/1/92	4/2/92	Task	2
56	140032-TAM ROUGH SET - FLUOSEAL DISCHARGE LEG - 2	TAM-1	4/1/92	4/2/92	Task	2
57	140028-TAM ROUGH SET - COAL GRAVIMETRIC FEEDER - 2	TAM-1	4/1/92	4/2/92	Task	2
58	140030-TAM ERECT - FLUOSEAL/J VALVE - 6	TAM-1	4/1/92	4/8/92	Task	6
59	000124-ALMET STRUCT STEEL COMPLETE - 1	ALMET-1	4/3/92	4/3/92	Task	1
60	140036-TAM ROUGH SET - BURNERS & PREPIPE RACK - 1	TAM-1	4/3/92	4/3/92	Task	1
61	140034-TAM ERECT - COAL GRAVIMETRIC FEEDER - 8	TAM-1	4/3/92	4/14/92	Task	8
62	140208-TAM ERECT - ASH DUCT - 10	TAM-2	4/3/92	4/16/92	Task	10
63	020005-A/C ELECT. MEZZ, FLOU SEAL, BATT RM - FORM/REBAR - 1	A/C-1	4/6/92	4/6/92	Task	1
64	140038-TAM INSTALL COMBUSTION TOP GRID STEEL - 7	TAM-1	4/6/92	4/14/92	Task	7
65	000125-ALMET ERECT LEAVE OUT STRUCT STEEL - 65	ALMET-1	4/6/92	7/7/92	Task	65
66	020010-A/C ELECT. MEZZ, FLOU SEAL, BATT RM - POUR - 1	A/C-1	4/7/92	4/7/92	Task	1
67	020020-A/C OPERATING FLOOR - FORM/REBAR - 1	A/C-1	4/7/92	4/7/92	Task	1
68	020035-A/C AIR HEATER, HEATER ASH LOAD FLOORS - FORM/REBAR - 1 *	A/C-1	4/8/92	4/8/92	Task	1
69	020025-A/C OPERATING FLOOR - POUR - 1	A/C-1	4/8/92	4/9/92	Task	2
70	020015-A/C ELECT. MEZZ, FLOU SEAL, BATT RM - CURE - 23	A/C-1	4/8/92	5/8/92	Task	23
71	020050-A/C BATTERY, SECONDARY FAN FLOOR - FORM/REBAR - 1	A/C-1	4/9/92	4/9/92	Task	1
72	140460-TAM DELIVER DUCT - SEC AIR AH TO BUSTLE - PM 04/08/92	TAM-1	4/9/92	4/9/92	Milestone	0
73	140040-TAM ROUGH SET - CYCLONE INLET EXPANSION JOINT - 1	TAM-1	4/9/92	4/9/92	Task	1
74	140044-TAM INSTALL - FLUIDIZING BLOWER - 6	TAM-1	4/9/92	4/16/92	Task	6
75	140042-TAM ERECT DUCT - PRI AIR AH TO PLENUM - 30 *	TAM-1	4/9/92	5/20/92	Task	30
76	020040-A/C AIR HEATER, HEATER ASH LOAD FLOORS - POUR - 1 *	A/C-1	4/10/92	4/10/92	Task	1
77	020065-A/C PRIMARY FAN FLOOR - FORM/REBAR - 1	A/C-1	4/10/92	4/10/92	Task	1
78	020051-A/C SECONDARY FAN PEDESTALS - FORM/REBAR - 4	A/C-1	4/10/92	4/15/92	Task	4
79	020030-A/C OPERATING ROOM - CURE - 20	A/C-1	4/10/92	5/7/92	Task	20
80	020055-A/C BATTERY, SECONDARY AIR FAN FLOOR - POUR - 1	A/C-1	4/13/92	4/13/92	Task	1
81	140462-TAM DELIVER DUCT - COAL FD PURGE AIR - PM 04/10/92	TAM-1	4/13/92	4/13/92	Milestone	0

In early start early finish sequence

	activity	sub title	earliest start	earliest finish	type	d
8 2	020080-A/C ELEVATOR MACHINE ROOM FLOOR - FORM/REBAR - 2	A/C-1	4/13/92	4/14/92	Task	2
8 3	020066-A/C PRIMARY AIR FAN PEDESTLES - FORM/REBAR - 4	A/C-1	4/13/92	4/16/92	Task	4
8 4	020045-A/C AIR HEATER, HEATER ASH LOAD FLOORS - CURE - 23	A/C-1	4/13/92	5/13/92	Task	23
8 5	020070-PRIMARY AIR FAN FLOOR - POUR - 1	A/C-1	4/14/92	4/14/92	Task	1
8 6	140464-TAM DELIVER - SAND SCREW FEEDER - PM 04/13/92	TAM-1	4/14/92	4/14/92	Milestone	0
8 7	140062-TAM ROUGH SET - SCREW CONVEYOR SAND - 2	TAM-1	4/14/92	4/15/92	Task	2
8 8	020060-A/C BATTERY, SECONDARY AIR FAN FLOOR - CURE - 23	A/C-1	4/14/92	5/14/92	Task	23
8 9	020085-A/C ELEVATOR MACHINE ROOM FLOOR - POUR - 1	A/C-1	4/15/92	4/15/92	Task	1
9 0	140058-TAM ROUGH SET DUCT - SEC AIR AH TO BUSTLE - 2	TAM-1	4/15/92	4/16/92	Task	2
9 1	140048-TAM INSTALL STEAM DRUM - 3	TAM-1	4/15/92	4/17/92	Task	3
9 2	140046-TAM INSTALL - CYCLONE SUPPORT STEEL - 5	TAM-1	4/15/92	4/21/92	Task	5
9 3	020075-A/C PRIMARY AIR FAN FLOOR - CURE - 23	A/C-1	4/15/92	5/15/92	Task	23
9 4	020056-A/C SECONDARY FAN PEDESTALS - POUR - 1	A/C-1	4/16/92	4/16/92	Task	1
9 5	140468-TAM DELIVER - SNCR SYSTEM TANK - PM 04/15/92	TAM-2	4/16/92	4/16/92	Milestone	0
9 6	140068-TAM ERECT SAND/FILL - SCREW CONVEYOR - 2	TAM-1	4/16/92	4/17/92	Task	2
9 7	140070 - TAM SET - UREA TANK - 2	TAM-2	4/16/92	4/17/92	Task	2
9 8	020090-A/C ELEVATOR MACHINE ROOM FLOOR - CURE - 23	A/C-1	4/16/92	5/18/92	Task	23
9 9	020071-A/C PRIMARY FAN PEDESTLES - POUR - 1	A/C-1	4/17/92	4/17/92	Task	1
100	140060-TAM ROUGH SET DUCT - COAL FD PURGE AIR - 2 *	TAM-1	4/17/92	4/20/92	Task	2
101	140236-TAM ERECT - ASH DUCT - 4	TAM-2	4/17/92	4/22/92	Task	4
102	140054-TAM INSTALL - FLUIDIZING DUCT - 15	TAM-1	4/17/92	5/7/92	Task	15
103	020061-A/C SECONDARY FAN PEDESTALS - CURE - 20	A/C-1	4/17/92	5/14/92	Task	20
104	140052-TAM INSTALL COMBUSTOR BOILER HANGERS - 10	TAM-1	4/20/92	5/1/92	Task	10
105	020076-A/C PRIMARY FAN PEDESTLES - CURE - 20	A/C-1	4/20/92	5/15/92	Task	20
106	140470-TAM DELIVER - TEMPERING / PREHEAT COILS - PM 04/20/92	TAM-2	4/21/92	4/21/92	Milestone	0
107	140064-TAM ROUGH SET - OF DUCT BUSTLE TO BURNERS - 2	TAM-1	4/21/92	4/22/92	Task	2
108	140472-TAM DELIVER - TUBES, FURNACE UPPER SW - PM 04/21/92	TAM-1	4/22/92	4/22/92	Milestone	0

In early start early finish sequence

	activity	sub title	earliest start	earliest finish	type	d
109	140476-TAM DELIVER - UPPER RW FURNACE TUBES - PM 04/24/92	TAM-2	4/25/92	4/25/92	Milestone	0
110	140474-TAM DELIVER - UPPER FW FURNACE TUBES - PM 04/24/92	TAM-1	4/27/92	4/27/92	Milestone	0
111	FROM 140052-TAM INSTALL COMBUSTOR BOILER HANGERS - SHT #01 - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
112	140480-TAM DELIVER - ECONOMIZER - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
113	140478-TAM DELIVER - AIRHEATER - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
114	140478-TAM DELIVER AIR HEATER - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
115	140066-TAM UPPER COMBUSTOR HEADERS - 5	TAM-1	5/4/92	5/8/92	Task	5
116	140072-TAM ROUGH SET - FURN SIDEWALL UPPER - 3	TAM-1	5/11/92	5/13/92	Task	3
117	140074-TAM ROUGH SET - FURN FW UPPER - 3	TAM-1	5/14/92	5/18/92	Task	3
118	140484-TAM DELIVER ECONOMIZER TO AH - PM 05/14/92	TAM-2	5/15/92	5/15/92	Milestone	0
119	FROM 140074-TAM ROUGH SET FURN FW UPPER - PM 05/18/92 - SHT #01	TAM-2	5/19/92	5/19/92	Milestone	0
120	140078-TAM ROUGH SET - FURN RW UPPER - 2	TAM-2	5/19/92	5/20/92	Task	2
121	140080-TAM ROUGH SET - AIR HEATER HOPPER - 2	TAM-2	5/21/92	5/22/92	Task	2
122	140082-TAM PART ERECT - UPPER FURN SIDEWALL - 3	TAM-2	5/21/92	5/26/92	Task	3
123	140084-TAM AIR HEATER SUPPORT STEEL - 3	TAM-2	5/26/92	5/28/92	Task	3
124	140486-TAM DELIVER - SH DUCT TO ECON - PM 05/26/92	TAM-2	5/27/92	5/27/92	Milestone	0
125	140082A-TAM COMP ERECT - UPPER FURN SIDEWALL - 3	TAM-2	5/27/92	5/29/92	Task	3
126	140086-TAM FURN SW WELD UPPER - 9	TAM-2	5/27/92	6/8/92	Task	9
127	140494-TAM DELIVER - RW LOWER FURNACE TUBES - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
128	140126-TAM ROUGH SET - GAS GUN PURGE AIR - 1	TAM-2	5/28/92	5/28/92	Task	1
129	140490-TAM DELIVER - SW LOWER FURNACE TUBES - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
130	140488-TAM DELIVER DUCT - GAS GUN PURGE AIR - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
131	140492-TAM DELIVER - FW FURNACE LOWER TUBES - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
132	140496-TAM DELIVER - RETRACTABLE SOOT BLOWERS - PM 05/28/92	TAM-2	5/29/92	5/29/92	Milestone	0
133	140132-TAM ROUGH SET - SAND PIPING TO COAL FEEDER - 2	TAM-2	5/29/92	6/1/92	Task	2
134	140088-TAM ROUGH SET - STEAM COIL AIR HEATER - 2	TAM-2	5/29/92	6/1/92	Task	2
135	140090-TAM ERECT - UPPER FURN FW - 6	TAM-2	6/1/92	6/8/92	Task	6

In early start early finish sequence

	activity	sub title	earliest start	earliest finish	type	d
136	140502-TAM DELIVER SOOTBLOWER ROTARY - PM 06/01/92	TAM-2	6/2/92	6/2/92	Milestone	0
137	140092-TAM ROUGH SET - PRIMARY AIR HEATER - 1	TAM-2	6/2/92	6/2/92	Task	1
138	140140-TAM ERECT - SAND PIPING TO COAL FEEDER - 8	TAM-2	6/2/92	6/11/92	Task	8
139	140504-TAM DELIVER - SUPERHEATER BUCKSTAYS - PM 06/02/92	TAM-2	6/3/92	6/3/92	Milestone	0
140	140504-TAM DELIVER - SUPERHEATER BUCKSTAYS - PM 06/02/92	TAM-2	6/3/92	6/3/92	Milestone	0
141	140510-TAM DELIVER - PNEUMATIC LIMESTONE SYSTEM - PM 06/02/92	TAM-2	6/3/92	6/3/92	Milestone	0
142	140150-TAM LIMESTONE SLIDE GATE - 1	TAM-2	6/3/92	6/3/92	Task	1
143	140098-TAM ROUGH SET - SECONDARY AIR HEATERS - 1	TAM-2	6/3/92	6/3/92	Task	1
144	140096-TAM ERECT PRIMARY AIR HEATER - 4	TAM-2	6/3/92	6/8/92	Task	4
145	140152-TAM LIMESTONE LINE - FEEDER TO BIN - 6	TAM-2	6/3/92	6/10/92	Task	6
146	140154-TAM LIMESTONE ROTARY AIR LOCK - 2	TAM-2	6/4/92	6/5/92	Task	2
147	140100-TAM ROUGH SET DUCT - ECON TO AH - 2	TAM-2	6/4/92	6/5/92	Task	2
148	140102-TAM ROUGH SET EXPANSION JOINT - 3	TAM-2	6/4/92	6/8/92	Task	3
149	140514-TAM DELIVER - SUPERHEATER HEADERS - PM 06/05/92	TAM-2	6/8/92	6/8/92	Milestone	0
150	140104-TAM INSTALL - ECONOMIZER SUPPORT STEEL - 3	TAM-2	6/8/92	6/10/92	Task	3
151	140158-TAM LIMESTONE CHUTES - 4	TAM-2	6/8/92	6/11/92	Task	4
152	140518-TAM DELIVER - SUPERHEATER ENCLOSURE HEADERS - PM 06/08/92	TAM-2	6/9/92	6/9/92	Milestone	0
153	140516-TAM DELIVER - SUPERHEATER ENCLOSURE HEADERS - PM 06/08/92	TAM-2	6/9/92	6/9/92	Milestone	0
154	140128-TAM ROUGH SET - FURN LW LOWER - 3	TAM-2	6/9/92	6/11/92	Task	3
155	140144-TAM ROUGH SET - FURN SW LOWER - 4	TAM-2	6/9/92	6/12/92	Task	4
156	140108-TAM ERECT - SECONDARY AIR HEATER - 4	TAM-2	6/9/92	6/12/92	Task	4
157	140106-TAM ERECT - UPPER FURN RW - 7	TAM-2	6/9/92	6/17/92	Task	7
158	140110-TAM ERECT - ECONOMIZER - 3	TAM-2	6/11/92	6/15/92	Task	3
159	140518-TAM DELIVER - SUPERHEATER ENCLOSURE WALLS - PM 06/11/92	TAM-2	6/12/92	6/12/92	Milestone	0
160	140518-TAM DELIVER SUPERHEATER ENCLOSURE WALLS - PM 06/11/92	TAM-2	6/12/92	6/12/92	Task	0
161	140172-TAM LIMESTONE ROTARY BLOWER - 3	TAM-2	6/12/92	6/16/92	Task	3
162	140094-TAM ERECT - STEAM COIL AIR HEATER - 4	TAM-2	6/12/92	6/17/92	Task	4

In early start early finish sequence

	activity	sub title	earliest start	earliest finish	type	d
163	140142-TAM ERECT - LOWER FURN FW -	TAM-2	6/12/92	6/22/92	Task	7
164	140112-TAM ERECT - AIR HEATER HOPPER - 6	TAM-2	6/15/92	6/22/92	Task	6
165	140160-TAM ERECT - LOWER FURN SW - 6	TAM-2	6/15/92	6/22/92	Task	6
166	140114-TAM ROUGH SET DUCT - SH TO ECONOMIZER - 2	TAM-2	6/16/92	6/17/92	Task	2
167	140124-TAM ROUGH SET SOOT BLOWER PIPING - 2	TAM-2	6/16/92	6/17/92	Task	2
168	140148-TAM SOOT BLOWERS - ROTARY - 4	TAM-2	6/16/92	6/19/92	Task	4
169	140122-TAM ERECT - 6" FEEDWATER PIPE - 4	TAM-2	6/16/92	6/19/92	Task	4
170	140116-TAM ERECT DUCT - ECON TO AH - 6	TAM-2	6/16/92	6/23/92	Task	6
171	140118-TAM ERECT - EXPANSION JOINT - 6	TAM-2	6/16/92	6/23/92	Task	6
172	140120-TAM FEEDWATER VALVE & PIPING - 7	TAM-2	6/16/92	6/24/92	Task	7
173	140136-TAM ROUGH SET - RETRACTABLE SOOT BLOWER - 2	TAM-2	6/18/92	6/19/92	Task	2
174	140134-TAM WELD UPPER FURN RW - 8	TAM-2	6/18/92	6/29/92	Task	8
175	140130-TAM ERECT BUCKSTAYS - 70	TAM-2	6/18/92	9/25/92	Task	70
176	140138-TAM ROUGH SET - HEAT RECOVERY AREA BUCKSTAYS - 3	TAM-2	6/22/92	6/24/92	Task	3
177	140146-TAM INSTALL - CYCLONE SUPPORT STEEL - 4	TAM-2	6/22/92	6/25/92	Task	4
178	140170-TAM WELD - FURN FW MIDDLE TUBE - 7	TAM-2	6/23/92	7/1/92	Task	7
179	140176-TAM WELD - FURN SW MIDDLE TUBE - 9	TAM-2	6/23/92	7/6/92	Task	9
180	140156-TAM ROUGH SET - INT SH OUTLET HEADER - 2	TAM-2	6/25/92	6/26/92	Task	2
181	140162-TAM ROUGH SET - DESUPERHEATER HDR - 1	TAM-2	6/29/92	6/29/92	Task	1
182	140168-TAM ERECT - DESUPERHEATER HEADER - 2	TAM-2	6/30/92	7/1/92	Task	2
183	140166-TAM ROUGH SET - LOWER FURN RW - 3	TAM-2	6/30/92	7/2/92	Task	3
184	140164-TAM HEAT RECOVERY AREA TOP GRID STEEL - 5	TAM-2	6/30/92	7/7/92	Task	5
185	140524-TAM DELIVER - ASH COOLING SCREWS - PM 07/01/92	TAM-2	7/2/92	7/2/92	Task	0
186	140522-TAM DELIVERY - SNCR SYSTEM PUMPS, MODULERS - PM 07/01/92	TAM-2	7/2/92	7/2/92	Milestone	0
187	140196-TAM UREA RECIRC PUMP - 2	TAM-2	7/2/92	7/6/92	Task	2
188	140198-TAM UREA CHEMICAL INJECTION SYSTEM - 3	TAM-2	7/2/92	7/7/92	Task	3
189	140200-TAM UREA DISTRIBUTION MODULES - 5	TAM-2	7/2/92	7/9/92	Task	5

In early start early finish sequence

	activity	sub title	earliest start	earliest finish	type	d
190	140206-TAM ASH COOLING SCREW CONVEYOR - 6	TAM-2	7/2/92	7/10/92	Task	6
191	140174 -TAM ERECT LOWER FURN RW - 7	TAM-2	7/6/92	7/14/92	Task	7
192	140526-TAM DELIVER - PRI AIR FANS TO AH - PM 07/06/92	TAM-2	7/7/92	7/7/92	Milestone	0
193	140190-TAM ERECT - FURN SW LOWER HDR - 4	TAM-2	7/7/92	7/10/92	Task	4
194	140204-TAM ROUGH ERECT DUCT - PRI AIR FANS TO AH - 5	TAM-2	7/7/92	7/13/92	Task	5
195	140178-TAM INSTALL SUPERHEAT BOILER HANGERS - 5	TAM-2	7/8/92	7/14/92	Task	5
196	140212-TAM UREA INTERCONNECTING PIPING - 9	TAM-2	7/10/92	7/22/92	Task	9
197	140528-TAM DELIVER DUCT - SECONDARY AIR FAN TO AH - PM 07/10/92	TAM-2	7/13/92	7/13/92	Milestone	0
198	140202-TAM FURNISH SW TUBE WELD LOWER TO HDR - 6	TAM-2	7/13/92	7/20/92	Task	6
199	140214-TAM ROUGH ERECT DUCT - SEC AIR FAN TO AH - 4	TAM-2	7/14/92	7/17/92	Task	4
200	140184-TAM ERECT - UPPER SH WALL RING HEADER - 3	TAM-2	7/15/92	7/17/92	Task	3
201	140182-TAM WELD FURN RW MIDDLE TUBE - 7	TAM-2	7/15/92	7/23/92	Task	7
202	140234-TAM ROUGH SET - NON METAL AIR DUCTS EXP JOINTS - 4	TAM-2	7/20/92	7/23/92	Task	4
203	140192-TAM ERECT - SH SIDE WALL PANELS - 4	TAM-2	7/20/92	7/23/92	Task	4
204	TO 140238-TAM TUBE WELD 1.5 X .180 SH SIDE PNL - SHT #03	TAM-2	7/23/92	7/23/92	Milestone	0
205	140194-TAM ERECT - SH FRONT WALL PANEL - 3	TAM-2	7/24/92	7/28/92	Task	3
206	140220-TAM ERECT - FLOOR PLENUM - 9	TAM-2	7/24/92	8/5/92	Task	9
207	140210-TAM ERECT - SH REAR WALL PANEL - 4	TAM-2	7/29/92	8/3/92	Task	4
208	140216-TAM ERECT - LOWER SH WALL RING HDR - 3	TAM-2	8/4/92	8/6/92	Task	3

In early start early finish sequence

	activity	sub title	earliest start	earliest finish	type	d
1	000010-1/R TO AWARD CONTRACT TO ALBERIC/CLARK - 11/04/91	A/C-1	11/4/91	11/4/91	Task	0
2	000015-A/C MOBILIZATION - 5	A/C-1	11/4/91	11/8/91	Task	5
3	000035-ALMET ERECT SEQUENCE 1 STRUCT STEEL - 5	ALMET-1	1/6/92	1/10/92	Task	5
4	000040-ALMET ERECT SEQUENCE 2 STRUCT STEEL - 5	ALMET-1	1/13/92	1/17/92	Task	5
5	000045- ALMET ERECT SEQUENCE 3 STRUCT STEEL - 6	ALMET-1	1/20/92	1/27/92	Task	6
6	000050-ALMET ERECT SEQUENCE 4 STRUCT STEEL - 5	ALMET-1	1/28/92	2/3/92	Task	5
7	000055-ALMET ERECT SEQUENCE 5 STRUCT STEEL - 6	ALMET-1	2/4/92	2/11/92	Task	6
8	000060-ALMET ERECT SEQUENCE 6 STRUCT STEEL - 6	ALMET-1	2/12/92	2/19/92	Task	6
9	000065- ALMET ERECT SEQUENCE 7 STRUCT STEEL - 2	ALMET-1	2/20/92	2/21/92	Task	2
10	000070-ALMET ERECT SEQUENCE 8 STRUCT STEEL - 3	ALMET-1	2/24/92	2/26/92	Task	3
11	000075-ALMET ERECT SEQUENCE 9 STRUCT STEEL - 5	ALMET-1	2/27/92	3/4/92	Task	5
12	000080-ALMET ERECT SEQUENCE 10 STRUCT STEEL - 2	ALMET-1	3/5/92	3/6/92	Task	2
13	000085- ALMET ERECT SEQUENCE 11 STRUCT STEEL - 4	ALMET-1	3/9/92	3/12/92	Task	4
14	000090-ALMET ERECT SEQUENCE 12 STRUCT STEEL - 2	ALMET-1	3/13/92	3/16/92	Task	2
15	000100-ALMET ERECT SEQUENCE 13 STRUCT STEEL - 2	ALMET-1	3/17/92	3/18/92	Task	2
16	000105-ALMET ERECT SEQUENCE 14 STRUCT STEEL - 3	ALMET-1	3/19/92	3/23/92	Task	3
17	000110- ALMET ERECT SEQUENCE 15 STRUCT STEEL - 4	ALMET-1	3/24/92	3/27/92	Task	4
18	000115-ALMET ERECT SEQUENCE 16 STRUCT STEEL - 2	ALMET-1	3/30/92	3/31/92	Task	2
19	000120-ALMET ERECT SEQUENCE 17 STRUCT STEEL - 2	ALMET-1	4/1/92	4/2/92	Task	2
20	000124-ALMET STRUCT STEEL COMPLETE - 1	ALMET-1	4/3/92	4/3/92	Task	1
21	000125-ALMET ERECT LEAVE OUT STRUCT STEEL - 65	ALMET-1	4/6/92	7/7/92	Task	65
22	020005-A/C ELECT. MEZZ, FLOU SEAL, BATT RM - FORM/REBAR - 1	A/C-1	4/6/92	4/6/92	Task	1
23	020010-A/C ELECT. MEZZ, FLOU SEAL, BATT RM - POUR - 1	A/C-1	4/7/92	4/7/92	Task	1
24	020015-A/C ELECT. MEZZ, FLOU SEAL, BATT RM - CURE - 23	A/C-1	4/8/92	5/8/92	Task	23
25	020020-A/C OPERATING FLOOR - FORM/REBAR - 1	A/C-1	4/7/92	4/7/92	Task	1
26	020025-A/C OPERATING FLOOR - POUR - 1	A/C-1	4/8/92	4/9/92	Task	2
27	020030-A/C OPERATING ROOM - CURE - 20	A/C-1	4/10/92	5/7/92	Task	20

In activity number order

	activity	sub title	earliest start	earliest finish	type	d
28	020035-A/C AIR HEATER, HEATER ASH LOAD FLOORS - FORM/REBAR - 1*	A/C-1	4/8/92	4/8/92	Task	1
29	020040-A/C AIR HEATER, HEATER ASH LOAD FLOORS - POUR - 1*	A/C-1	4/10/92	4/10/92	Task	1
30	020045-A/C AIR HEATER, HEATER ASH LOAD FLOORS - CURE - 23	A/C-1	4/13/92	5/13/92	Task	23
31	020050-A/C BATTERY, SECONDARY FAN FLOOR - FORM/REBAR - 1	A/C-1	4/9/92	4/9/92	Task	1
32	020051-A/C SECONDARY FAN PEDESTALS - FORM/REBAR - 4	A/C-1	4/10/92	4/15/92	Task	4
33	020055-A/C BATTERY, SECONDARY AIR FAN FLOOR - POUR - 1	A/C-1	4/13/92	4/13/92	Task	1
34	020056-A/C SECONDARY FAN PEDESTALS - POUR - 1	A/C-1	4/16/92	4/16/92	Task	1
35	020060-A/C BATTERY, SECONDARY AIR FAN FLOOR - CURE - 23	A/C-1	4/14/92	5/14/92	Task	23
36	020061-A/C SECONDARY FAN PEDESTALS - CURE - 20	A/C-1	4/17/92	5/14/92	Task	20
37	020065-A/C PRIMARY FAN FLOOR - FORM/REBAR - 1	A/C-1	4/10/92	4/10/92	Task	1
38	020066-A/C PRIMARY AIR FAN PEDESTLES - FORM/REBAR - 4	A/C-1	4/13/92	4/16/92	Task	4
39	020070-PRIMARY AIR FAN FLOOR - POUR - 1	A/C-1	4/14/92	4/14/92	Task	1
40	020071-A/C PRIMARY FAN PEDESTLES - POUR - 1	A/C-1	4/17/92	4/17/92	Task	1
41	020075-A/C PRIMARY AIR FAN FLOOR - CURE - 23	A/C-1	4/15/92	5/15/92	Task	23
42	020076-A/C PRIMARY FAN PEDESTLES - CURE - 20	A/C-1	4/20/92	5/15/92	Task	20
43	020080-A/C ELEVATOR MACHINE ROOM FLOOR - FORM/REBAR - 2	A/C-1	4/13/92	4/14/92	Task	2
44	020085-A/C ELEVATOR MACHINE ROOM FLOOR - POUR - 1	A/C-1	4/15/92	4/15/92	Task	1
45	020090-A/C ELEVATOR MACHINE ROOM FLOOR - CURE - 23	A/C-1	4/16/92	5/18/92	Task	23
46	140000- TAMPELLA MOBILIZATION - 15	TAM-1	3/2/92	3/20/92	Task	15
47	140002-TAM INSTALL LIMESTONE SILO - 1	TAM-2	3/23/92	3/23/92	Task	1
48	140004-TAM - LIMESTONE FOUNDATION STRUCTURE - 1	TAM-2	3/23/92	3/23/92	Task	1
49	140008-TAM GROUND ASSEMBLE DUCT - ECON TO AH - 7	TAM-2	3/23/92	3/31/92	Task	7
50	140010-TAM ROUGH SET DUCT - AIR HEATER TO PLENUM - 2	TAM-1	3/23/92	3/24/92	Task	2
51	140012-TAM SET SAND BIN - 2	TAM-1	3/23/92	3/24/92	Task	2
52	140014-TAM ROUGH SET - FURN DW LOWER HDR - 1	TAM-1	3/23/92	3/23/92	Task	1
53	140016-TAM ROUGH SET DOWNCOMBERS - 2	TAM-1	3/25/92	3/26/92	Task	2
54	140018-TAM ROUGH SET - FURN SW LOWER HDR - 1	TAM-1	3/24/92	3/24/92	Task	1

In activity number order



	activity	sub title	earliest start	earliest finish	type	d
55	140020-TAM ROUGH SET - FLOOR/PLENUM - 1	TAM-1	3/25/92	3/25/92	Task	1
56	140022-TAM INSTALL FLUOSEAL SUPPORT STEEL - 3	TAM-1	3/25/92	3/27/92	Task	3
57	140024-TAM ROUGH SET - BUCKSTAYS - 4	TAM-1	3/26/92	3/31/92	Task	4
58	140026-TAM ROUGH SET - FLUOSEAL - 2	TAM-1	3/30/92	3/31/92	Task	2
59	140028-TAM ROUGH SET - COAL GRAVIMETRIC FEEDER - 2	TAM-1	4/1/92	4/2/92	Task	2
60	140030-TAM ERECT - FLUOSEAL VALVE - 6	TAM-1	4/1/92	4/8/92	Task	6
61	140032-TAM ROUGH SET - FLUOSEAL DISCHARGE LEG - 2	TAM-1	4/1/92	4/2/92	Task	2
62	140034-TAM ERECT - COAL GRAVIMETRIC FEEDER - 8	TAM-1	4/3/92	4/14/92	Task	8
63	140036-TAM ROUGH SET - BURNERS & PREPIPE RACK - 1	TAM-1	4/3/92	4/3/92	Task	1
64	140038-TAM INSTALL COMBUSTION TOP GRID STEEL - 7	TAM-1	4/6/92	4/14/92	Task	7
65	140040-TAM ROUGH SET - CYCLONE INLET EXPANSION JOINT - 1	TAM-1	4/9/92	4/9/92	Task	1
66	140042-TAM ERECT DUCT - PRI AIR AH TO PLENUM - 30 *	TAM-1	4/9/92	5/20/92	Task	30
67	140044-TAM INSTALL - FLUIDIZING BLOWER - 6	TAM-1	4/9/92	4/16/92	Task	6
68	140046-TAM INSTALL - CYCLONE SUPPORT STEEL - 5	TAM-1	4/15/92	4/21/92	Task	5
69	140048-TAM INSTALL STEAM DRUM - 3	TAM-1	4/15/92	4/17/92	Task	3
70	140050-TAM GROUND ASSEMBLE - AIR HEATER HOPPER - 4	TAM-2	3/30/92	4/2/92	Task	4
71	140052-TAM INSTALL COMBUSTOR BOILER HANGERS - 10	TAM-1	4/20/92	5/1/92	Task	10
72	140054-TAM INSTALL - FLUIDIZING DUCT - 15	TAM-1	4/17/92	5/7/92	Task	15
73	140058-TAM ROUGH SET DUCT - SEC AIR AH TO BUSTLE - 2	TAM-1	4/15/92	4/16/92	Task	2
74	140060-TAM ROUGH SET DUCT - COAL FD PURGE AIR - 2 *	TAM-1	4/17/92	4/20/92	Task	2
75	140062-TAM ROUGH SET - SCREW CONVEYOR SAND - 2	TAM-1	4/14/92	4/15/92	Task	2
76	140064-TAM ROUGH SET - OF DUCT BUSTLE TO BURNERS - 2	TAM-1	4/21/92	4/22/92	Task	2
77	140066-TAM UPPER COMBUSTOR HEADERS - 5	TAM-1	5/4/92	5/8/92	Task	5
78	140068-TAM ERECT SAND/FILL - SCREW CONVEYOR - 2	TAM-1	4/16/92	4/17/92	Task	2
79	140070 - TAM SET - UREA TANK - 2	TAM-2	4/16/92	4/17/92	Task	2
80	140072-TAM ROUGH SET - FURN SIDEWALL UPPER - 3	TAM-1	5/11/92	5/13/92	Task	3
81	140074-TAM ROUGH SET - FURN FW UPPER - 3	TAM-1	5/14/92	5/18/92	Task	3

In activity number order

	activity	sub title	earliest start	earliest finish	type	d
8 2	140078-TAM ROUGH SET - FURN RW UPPER - 2	TAM-2	5/19/92	5/20/92	Task	2
8 3	140080-TAM ROUGH SET - AIR HEATER HOPPER - 2	TAM-2	5/21/92	5/22/92	Task	2
8 4	140082-TAM PART ERECT - UPPER FURN SIDEWALL - 3	TAM-2	5/21/92	5/26/92	Task	3
8 5	140082A-TAM COMP ERECT - UPPER FURN SIDEWALL - 3	TAM-2	5/27/92	5/29/92	Task	3
8 6	140084-TAM AIR HEATER SUPPORT STEEL - 3	TAM-2	5/26/92	5/28/92	Task	3
8 7	140086-TAM FURN SW WELD UPPER - 9	TAM-2	5/27/92	6/8/92	Task	9
8 8	140088-TAM ROUGH SET - STEAM COIL AIR HEATER - 2	TAM-2	5/29/92	6/1/92	Task	2
8 9	140090-TAM ERECT - UPPER FURN FW - 6	TAM-2	6/1/92	6/8/92	Task	6
9 0	140092-TAM ROUGH SET - PRIMARY AIR HEATER - 1	TAM-2	6/2/92	6/2/92	Task	1
9 1	140094-TAM ERECT - STEAM COIL AIR HEATER - 4	TAM-2	6/12/92	6/17/92	Task	4
9 2	140096-TAM ERECT PRIMARY AIR HEATER - 4	TAM-2	6/3/92	6/8/92	Task	4
9 3	140098-TAM ROUGH SET - SECONDARY AIR HEATERS - 1	TAM-2	6/3/92	6/3/92	Task	1
9 4	140100-TAM ROUGH SET DUCT - ECON TO AH - 2	TAM-2	6/4/92	6/5/92	Task	2
9 5	140102-TAM ROUGH SET EXPANSION JOINT - 3	TAM-2	6/4/92	6/8/92	Task	3
9 6	140104-TAM INSTALL - ECONOMIZER SUPPORT STEEL - 3	TAM-2	6/8/92	6/10/92	Task	3
9 7	140106-TAM ERECT - UPPER FURN RW - 7	TAM-2	6/9/92	6/17/92	Task	7
9 8	140108-TAM ERECT - SECONDARY AIR HEATER - 4	TAM-2	6/9/92	6/12/92	Task	4
9 9	140110-TAM ERECT - ECONOMIZER - 3	TAM-2	6/11/92	6/15/92	Task	3
10 0	140112-TAM ERECT - AIR HEATER HOPPER - 6	TAM-2	6/15/92	6/22/92	Task	6
10 1	140114-TAM ROUGH SET DUCT - SH TO ECONOMIZER - 2	TAM-2	6/16/92	6/17/92	Task	2
10 2	140116-TAM ERECT DUCT - ECON TO AH - 6	TAM-2	6/16/92	6/23/92	Task	6
10 3	140118-TAM ERECT - EXPANSION JOINT - 6	TAM-2	6/16/92	6/23/92	Task	6
10 4	140120-TAM FEEDWATER VALVE & PIPING - 7	TAM-2	6/16/92	6/24/92	Task	7
10 5	140122-TAM ERECT - 6" FEEDWATER PIPE - 4	TAM-2	6/16/92	6/19/92	Task	4
10 6	140124-TAM ROUGH SET SOOT BLOWER PIPING - 2	TAM-2	6/16/92	6/17/92	Task	2
10 7	140126-TAM ROUGH SET - GAS GUN PURGE AIR - 1	TAM-2	5/28/92	5/28/92	Task	1
10 8	140128-TAM ROUGH SET - FURN LW LOWER - 3	TAM-2	6/9/92	6/11/92	Task	3

In activity number order

	activity	sub title	earliest start	earliest finish	type	d
109	140130-TAM ERECT BUCKSTAYS - 70	TAM-2	6/18/92	9/25/92	Task	70
110	140132-TAM ROUGH SET - SAND PIPING TO COAL FEEDER - 2	TAM-2	5/29/92	6/1/92	Task	2
111	140134-TAM WELD UPPER FURN RW - 8	TAM-2	6/18/92	6/29/92	Task	8
112	140136-TAM ROUGH SET - RETRACTABLE SOOT BLOWER - 2	TAM-2	6/18/92	6/19/92	Task	2
113	140138-TAM ROUGH SET - HEAT RECOVERY AREA BUCKSTAYS - 3	TAM-2	6/22/92	6/24/92	Task	3
114	140140-TAM ERECT - SAND PIPING TO COAL FEEDER - 8	TAM-2	6/2/92	6/11/92	Task	8
115	140142-TAM ERECT - LOWER FURN FW -	TAM-2	6/12/92	6/22/92	Task	7
116	140144-TAM ROUGH SET - FURN SW LOWER - 4	TAM-2	6/9/92	6/12/92	Task	4
117	140146-TAM INSTALL - CYCLONE SUPPORT STEEL - 4	TAM-2	6/22/92	6/25/92	Task	4
118	140148-TAM SOOT BLOWERS - ROTARY - 4	TAM-2	6/16/92	6/19/92	Task	4
119	140150-TAM LIMESTONE SLIDE GATE - 1	TAM-2	6/3/92	6/3/92	Task	1
120	140152-TAM LIMESTONE LINE - FEEDER TO BIN - 6	TAM-2	6/3/92	6/10/92	Task	6
121	140154-TAM LIMESTONE ROTARY AIR LOCK - 2	TAM-2	6/4/92	6/5/92	Task	2
122	140156-TAM ROUGH SET - INT SH OUTLET HEADER - 2	TAM-2	6/25/92	6/26/92	Task	2
123	140158-TAM LIMESTONE CHUTES - 4	TAM-2	6/8/92	6/11/92	Task	4
124	140160-TAM ERECT - LOWER FURN SW - 6	TAM-2	6/15/92	6/22/92	Task	6
125	140162-TAM ROUGH SET - DESUPERHEATER HDR - 1	TAM-2	6/29/92	6/29/92	Task	1
126	140164-TAM HEAT RECOVERY AREA TOP GRID STEEL - 5	TAM-2	6/30/92	7/7/92	Task	5
127	140166-TAM ROUGH SET - LOWER FURN RW - 3	TAM-2	6/30/92	7/2/92	Task	3
128	140168-TAM ERECT - DESUPERHEATER HEADER - 2	TAM-2	6/30/92	7/1/92	Task	2
129	140170-TAM WELD - FURN FW MIDDLE TUBE - 7	TAM-2	6/23/92	7/1/92	Task	7
130	140172-TAM LIMESTONE ROTARY BLOWER - 3	TAM-2	6/12/92	6/16/92	Task	3
131	140174-TAM ERECT LOWER FURN RW - 7	TAM-2	7/6/92	7/14/92	Task	7
132	140176-TAM WELD - FURN SW MIDDLE TUBE - 9	TAM-2	6/23/92	7/6/92	Task	9
133	140178-TAM INSTALL SUPERHEAT BOILER HANGERS - 5	TAM-2	7/8/92	7/14/92	Task	5
134	140180-TAM ROUGH SET - ASH CLASSIFIER - 2	TAM-2	3/23/92	3/24/92	Task	2
135	140182-TAM WELD FURN RW MIDDLE TUBE - 7	TAM-2	7/15/92	7/23/92	Task	7

In activity number order

	activity	sub title	earliest start	earliest finish	type	d
136	140184-TAM ERECT - UPPER SH WALL RING HEADER - 3	TAM-2	7/15/92	7/17/92	Task	3
137	140186-TAM ERECT - ASH CLASSIFIER - 6	TAM-2	3/25/92	4/1/92	Task	6
138	140188-TAM ROUGH SET - ASH DUCT - 7	TAM-2	3/25/92	4/2/92	Task	7
139	140190-TAM ERECT - FURN SW LOWER HDR - 4	TAM-2	7/7/92	7/10/92	Task	4
140	140192-TAM ERECT - SH SIDE WALL PANELS - 4	TAM-2	7/20/92	7/23/92	Task	4
141	140194-TAM ERECT - SH FRONT WALL PANEL - 3	TAM-2	7/24/92	7/28/92	Task	3
142	140196-TAM UREA RECIRC PUMP - 2	TAM-2	7/2/92	7/6/92	Task	2
143	140198-TAM UREA CHEMICAL INJECTION SYSTEM - 3	TAM-2	7/2/92	7/7/92	Task	3
144	140200-TAM UREA DISTRIBUTION MODULES - 5	TAM-2	7/2/92	7/9/92	Task	5
145	140202-TAM FURNISH SW TUBE WELD LOWER TO HDR - 6	TAM-2	7/13/92	7/20/92	Task	6
146	140204-TAM ROUGH ERECT DUCT - PRI AIR FANS TO AH - 5	TAM-2	7/7/92	7/13/92	Task	5
147	140206-TAM ASH COOLING SCREW CONVEYOR - 6	TAM-2	7/2/92	7/10/92	Task	6
148	140208-TAM ERECT - ASH DUCT - 10	TAM-2	4/3/92	4/16/92	Task	10
149	140210-TAM ERECT - SH REAR WALL PANEL - 4	TAM-2	7/29/92	8/3/92	Task	4
150	140212-TAM UREA INTERCONNECTING PIPING - 9	TAM-2	7/10/92	7/22/92	Task	9
151	140214-TAM ROUGH ERECT DUCT - SEC AIR FAN TO AH - 4	TAM-2	7/14/92	7/17/92	Task	4
152	140216-TAM ERECT - LOWER SH WALL RING HDR - 3	TAM-2	8/4/92	8/6/92	Task	3
153	140220-TAM ERECT - FLOOR PLENUM - 9	TAM-2	7/24/92	8/5/92	Task	9
154	140234-TAM ROUGH SET - NON METAL AIR DUCTS EXP JOINTS - 4	TAM-2	7/20/92	7/23/92	Task	4
155	140236-TAM ERECT - ASH DUCT - 4	TAM-2	4/17/92	4/22/92	Task	4
156	140432-TAM DELIVER - AIR HEATER TO PLENUM DUCT - 02/28/92 PM - TO 140010	TAM-1	3/2/92	3/2/92	Milestone	0
157	140434-TAM DELIVER - FLUOSEAL - 03/02/92 PM - TO 140026	TAM-1	3/3/92	3/3/92	Milestone	0
158	140436-TAM DELIVER - FURNACE LOWER HEADERS - 03/04/92 PM - TO 140018	TAM-1	3/5/92	3/5/92	Milestone	0
159	140438-TAM DELIVER - FURNACE FLOOR TUBES - 03/05/92 PM - TO 140020	TAM-1	3/6/92	3/6/92	Milestone	0
160	140440-TAM DELIVER - FURNACE BUCKSTAYS - 03/06/92 PM - TO 140024	TAM-1	3/9/92	3/9/92	Milestone	0
161	140442-TAM DELIVER - FRAMING STEEL - 03/06/92 PM - TO 140022, 038, 046, 084, 104, 164	TAM-1	3/9/92	3/9/92	Milestone	0
162	140442-TAM DELIVER - FRAMING STEEL - 03/06/92 PM - TO 140022, 038, 046, 084, 104, 164	TAM-1	3/9/92	3/9/92	Milestone	0

In activity number order

	activity	sub title	earliest start	earliest finish	type	d
163	140442-TAM DELIVER - FRAMING STEEL - PM 03/06/92	TAM-2	3/9/92	3/9/92	Milestone	0
164	140444-TAM DELIVER - ASH CLASSIFIER - 03/09/92 - TO 140180	TAM-2	3/10/92	3/10/92	Milestone	0
165	140446-TAM DELIVER - COAL FEEDERS - 03/12/92 PM - TO 140028	TAM-1	3/13/92	3/13/92	Milestone	0
166	140448-TAM DELIVER - BURNERS & RACKS - 03/16/92 PM - TO 140036	TAM-1	3/17/92	3/17/92	Milestone	0
167	140450-TAM DELIVER - BURNER INJECTOR & RACKS - 03/16/92 PM - TO 140036	TAM-1	3/17/92	3/17/92	Milestone	0
168	140452-TAM DELIVER - SUPPORTS & HANGERS - 03/16/92 PM - TO 140052	TAM-1	3/17/92	3/17/92	Milestone	0
169	140452-TAM DELIVER SUPPORTS & HANGERS - PM 03/16/92	TAM-2	3/17/92	3/17/92	Milestone	0
170	140454-TAM DELIVER STEAM DRUM - AM 03/26/92	TAM-1	3/26/92	3/26/92	Milestone	0
171	140456-TAM DELIVER - AIR HEATER HOPPER - PM 03/27/92	TAM-2	3/30/92	3/30/92	Milestone	0
172	140460-TAM DELIVER DUCT - SEC AIR AH TO BUSTLE - PM 04/08/92	TAM-1	4/9/92	4/9/92	Milestone	0
173	140462-TAM DELIVER DUCT - COAL FD PURGE AIR - PM 04/10/92	TAM-1	4/13/92	4/13/92	Milestone	0
174	140464-TAM DELIVER - SAND SCREW FEEDER - PM 04/13/92	TAM-1	4/14/92	4/14/92	Milestone	0
175	140468-TAM DELIVER - SNCR SYSTEM TANK - PM 04/15/92	TAM-2	4/16/92	4/16/92	Milestone	0
176	140470-TAM DELIVER - TEMPERING / PREHEAT COILS - PM 04/20/92	TAM-2	4/21/92	4/21/92	Milestone	0
177	140472-TAM DELIVER - TUBES, FURNACE UPPER SW - PM 04/21/92	TAM-1	4/22/92	4/22/92	Milestone	0
178	140474-TAM DELIVER - UPPER FW FURNACE TUBES - PM 04/24/92	TAM-1	4/27/92	4/27/92	Milestone	0
179	140476-TAM DELIVER - UPPER RW FURNACE TUBES - PM 04/24/92	TAM-2	4/25/92	4/25/92	Milestone	0
180	140478-TAM DELIVER - AIRHEATER - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
181	140478-TAM DELIVER AIR HEATER - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
182	140480-TAM DELIVER - ECONOMIZER - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
183	140484-TAM DELIVER ECONOMIZER TO AH - PM 05/14/92	TAM-2	5/15/92	5/15/92	Milestone	0
184	140486-TAM DELIVER - SH DUCT TO ECON - PM 05/26/92	TAM-2	5/27/92	5/27/92	Milestone	0
185	140488-TAM DELIVER DUCT - GAS GUN PURGE AIR - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
186	140490-TAM DELIVER - SW LOWER FURNACE TUBES - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
187	140492-TAM DELIVER - FW FURNACE LOWER TUBES - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
188	140494-TAM DELIVER - RW LOWER FURNACE TUBES - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
189	140496-TAM DELIVER - RETRACTABLE SOOT BLOWERS - PM 05/28/92	TAM-2	5/29/92	5/29/92	Milestone	0

In activity number order

	activity	sub title	earliest start	earliest finish	type	d
190	140502-TAM DELIVER SOOTBLOWER ROTARY - PM 06/01/92	TAM-2	6/2/92	6/2/92	Milestone	0
191	140504-TAM DELIVER - SUPERHEATER BUCKSTAYS - PM 06/02/92	TAM-2	6/3/92	6/3/92	Milestone	0
192	140504-TAM DELIVER - SUPERHEATER BUCKSTAYS - PM 06/02/92	TAM-2	6/3/92	6/3/92	Milestone	0
193	140510-TAM DELIVER - PNEUMATIC LIMESTONE SYSTEM - PM 06/02/92	TAM-2	6/3/92	6/3/92	Milestone	0
194	140514-TAM DELIVER - SUPERHEATER HEADERS - PM 06/05/92	TAM-2	6/8/92	6/8/92	Milestone	0
195	140516-TAM DELIVER - SUPERHEATER ENCLOSURE HEADERS - PM 06/08/92	TAM-2	6/9/92	6/9/92	Milestone	0
196	140518-TAM DELIVER - SUPERHEATER ENCLOSURE HEADERS - PM 06/08/92	TAM-2	6/9/92	6/9/92	Milestone	0
197	140518-TAM DELIVER - SUPERHEATER ENCLOSURE WALLS - PM 06/11/92	TAM-2	6/12/92	6/12/92	Milestone	0
198	140518-TAM DELIVER SUPERHEATER ENCLOSURE WALLS - PM 06/11/92	TAM-2	6/12/92	6/12/92	Task	0
199	140522-TAM DELIVERY - SNCR SYSTEM PUMPS, MODULERS - PM 07/01/92	TAM-2	7/2/92	7/2/92	Milestone	0
200	140524-TAM DELIVER - ASH COOLING SCREWS - PM 07/01/92	TAM-2	7/2/92	7/2/92	Task	0
201	140526-TAM DELIVER - PRI AIR FANS TO AH - PM 07/06/92	TAM-2	7/7/92	7/7/92	Milestone	0
202	140528-TAM DELIVER DUCT - SECONDARY AIR FAN TO AH - PM 07/10/92	TAM-2	7/13/92	7/13/92	Milestone	0
203	FROM 140052-TAM INSTALL COMBUSTOR BOILER HANGERS - SHT #01 - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
204	FROM 140074-TAM ROUGH SET FURN FW UPPER - PM 05/18/92 - SHT #01	TAM-2	5/19/92	5/19/92	Milestone	0
205	T/R TO START OF ALMET ERECT STRUCT STEEL - 01/06/92	ALMET-1	1/6/92	1/6/92	Task	0
206	T/R TO TAMPELLA START MOBILIZATION - AM 03/02/92	TAM-1	3/2/92	3/2/92	Milestone	0
207	TO 140190-TAM ERECT - FURN SW LOWER HDR - SHT #02	TAM-1	3/24/92	3/24/92	Milestone	0
208	TO 140238-TAM TUBE WELD 1.5 X .180 SH SIDE PNL - SHT #03	TAM-2	7/23/92	7/23/92	Milestone	0

In activity number order

	activity	sub title	earliest start	earliest finish	type	d
1	000010-T/R TO AWARD CONTRACT TO ALBERICI/CLARK - 11/04/91	A/C-1	11/4/91	11/4/91	Task	0
2	000015-A/C MOBILIZATION - 5	A/C-1	11/4/91	11/8/91	Task	5
3	020005-A/C ELECT. MEZZ, FLOU SEAL, BATT RM - FORM/REBAR - 1	A/C-1	4/6/92	4/6/92	Task	1
4	020010-A/C ELECT. MEZZ, FLOU SEAL, BATT RM - POUR - 1	A/C-1	4/7/92	4/7/92	Task	1
5	020020-A/C OPERATING FLOOR - FORM/REBAR - 1	A/C-1	4/7/92	4/7/92	Task	1
6	020035-A/C AIR HEATER, HEATER ASH LOAD FLOORS - FORM/REBAR - 1 *	A/C-1	4/8/92	4/8/92	Task	1
7	020025-A/C OPERATING FLOOR - POUR - 1	A/C-1	4/8/92	4/9/92	Task	2
8	020015-A/C ELECT. MEZZ, FLOU SEAL, BATT RM - CURE - 23	A/C-1	4/8/92	5/8/92	Task	23
9	020050-A/C BATTERY, SECONDARY FAN FLOOR - FORM/REBAR - 1	A/C-1	4/9/92	4/9/92	Task	1
10	020040-A/C AIR HEATER, HEATER ASH LOAD FLOORS - POUR - 1 *	A/C-1	4/10/92	4/10/92	Task	1
11	020065-A/C PRIMARY FAN FLOOR - FORM/REBAR - 1	A/C-1	4/10/92	4/10/92	Task	1
12	020051-A/C SECONDARY FAN PEDESTALS - FORM/REBAR - 4	A/C-1	4/10/92	4/15/92	Task	4
13	020030-A/C OPERATING ROOM - CURE - 20	A/C-1	4/10/92	5/7/92	Task	20
14	020055-A/C BATTERY, SECONDARY AIR FAN FLOOR - POUR - 1	A/C-1	4/13/92	4/13/92	Task	1
15	020080-A/C ELEVATOR MACHINE ROOM FLOOR - FORM/REBAR - 2	A/C-1	4/13/92	4/14/92	Task	2
16	020066-A/C PRIMARY AIR FAN PEDESTLES - FORM/REBAR - 4	A/C-1	4/13/92	4/16/92	Task	4
17	020045-A/C AIR HEATER, HEATER ASH LOAD FLOORS - CURE - 23	A/C-1	4/13/92	5/13/92	Task	23
18	020070-PRIMARY AIR FAN FLOOR - POUR - 1	A/C-1	4/14/92	4/14/92	Task	1
19	020060-A/C BATTERY, SECONDARY AIR FAN FLOOR - CURE - 23	A/C-1	4/14/92	5/14/92	Task	23
20	020085-A/C ELEVATOR MACHINE ROOM FLOOR - POUR - 1	A/C-1	4/15/92	4/15/92	Task	1
21	020075-A/C PRIMARY AIR FAN FLOOR - CURE - 23	A/C-1	4/15/92	5/15/92	Task	23
22	020056-A/C SECONDARY FAN PEDESTALS - POUR - 1	A/C-1	4/16/92	4/16/92	Task	1
23	020090-A/C ELEVATOR MACHINE ROOM FLOOR - CURE - 23	A/C-1	4/16/92	5/18/92	Task	23
24	020071-A/C PRIMARY FAN PEDESTLES - POUR - 1	A/C-1	4/17/92	4/17/92	Task	1
25	020061-A/C SECONDARY FAN PEDESTALS - CURE - 20	A/C-1	4/17/92	5/14/92	Task	20
26	020076-A/C PRIMARY FAN PEDESTLES - CURE - 20	A/C-1	4/20/92	5/15/92	Task	20
27	T/R TO START OF ALMET ERECT STRUCT STEEL - 01/06/92	ALMET-1	1/6/92	1/6/92	Task	0



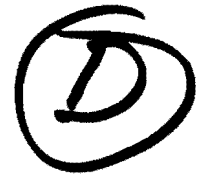
	activity	sub title	earliest start	earliest finish	type	d
28	000035-ALMET ERECT SEQUENCE 1 STRUCT STEEL - 5	ALMET-1	1/6/92	1/10/92	Task	5
29	000040-ALMET ERECT SEQUENCE 2 STRUCT STEEL - 5	ALMET-1	1/13/92	1/17/92	Task	5
30	000045-ALMET ERECT SEQUENCE 3 STRUCT STEEL - 6	ALMET-1	1/20/92	1/27/92	Task	6
31	000050-ALMET ERECT SEQUENCE 4 STRUCT STEEL - 5	ALMET-1	1/28/92	2/3/92	Task	5
32	000055-ALMET ERECT SEQUENCE 5 STRUCT STEEL - 6	ALMET-1	2/4/92	2/11/92	Task	6
33	000060-ALMET ERECT SEQUENCE 6 STRUCT STEEL - 6	ALMET-1	2/12/92	2/19/92	Task	6
34	000065-ALMET ERECT SEQUENCE 7 STRUCT STEEL - 2	ALMET-1	2/20/92	2/21/92	Task	2
35	000070-ALMET ERECT SEQUENCE 8 STRUCT STEEL - 3	ALMET-1	2/24/92	2/26/92	Task	3
36	000075-ALMET ERECT SEQUENCE 9 STRUCT STEEL - 5	ALMET-1	2/27/92	3/4/92	Task	5
37	000080-ALMET ERECT SEQUENCE 10 STRUCT STEEL - 2	ALMET-1	3/5/92	3/6/92	Task	2
38	000085-ALMET ERECT SEQUENCE 11 STRUCT STEEL - 4	ALMET-1	3/9/92	3/12/92	Task	4
39	000090-ALMET ERECT SEQUENCE 12 STRUCT STEEL - 2	ALMET-1	3/13/92	3/16/92	Task	2
40	000100-ALMET ERECT SEQUENCE 13 STRUCT STEEL - 2	ALMET-1	3/17/92	3/18/92	Task	2
41	000105-ALMET ERECT SEQUENCE 14 STRUCT STEEL - 3	ALMET-1	3/19/92	3/23/92	Task	3
42	000110-ALMET ERECT SEQUENCE 15 STRUCT STEEL - 4	ALMET-1	3/24/92	3/27/92	Task	4
43	000115-ALMET ERECT SEQUENCE 16 STRUCT STEEL - 2	ALMET-1	3/30/92	3/31/92	Task	2
44	000120-ALMET ERECT SEQUENCE 17 STRUCT STEEL - 2	ALMET-1	4/1/92	4/2/92	Task	2
45	000124-ALMET STRUCT STEEL COMPLETE - 1	ALMET-1	4/3/92	4/3/92	Task	1
46	000125-ALMET ERECT LEAVE OUT STRUCT STEEL - 65	ALMET-1	4/6/92	7/7/92	Task	65
47	140432-TAM DELIVER - AIR HEATER TO PLENUM DUCT - 02/28/92 PM - TO 140010	TAM-1	3/2/92	3/2/92	Milestone	0
48	T/R TO TAMPELLA START MOBILIZATION - AM 03/02/92	TAM-1	3/2/92	3/2/92	Milestone	0
49	140000- TAMPELLA MOBILIZATION - 15	TAM-1	3/2/92	3/20/92	Task	15
50	140434-TAM DELIVER - FLUOSEAL - 03/02/92 PM - TO 140026	TAM-1	3/3/92	3/3/92	Milestone	0
51	140436-TAM DELIVER - FURNACE LOWER HEADERS - 03/04/92 PM - TO 140018	TAM-1	3/5/92	3/5/92	Milestone	0
52	140438-TAM DELIVER - FURNACE FLOOR TUBES - 03/05/92 PM - TO 140020	TAM-1	3/6/92	3/6/92	Milestone	0
53	140440-TAM DELIVER - FURNACE BUCKSTAYS - 03/06/92 PM - TO 140024	TAM-1	3/9/92	3/9/92	Milestone	0
54	140442-TAM DELIVER - FRAMING STEEL - 03/06/92 PM - TO 140022, 038, 046, 084, 104, 164	TAM-1	3/9/92	3/9/92	Milestone	0



	activity	sub title	earliest start	earliest finish	type	d
55	140442-TAM DELIVER - FRAMING STEEL - 03/06/92 PM - TO 140022, 038, 046, 084, 104, 164	TAM-1	3/9/92	3/9/92	Milestone	0
56	140446-TAM DELIVER - COAL FEEDERS - 03/12/92 PM - TO 140028	TAM-1	3/13/92	3/13/92	Milestone	0
57	140448-TAM DELIVER - BURNERS & RACKS - 03/16/92 PM - TO 140036	TAM-1	3/17/92	3/17/92	Milestone	0
58	140450-TAM DELIVER - BURNER INJECTOR & RACKS - 03/16/92 PM - TO 140036	TAM-1	3/17/92	3/17/92	Milestone	0
59	140452-TAM DELIVER - SUPPORTS & HANGERS - 03/16/92 PM - TO 140052	TAM-1	3/17/92	3/17/92	Milestone	0
60	140014-TAM ROUGH SET - FURN DW LOWER HDR - 1	TAM-1	3/23/92	3/23/92	Task	1
61	140010-TAM ROUGH SET DUCT - AIR HEATER TO PLENUM - 2	TAM-1	3/23/92	3/24/92	Task	2
62	140012-TAM SET SAND BIN - 2	TAM-1	3/23/92	3/24/92	Task	2
63	140018-TAM ROUGH SET - FURN SW LOWER HDR - 1	TAM-1	3/24/92	3/24/92	Task	1
64	TO 140190-TAM ERECT - FURN SW LOWER HDR - SHT #02	TAM-1	3/24/92	3/24/92	Milestone	0
65	140020-TAM ROUGH SET - FLOOR/PLENUM - 1	TAM-1	3/25/92	3/25/92	Task	1
66	140016-TAM ROUGH SET DOWNCOMBERS - 2	TAM-1	3/25/92	3/26/92	Task	2
67	140022-TAM INSTALL FLUOSEAL SUPPORT STEEL - 3	TAM-1	3/25/92	3/27/92	Task	3
68	140454-TAM DELIVER STEAM DRUM - AM 03/26/92	TAM-1	3/26/92	3/26/92	Milestone	0
69	140024-TAM ROUGH SET - BUCKSTAYS - 4	TAM-1	3/26/92	3/31/92	Task	4
70	140026-TAM ROUGH SET - FLUOSEAL - 2	TAM-1	3/30/92	3/31/92	Task	2
71	140028-TAM ROUGH SET - COAL GRAVIMETRIC FEEDER - 2	TAM-1	4/1/92	4/2/92	Task	2
72	140032-TAM ROUGH SET - FLUOSEAL DISCHARGE LEG - 2	TAM-1	4/1/92	4/2/92	Task	2
73	140030-TAM ERECT - FLUOSEAL/J VALVE - 6	TAM-1	4/1/92	4/8/92	Task	6
74	140036-TAM ROUGH SET - BURNERS & PREPIPE RACK - 1	TAM-1	4/3/92	4/3/92	Task	1
75	140034-TAM ERECT - COAL GRAVIMETRIC FEEDER - 8	TAM-1	4/3/92	4/14/92	Task	8
76	140038-TAM INSTALL COMBUSTION TOP GRID STEEL - 7	TAM-1	4/6/92	4/14/92	Task	7
77	140040-TAM ROUGH SET - CYCLONE INLET EXPANSION JOINT - 1	TAM-1	4/9/92	4/9/92	Task	1
78	140460-TAM DELIVER DUCT - SEC AIR AH TO BUSTLE - PM 04/08/92	TAM-1	4/9/92	4/9/92	Milestone	0
79	140044-TAM INSTALL - FLUIDIZING BLOWER - 6	TAM-1	4/9/92	4/16/92	Task	6
80	140042-TAM ERECT DUCT - PRI AIR AH TO PLENUM - 30 *	TAM-1	4/9/92	5/20/92	Task	30
81	140462-TAM DELIVER DUCT - COAL FD PURGE AIR - PM 04/10/92	TAM-1	4/13/92	4/13/92	Milestone	0

	activity	sub title	earliest start	earliest finish	type	d
8 2	140464-TAM DELIVER - SAND SCREW FEEDER - PM 04/13/92	TAM-1	4/14/92	4/14/92	Milestone	0
8 3	140062-TAM ROUGH SET - SCREW CONVEYOR SAND - 2	TAM-1	4/14/92	4/15/92	Task	2
8 4	140058-TAM ROUGH SET DUCT - SEC AIR AH TO BUSTLE - 2	TAM-1	4/15/92	4/16/92	Task	2
8 5	140048-TAM INSTALL STEAM DRUM - 3	TAM-1	4/15/92	4/17/92	Task	3
8 6	140046-TAM INSTALL - CYCLONE SUPPORT STEEL - 5	TAM-1	4/15/92	4/21/92	Task	5
8 7	140068-TAM ERECT SAND/FILL - SCREW CONVEYOR - 2	TAM-1	4/16/92	4/17/92	Task	2
8 8	140060-TAM ROUGH SET DUCT - COAL FD PURGE AIR 2 *	TAM-1	4/17/92	4/20/92	Task	2
8 9	140054-TAM INSTALL - FLUIDIZING DUCT - 15	TAM-1	4/17/92	5/7/92	Task	15
9 0	140052-TAM INSTALL COMBUSTOR BOILER HANGERS - 10	TAM-1	4/20/92	5/1/92	Task	10
9 1	140064-TAM ROUGH SET - OF DUCT BUSTLE TO BURNERS - 2	TAM-1	4/21/92	4/22/92	Task	2
9 2	140472-TAM DELIVER - TUBES, FURNACE UPPER SW - PM 04/21/92	TAM-1	4/22/92	4/22/92	Milestone	0
9 3	140474-TAM DELIVER - UPPER FW FURNACE TUBES - PM 04/24/92	TAM-1	4/27/92	4/27/92	Milestone	0
9 4	140066-TAM UPPER COMBUSTOR HEADERS - 5	TAM-1	5/4/92	5/8/92	Task	5
9 5	140072-TAM ROUGH SET - FURN SIDEWALL UPPER - 3	TAM-1	5/11/92	5/13/92	Task	3
9 6	140074-TAM ROUGH SET - FURN FW UPPER - 3	TAM-1	5/14/92	5/18/92	Task	3

	activity	sub title	earliest start	earliest finish	type	d
1	140442-TAM DELIVER - FRAMING STEEL - PM 03/06/92	TAM-2	3/9/92	3/9/92	Milestone	0
2	140444-TAM DELIVER - ASH CLASSIFIER - 03/09/92 - TO 140180	TAM-2	3/10/92	3/10/92	Milestone	0
3	140452-TAM DELIVER SUPPORTS & HANGERS - PM 03/16/92	TAM-2	3/17/92	3/17/92	Milestone	0
4	140002-TAM INSTALL LIMESTONE SILO - 1	TAM-2	3/23/92	3/23/92	Task	1
5	140004-TAM - LIMESTONE FOUNDATION STRUCTURE - 1	TAM-2	3/23/92	3/23/92	Task	1
6	140180-TAM ROUGH SET - ASH CLASSIFIER - 2	TAM-2	3/23/92	3/24/92	Task	2
7	140008-TAM GROUND ASSEMBLE DUCT - ECON TO AH - 7	TAM-2	3/23/92	3/31/92	Task	7
8	140186-TAM ERECT - ASH CLASSIFIER - 6	TAM-2	3/25/92	4/1/92	Task	6
9	140188-TAM ROUGH SET - ASH DUCT - 7	TAM-2	3/25/92	4/2/92	Task	7
10	140456-TAM DELIVER - AIR HEATER HOPPER - PM 03/27/92	TAM-2	3/30/92	3/30/92	Milestone	0
11	140050-TAM GROUND ASSEMBLE - AIR HEATER HOPPER - 4	TAM-2	3/30/92	4/2/92	Task	4
12	140208-TAM ERECT - ASH DUCT - 10	TAM-2	4/3/92	4/16/92	Task	10
13	140468-TAM DELIVER - SNCR SYSTEM TANK - PM 04/15/92	TAM-2	4/16/92	4/16/92	Milestone	0
14	140070 - TAM SET - UREA TANK - 2	TAM-2	4/16/92	4/17/92	Task	2
15	140236-TAM ERECT - ASH DUCT - 4	TAM-2	4/17/92	4/22/92	Task	4
16	140470-TAM DELIVER - TEMPERING / PREHEAT COILS - PM 04/20/92	TAM-2	4/21/92	4/21/92	Milestone	0
17	140476-TAM DELIVER - UPPER RW FURNACE TUBES - PM 04/24/92	TAM-2	4/25/92	4/25/92	Milestone	0
18	140478-TAM DELIVER - AIRHEATER - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
19	140478-TAM DELIVER AIR HEATER - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
20	140480-TAM DELIVER - ECONOMIZER - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
21	FROM 140052-TAM INSTALL COMBUSTOR BOILER HANGERS - SHT #01 - PM 05/01/92	TAM-2	5/4/92	5/4/92	Milestone	0
22	140484-TAM DELIVER ECONOMIZER TO AH - PM 05/14/92	TAM-2	5/15/92	5/15/92	Milestone	0
23	FROM 140074-TAM ROUGH SET FURN FW UPPER - PM 05/18/92 - SHT #01	TAM-2	5/19/92	5/19/92	Milestone	0
24	140078-TAM ROUGH SET - FURN RW UPPER - 2	TAM-2	5/19/92	5/20/92	Task	2
25	140080-TAM ROUGH SET - AIR HEATER HOPPER - 2	TAM-2	5/21/92	5/22/92	Task	2
26	140082-TAM PART ERECT - UPPER FURN SIDEWALL - 3	TAM-2	5/21/92	5/26/92	Task	3
27	140084-TAM AIR HEATER SUPPORT STEEL - 3	TAM-2	5/26/92	5/28/92	Task	3



	activity	sub title	earliest start	earliest finish	type	d
28	140486-TAM DELIVER - SH DUCT TO ECON - PM 05/26/92	TAM-2	5/27/92	5/27/92	Milestone	0
29	140082A-TAM COMP ERECT - UPPER FURN SIDEWALL - 3	TAM-2	5/27/92	5/29/92	Task	3
30	140086-TAM FURN SW WELD UPPER - 9	TAM-2	5/27/92	6/8/92	Task	9
31	140126-TAM ROUGH SET - GAS GUN PURGE AIR - 1	TAM-2	5/28/92	5/28/92	Task	1
32	140488-TAM DELIVER DUCT - GAS GUN PURGE AIR - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
33	140490-TAM DELIVER - SW LOWER FURNACE TUBES - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
34	140492-TAM DELIVER - FW FURNACE LOWER TUBES - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
35	140494-TAM DELIVER - RW LOWER FURNACE TUBES - PM 05/27/92	TAM-2	5/28/92	5/28/92	Milestone	0
36	140496-TAM DELIVER - RETRACTABLE SOOT BLOWERS - PM 05/28/92	TAM-2	5/29/92	5/29/92	Milestone	0
37	140088-TAM ROUGH SET - STEAM COIL AIR HEATER - 2	TAM-2	5/29/92	6/1/92	Task	2
38	140132-TAM ROUGH SET - SAND PIPING TO COAL FEEDER - 2	TAM-2	5/29/92	6/1/92	Task	2
39	140090-TAM ERECT - UPPER FURN FW - 6	TAM-2	6/1/92	6/8/92	Task	6
40	140092-TAM ROUGH SET - PRIMARY AIR HEATER - 1	TAM-2	6/2/92	6/2/92	Task	1
41	140502-TAM DELIVER SOOTBLOWER ROTARY - PM 06/01/92	TAM-2	6/2/92	6/2/92	Milestone	0
42	140140-TAM ERECT - SAND PIPING TO COAL FEEDER - B	TAM-2	6/2/92	6/11/92	Task	8
43	140098-TAM ROUGH SET - SECONDARY AIR HEATERS - 1	TAM-2	6/3/92	6/3/92	Task	1
44	140150-TAM LIMESTONE SLIDE GATE - 1	TAM-2	6/3/92	6/3/92	Task	1
45	140504-TAM DELIVER - SUPERHEATER BUCKSTAYS - PM 06/02/92	TAM-2	6/3/92	6/3/92	Milestone	0
46	140504-TAM DELIVER - SUPERHEATER BUCKSTAYS - PM 06/02/92	TAM-2	6/3/92	6/3/92	Milestone	0
47	140510-TAM DELIVER - PNEUMATIC LIMESTONE SYSTEM - PM 06/02/92	TAM-2	6/3/92	6/3/92	Milestone	0
48	140096-TAM ERECT PRIMARY AIR HEATER - 4	TAM-2	6/3/92	6/8/92	Task	4
49	140152-TAM LIMESTONE LINE - FEEDER TO BIN - 6	TAM-2	6/3/92	6/10/92	Task	6
50	140100-TAM ROUGH SET DUCT - ECON TO AH - 2	TAM-2	6/4/92	6/5/92	Task	2
51	140154-TAM LIMESTONE ROTARY AIR LOCK - 2	TAM-2	6/4/92	6/5/92	Task	2
52	140102-TAM ROUGH SET EXPANSION JOINT - 3	TAM-2	6/4/92	6/8/92	Task	3
53	140514-TAM DELIVER - SUPERHEATER HEADERS - PM 06/05/92	TAM-2	6/8/92	6/8/92	Milestone	0
54	140104-TAM INSTALL - ECONOMIZER SUPPORT STEEL - 3	TAM-2	6/8/92	6/10/92	Task	3

	activity	sub title	earliest start	earliest finish	type	d
5 5	140158-TAM LIMESTONE CHUTES - 4	TAM-2	6/8/92	6/11/92	Task	4
5 6	140516-TAM DELIVER - SUPERHEATER ENCLOSURE HEADERS - PM 06/08/92	TAM-2	6/9/92	6/9/92	Milestone	0
5 7	140518-TAM DELIVER - SUPERHEATER ENCLOSURE HEADERS - PM 06/08/92	TAM-2	6/9/92	6/9/92	Milestone	0
5 8	140128-TAM ROUGH SET - FURN LW LOWER - 3	TAM-2	6/9/92	6/11/92	Task	3
5 9	140108-TAM ERECT - SECONDARY AIR HEATER - 4	TAM-2	6/9/92	6/12/92	Task	4
6 0	140144-TAM ROUGH SET - FURN SW LOWER - 4	TAM-2	6/9/92	6/12/92	Task	4
6 1	140106-TAM ERECT - UPPER FURN RW - 7	TAM-2	6/9/92	6/17/92	Task	7
6 2	140110-TAM ERECT - ECONOMIZER - 3	TAM-2	6/11/92	6/15/92	Task	3
6 3	140518-TAM DELIVER - SUPERHEATER ENCLOSURE WALLS - PM 06/11/92	TAM-2	6/12/92	6/12/92	Milestone	0
6 4	140518-TAM DELIVER SUPERHEATER ENCLOSURE WALLS - PM 06/11/92	TAM-2	6/12/92	6/12/92	Task	0
6 5	140172-TAM LIMESTONE ROTARY BLOWER - 3	TAM-2	6/12/92	6/16/92	Task	3
6 6	140094-TAM ERECT - STEAM COIL AIR HEATER - 4	TAM-2	6/12/92	6/17/92	Task	4
6 7	140142-TAM ERECT - LOWER FURN FW -	TAM-2	6/12/92	6/22/92	Task	7
6 8	140112-TAM ERECT - AIR HEATER HOPPER - 6	TAM-2	6/15/92	6/22/92	Task	6
6 9	140160-TAM ERECT - LOWER FURN SW - 6	TAM-2	6/15/92	6/22/92	Task	6
7 0	140114-TAM ROUGH SET DUCT - SH TO ECONOMIZER - 2	TAM-2	6/16/92	6/17/92	Task	2
7 1	140124-TAM ROUGH SET SOOT BLOWER PIPING - 2	TAM-2	6/16/92	6/17/92	Task	2
7 2	140122-TAM ERECT - 6" FEEDWATER PIPE - 4	TAM-2	6/16/92	6/19/92	Task	4
7 3	140148-TAM SOOT BLOWERS - ROTARY - 4	TAM-2	6/16/92	6/19/92	Task	4
7 4	140116-TAM ERECT DUCT - ECON TO AH - 6	TAM-2	6/16/92	6/23/92	Task	6
7 5	140118-TAM ERECT - EXPANSION JOINT - 6	TAM-2	6/16/92	6/23/92	Task	6
7 6	140120-TAM FEEDWATER VALVE & PIPING - 7	TAM-2	6/16/92	6/24/92	Task	7
7 7	140136-TAM ROUGH SET - RETRACTABLE SOOT BLOWER - 2	TAM-2	6/18/92	6/19/92	Task	2
7 8	140134-TAM WELD UPPER FURN RW - 8	TAM-2	6/18/92	6/29/92	Task	8
7 9	140130-TAM ERECT BUCKSTAYS - 70	TAM-2	6/18/92	9/25/92	Task	70
8 0	140138-TAM ROUGH SET - HEAT RECOVERY AREA BUCKSTAYS - 3	TAM-2	6/22/92	6/24/92	Task	3
8 1	140146-TAM INSTALL - CYCLONE SUPPORT STEEL - 4	TAM-2	6/22/92	6/25/92	Task	4

	activity	sub title	earliest start	earliest finish	type	d
8 2	140170-TAM WELD - FURN FW MIDDLE TUBE - 7	TAM-2	6/23/92	7/1/92	Task	7
8 3	140176-TAM WELD - FURN SW MIDDLE TUBE - 9	TAM-2	6/23/92	7/6/92	Task	9
8 4	140156-TAM ROUGH SET - INT SH OUTLET HEADER - 2	TAM-2	6/25/92	6/26/92	Task	2
8 5	140162-TAM ROUGH SET - DESUPERHEATER HDR - 1	TAM-2	6/29/92	6/29/92	Task	1
8 6	140168-TAM ERECT - DESUPERHEATER HEADER - 2	TAM-2	6/30/92	7/1/92	Task	2
8 7	140166-TAM ROUGH SET - LOWER FURN RW - 3	TAM-2	6/30/92	7/2/92	Task	3
8 8	140164-TAM HEAT RECOVERY AREA TOP GRID STEEL - 5	TAM-2	6/30/92	7/7/92	Task	5
8 9	140522-TAM DELIVERY - SNCR SYSTEM PUMPS, MODULERS - PM 07/01/92	TAM-2	7/2/92	7/2/92	Milestone	0
9 0	140524-TAM DELIVER - ASH COOLING SCREWS - PM 07/01/92	TAM-2	7/2/92	7/2/92	Task	0
9 1	140196-TAM UREA RECIRC PUMP - 2	TAM-2	7/2/92	7/6/92	Task	2
9 2	140198-TAM UREA CHEMICAL INJECTION SYSTEM - 3	TAM-2	7/2/92	7/7/92	Task	3
9 3	140200-TAM UREA DISTRIBUTION MODULES - 5	TAM-2	7/2/92	7/9/92	Task	5
9 4	140206-TAM ASH COOLING SCREW CONVEYOR - 6	TAM-2	7/2/92	7/10/92	Task	6
9 5	140174 -TAM ERECT LOWER FURN RW - 7	TAM-2	7/6/92	7/14/92	Task	7
9 6	140526-TAM DELIVER - PRI AIR FANS TO AH - PM 07/06/92	TAM-2	7/7/92	7/7/92	Milestone	0
9 7	140190-TAM ERECT - FURN SW LOWER HDR - 4	TAM-2	7/7/92	7/10/92	Task	4
9 8	140204-TAM ROUGH ERECT DUCT - PRI AIR FANS TO AH - 5	TAM-2	7/7/92	7/13/92	Task	5
9 9	140178-TAM INSTALL SUPERHEAT BOILER HANGERS - 5	TAM-2	7/8/92	7/14/92	Task	5
10 0	140212-TAM UREA INTERCONNECTING PIPING - 9	TAM-2	7/10/92	7/22/92	Task	9
10 1	140528-TAM DELIVER DUCT - SECONDARY AIR FAN TO AH - PM 07/10/92	TAM-2	7/13/92	7/13/92	Milestone	0
10 2	140202-TAM FURNISH SW TUBE WELD LOWER TO HDR - 6	TAM-2	7/13/92	7/20/92	Task	6
10 3	140214-TAM ROUGH ERECT DUCT - SEC AIR FAN TO AH - 4	TAM-2	7/14/92	7/17/92	Task	4
10 4	140184-TAM ERECT - UPPER SH WALL RING HEADER - 3	TAM-2	7/15/92	7/17/92	Task	3
10 5	140182-TAM WELD FURN RW MIDDLE TUBE - 7	TAM-2	7/15/92	7/23/92	Task	7
10 6	140192-TAM ERECT - SH SIDE WALL PANELS - 4	TAM-2	7/20/92	7/23/92	Task	4
10 7	140234-TAM ROUGH SET - NON METAL AIR DUCTS EXP JOINTS - 4	TAM-2	7/20/92	7/23/92	Task	4
10 8	TO 140238-TAM TUBE WELD 1.5 X .180 SH SIDE PNL - SHT #03	TAM-2	7/23/92	7/23/92	Milestone	0

	activity	sub title	earliest start	earliest finish	type	d
109	140194-TAM ERECT - SH FRONT WALL PANEL - 3	TAM-2	7/24/92	7/28/92	Task	3
110	140220-TAM ERECT - FLOOR PLENUM - 9	TAM-2	7/24/92	8/5/92	Task	9
111	140210-TAM ERECT - SH REAR WALL PANEL - 4	TAM-2	7/29/92	8/3/92	Task	4
112	140216-TAM ERECT - LOWER SH WALL RING HDR - 3	TAM-2	8/4/92	8/6/92	Task	3

9:14

**Ralph J. Stephenson P.E. P.C.**

Consulting Engineer

323 Hiawatha Drive

Mt. Pleasant, Michigan 48858 ph 517 772 2537

October 22, 1991

Mr. James Simons  
Project Representative  
Michigan State University  
Physical Plant  
East Lansing, Michigan 48824

Dear Jim:

Enclosed is a copy of the material you, Dick Wever and I prepared on Monday, October 21, 1991 outlining contents of the General Project Manager's briefing manual for the Power Plant #4 project.

This replaces the rough copy left with you and Dick. There were a couple of minor changes made, including the addition of Dick's name to the list of those present at the pm meeting and a change in the reference date of the current networks. Otherwise the material is the same, but more readable.

Only one copy is being sent and that to you since I feel that distribution to the others is best made through one source. I shall check with you on Thursday, October 24, 1991 to see if you got the information.

Thanks for your help.



Ralph J. Stephenson



T. B. Simon Unit 4, Michigan State University - notes #3

1. 1:40:36 PM - Monday, October 21, 1991
  - 1.1. T. B. Simon Power Plant Unit 4 Addition notes
  - 1.2. By Ralph J. Stephenson
  - 1.3. Meeting date - Monday, October 21, 1991
  - 1.4. Location - MSU Physical Plant office & MSU Power Plant field office
  - 1.5. Those attending
    - 1.5.1. AM meetings
      - Robert Nestle - University engineer
      - Robert Dowding - MSU contracts officer
      - Joe Kavanagh - MSU project manager
      - Jim Simons - MSU project representative
      - Dick Wever - MSU construction superintendent
      - Ralph J. Stephenson - consultant
    - 1.5.2. PM meetings
      - Dick Wever - MSU construction superintendent
      - Jim Simons - MSU project representative
      - Ralph J. Stephenson - consultant
  - 1.6. Agenda
    - 1.6.1. AM
      - Discuss assignment of contracts
      - Discuss interim date structure
      - Review lay down area designations
      - Decide on how to convey contract data to General Project Manager (gpm)
    - 1.6.2. PM
      - Prepare briefing manual for General Project Manager
  - 1.7. MSU Power Plant #4 addition briefing manual
    - 1.7.1. Table of contents - checks indicate item put in briefing manuals
      - √Milestone dates
      - √Design data and schedules
      - √Covered in the 17 point discussion below under acceptance of the various contracts indicated
        - √Planning and scheduling project work
          - Design
          - Fabrication
          - Installation and erection
        - √Contracts awarded to date
        - √Contracts to be awarded
        - √Management scope of work included in contracts
        - √Fabrication data and schedules
        - √Tracking project work
          - Design
          - Fabrication
          - Installation & erection
        - √Processing payments
        - √Processing submittals
        - √Processing revisions
      - √Installation & erection data and schedules
    - 1.7.2. Briefing Manual
      - Contracts awarded to date
      - 62.3401 - Steam generator - furnish & erect

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- Awarded to Tampella Keeler - March 11, 1991 (wd 304)
- 62.1001 - Turbine generator - furnish & erect
  - Awarded to General Electric - March 1, 1991 (wd 298)
- 62.0601 - Cooling tower - furnish & erect
  - Awarded to Thermal Dynamic Towers, Inc. - April 10, 1991 (wd 326)
- 62.0203 - Fabric filter
  - Awarded to Environmental Elements Corporation - March 19, 1991 (wd 310)
- 64.0212 - Distributed controls
  - Awarded to Bailey Controls Company - March 14, 1991 (wd 307)
- 71.0402 - Site work & concrete foundations
  - Approved for award to Design & Build of Lansing, Inc. - June 7, 1991 (wd 368)
- 61.4001 - Structural steel
  - Approved for award to Almet, Inc. - July 26, 1991 (wd 401)
- 72.0200 - General Project Management
  - Awarded to joint venture of Alberici/Clark - approved for award October 11, 1991 (wd 4560)
  - Includes
    - Architectural and building enclosure - formerly numbered 71.0403
    - Mechanical construction - formerly numbered 72.0200

***Contracts to be awarded***

- 73.0200 - Electrical construction - to be bid in January, 1992 & approved at the February, 1992 Board meeting
  - To be assigned to General Project Manager (72.2000)
- 63.0000 - Electrical equipment - bids received October 7, 1991 (wd 451)
  - Apparent low bidder - ?
  - Installation of electrical equipment to be assigned to electrical construction contractor (73.0200)

***Scope of General Project Manager's (gpm) work included in contracts***

**From page 1A-4 & 5 - General Construction - 72.0200 - original specifications**

Project Management Requirements.- The Contractor and his subcontractors shall actively participate in and adhere to the Owner's project management requirements, job rules and conduct, fire protection and safety procedures, and all other procedures initiated by the Owner for the purpose of maintaining jobsite administrative control. The Contractor and his subcontractors shall attend project management meetings or other meetings as deemed necessary by the Owner.

The Contractor shall have six other Owner contracts assigned as subcontracts for the purpose of project management, site coordination, and administration as specified herein.

The Contractor shall coordinate all subcontract work, monitor all activities, process all Bulletins, Change Orders, process all Applications for Payment, and interface all assigned subcontractors with the Owner. (sic).

For purposes of clarification, Project Management on this job shall include, but not necessarily be limited to the following minimum activities / responsibilities.

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- a. Acceptance of assignment of the various contracts for this project as determined by the Owner.
- b. Coordination & assignment of all laydown and storage space.
- c. Coordination & scheduling all project related site activities.
- d. Coordination, planning, & assisting the Owner's planning consultant with CPM scheduling of all project related construction activities.
- e. Arbitration & resolution between Contractor, Subcontractors and all assignees of all site & construction disputes.
- f. Timely and accurate processing of all bulletins, change orders, field orders, and payment requests for Contractor, Subcontractors, and all assignees.
- g. Attendance at and coordination of all weekly or special project progress meetings with the Owner.
- h. Monthly updates of all Owner CPM schedules using input from all parties.
- i. Coordination of all site services.
- j. Assist Owner's Project Representative in inspection of the Work to guard against defects and deficiencies.

**As clarified in addendum #1 - page 8**

- Accept assignment of the various contracts indicated.
- Monitor work of subcontractors and coordinate the work with activities and responsibilities of the Owner and the A & E.
- Coordinate, plan, and schedule all construction activities, and exercise control of the construction site.
- Assist Owner's CPM network planning consultant to develop and maintain project schedule.
- Assist Owner's Project Representative in inspection of the work to guard against defects and deficiencies.
- Arbitrate and resolve all site and construction disputes.
- Field inventory and inspection of all material received from suppliers and notify the Owner and subcontractors of any deficiencies.
- Implement timely and accurate program for processing shop drawings, bulletins, change orders, field orders, and payment requests.

*Assignment of the various contracts indicated*

The acceptance of assignment of design, furnish & install (dfi) contracts means that the General Project Manager will accept the Owner's instructions as to the gmp's scope of work for erection of the designed and furnished materials and equipment.

It is assumed by the Owner that all site fabrication is part of the installation and erection process, and as such is under the management of the General Project Manager, in conjunction with each dfi installation and erection supervisor.

The General Project Manager will be responsible for directing the dfi contractor's forces in the following activities from the time the dfi contractor moves on the project site or when dfi materials and equipment arrive on the project site, whichever is earlier.

- 01.) Plan all laydown and storage space.
- 02.) Make all space assignments to the dfi contractors
- 03.) Prepare an inventory of all dfi material and equipment as it arrives at the job site
- 04.) Insure that proper protection and insurance coverage is provided for all dfi materials and equipment by dfi contractor.
- 05.) Regularly inform Owner's representative of the current inventory location, amount, expected draw down from stock, protection status and insurance status of all dfi site stored materials & equipment.
- 06.) Participate in and mutually agree with the Owner, the dfi contractor, and the Owner's planning consultant on a clearly defined procedure for preparing and issuing network models and schedules for all dfi installation and erection activities.
- 07.) Plan and schedule all dfi project related installation and erection activities in conjunction with the dfi contractor and the Owner's planning consultant.
- 08.) Participate in and mutually agree with the Owner, the dfi contractor and the Owner's planning consultant on a clearly defined measuring and monitoring procedure for evaluating current project status on a regular basis.
- 10.) In conjunction with the Owner, the dfi contractor and the Owner's planning consultant, monitor project status and measure against the current network model and schedule on a regular basis.
- 11.) Participate in and mutually agree with the Owner, the dfi contractor and the Owner's planning consultant on a clearly defined network model and

T. B. Simon Unit 4, Michigan State University - notes #3

schedule updating procedures to be accomplished with all affected parties.

12.) Identify, arbitrate, and resolve installation and erection disputes between all dfi contractors, dfi subcontractors, and General Project Manager subcontractors.

13.) Act as the Owner's limited agent in effectively processing all erection and installation bulletins, change orders, field orders, and payment requests from dfi contractors. The procedures and limitations for processing are to be established in conjunction with the Owner's Representative to the mutual satisfaction of the General Project Manager and the Owner's Representative.

14.) Attend, conduct and prepare the official minutes of all weekly and special project progress meetings with the dfi contractors, the Owner, and the Architect and Engineer.

15.) Provide all services required to maintain the construction site so as to be fully accessible and usable by the Owner and all contractors. Details of this requirement are to be mutually agreed upon between the Owner and the General Project Manager.

16.) Develop a project construction quality control program to effectively protect the Owner from defects and deficiencies in the work. Such program shall be subject to the Owner's review and approval.

17.) Act as the Owner's limited agent in effectively processing all submittals including shop drawings, samples and mock ups among others. The procedures and limitations for processing are to be established in conjunction with the Owner's Representative to the mutual satisfaction of the General Project Manager and the Owner's Representative.

***Milestone dates***

Provide the gpm with MSU power plant addition #4 contract dates data matrix  
Jim Simons to verify final matrix data with contract dates  
To be attached to briefing manual

***Design data & schedules***

Included in Black & Veatch design and engineering schedules  
To be attached to briefing manual

***List of network models & translations issued on project as of 10/21/91 (wd 461)***

Summary network models

Current networks

Sheet #sm2 - Issue #5, dated 09/05/91 (429)

Bulletin - change order processing network

T. B. Simon Unit 4, Michigan State University - notes #3

- Current networks
  - Sheet #cor 1 - Issue #3, dated 05/08/91 (346)
- Superseded networks
  - Sheet #cor 1 - Issue #1, dated 04/23/91 (335)
    - Superseded by issue #2
  - Sheet #cor 1 - Issue #2, dated 05/06/91 (344)
    - Superseded by issue #3
- Contract award networks
  - Template
    - Sheet #P1F - Issue #1, dated 03/12/91 (305)
      - Superseded by issue #2
    - Sheet #P1F - Issue #2, dated 03/15/91 (308)
      - Superseded by individual award networks
  - Multiple contract award networks
    - Current networks
      - Sheets #sscal 1, abcal 1, mcal1, elcal 1, eccal 1 - Issue # 2, dated May 22, 1991 (356)
        - Translations issued
          - Data tabulations
            - In es, ef sequence
            - By package in es, ef sequence
            - In ls, lf sequence
            - In lf, ls sequence
          - Bar chart by weekly increments
- Contract 71.0402 - Site & foundation work
  - Current networks
    - Sheet #1 - Issue #5, dated 09/3/91 (415)
  - Superseded networks
    - Sheet #Asm1 - Issue #1, dated 04/02/91 (320) - scenario A
      - Superseded by sheet #1, issue #1 & by multiple contract award networks
    - Sheet #Bsm1 - Issue #1, dated 04/02/91 (320) - scenario B
      - Superseded by sheet #1, issue #1 & by multiple contract award networks
    - Sheet #Csm1 - Issue #1, dated 04/02/91 (320) - scenario C
      - Superseded by sheet #1, issue #1 & by multiple contract award networks
    - Sheet #1 - Issue #1, dated 05/23/91 (357)
      - Superseded by Issue #2
    - Sheet #1 - Issue #2, dated 06/07/92 (367)
      - Superseded by Issue #3
    - Sheet #1 - Issue #3, dated 07/12/91 (391)
      - Translations issued
        - Data tabulation in es, ef sequence
        - Bar chart by weekly increments
      - Superseded by Issue #4
    - Sheet #1 - Issue #4, dated 08/12/91 (412)
      - Translations issued
        - Day time scale bar chart
- Contract 61.4001 - Structural steel

T. B. Simon Unit 4, Michigan State University - notes #3

Current networks

Included in multiple contract award networks listed above

Superseded networks

Sheet #sscal - Issue #1 dated 04/23/91 (325)

Superseded by multiple network sheet sscal 1, abcal 1, mdal 1, elcal  
1 & eccal

Contract 62.3401 - Steam Generator

Current networks

Sheet BL1 - issue #2 dated October 9, 1991 (wd 453)

Superseded network

Sheet BL1 - issue #1 dated September 19, 1991 (wd 439)

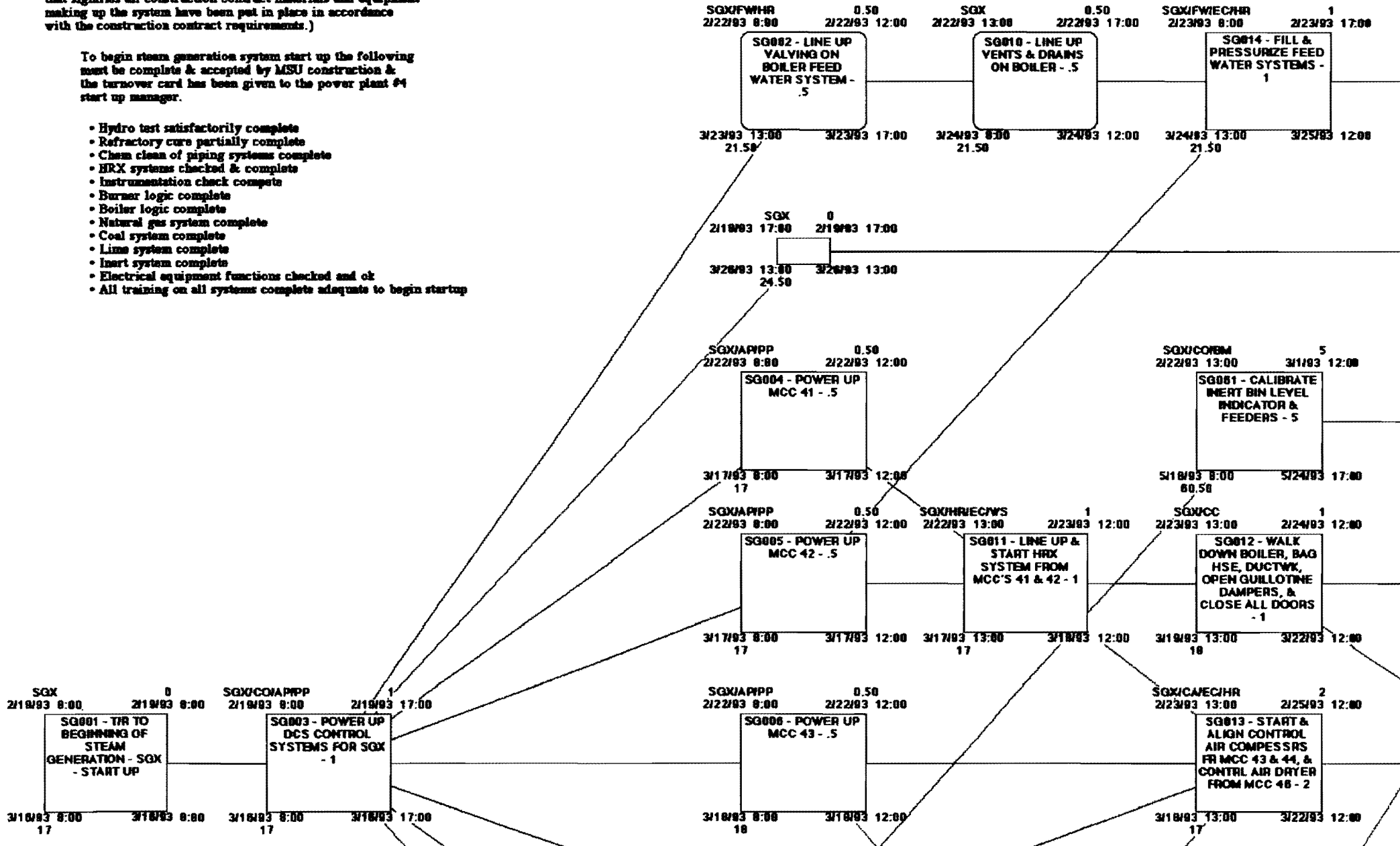
# STEAM GENERATOR START UP (SGX)

**DURATIONS SHOWN ASSUME  
NO RECYCLING OR TRACKING  
OF TURNOVER PACKET IS  
REQUIRED.**

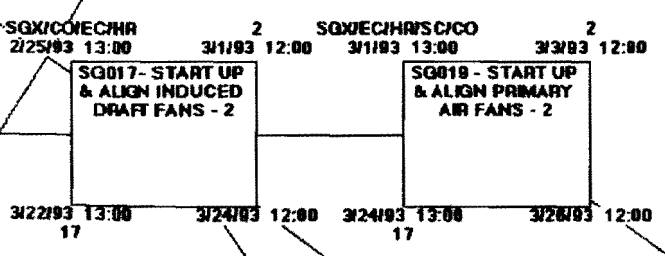
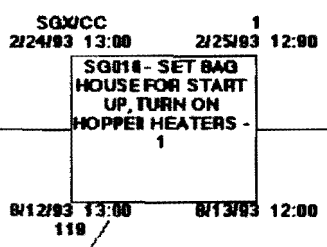
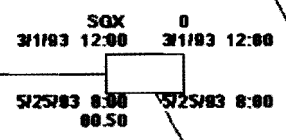
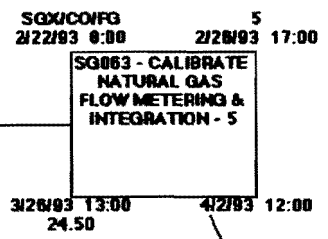
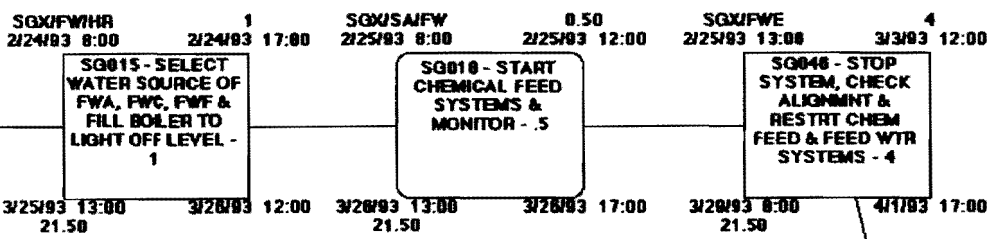
Beginning of start up is the point where the start up manager receives the initial turnover card (this is the card to be given to Roy Gies by Jim Simons that signifies all construction contract materials and equipment making up the system have been put in place in accordance with the construction contract requirements.)

To begin steam generation system start up the following must be complete & accepted by MSU construction & the turnover card has been given to the power plant #4 start up manager.

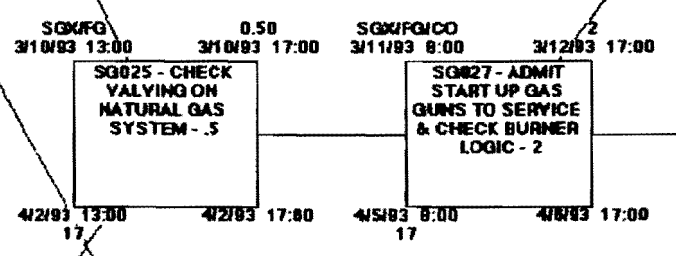
- Hydro test satisfactorily complete
- Refractory cure partially complete
- Chem clean of piping systems complete
- HRX systems checked & complete
- Instrumentation check complete
- Burner logic complete
- Boiler logic complete
- Natural gas system complete
- Coal system complete
- Lime system complete
- Inert system complete
- Electrical equipment functions checked and ok
- All training on all systems complete adequate to begin startup

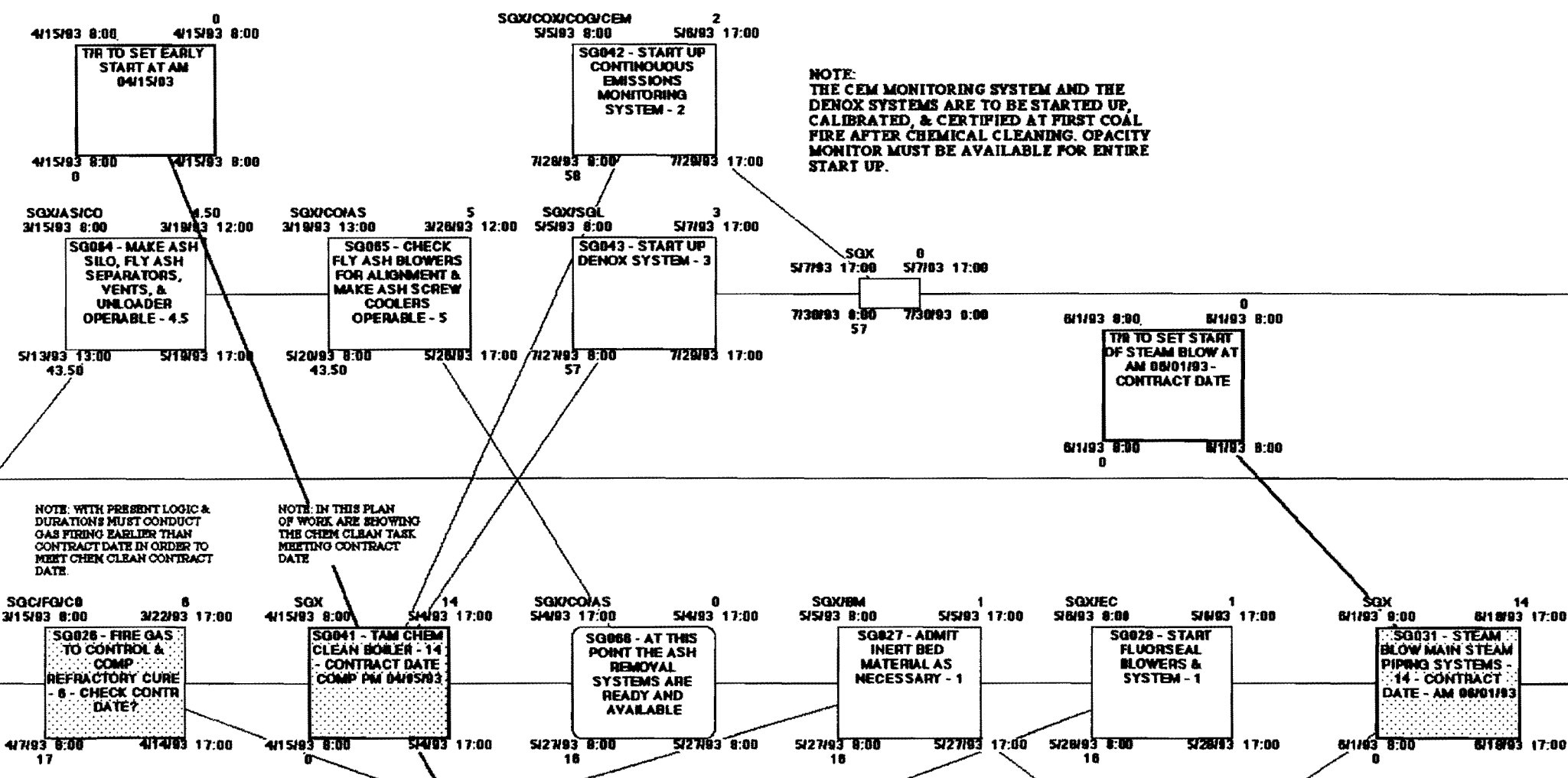






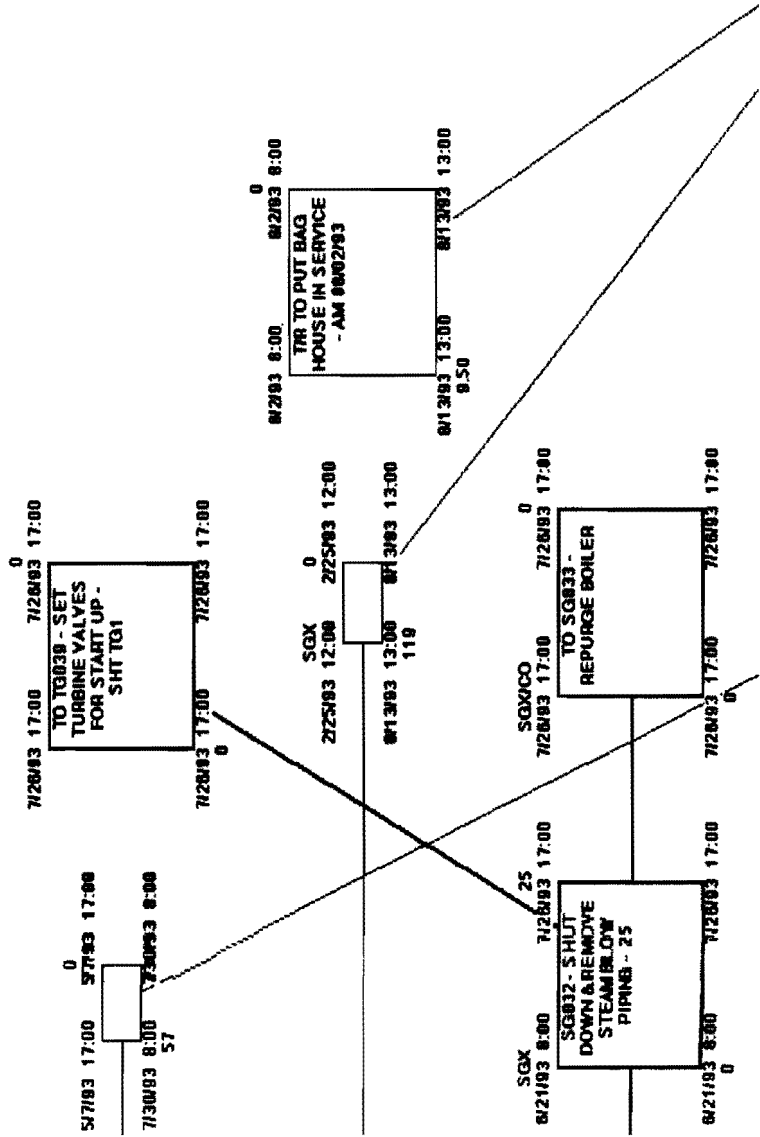
NOTE: WITH PRESENT LOGIC & DURATIONS MUST CONDUCT CLEAN AIR TEST EARLIER THAN CONTRACT DATE IN ORDER TO MEET CHEN CLEAN CONTRACT DATE.



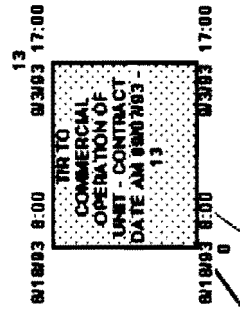


• Major systems abbreviations from B & V design documents & from utilities start up

- apx - auxiliary power supply
- axx - ash handling
- baxx - bulk materials (other than coal)
- bxx - buildings and structures
- cax - compressed air
- ccx - combustion gas cleaning and exhaust
- can - continuous emissions monitoring system
- ctx - construction facilities
- cpz - compressed gas storage
- chs - coal handling
- cox - communication
- coz - controls
- dpx - drains & plumbing
- danox - desox (scw) system
- ecx - equipment cooking
- esx - electrical
- fgz - fuel gas
- fpz - fire protection
- fwz - feed water
- gtx - generator terminal
- hrx - cyclis heat rejection
- inx - information
- ltx - lighting
- panx - plant maintenance
- ppz - primary power supply
- sax - sampling & analysis
- scx - space conditioning
- sgx steam generation
- stx - site
- tex - turbine extraction
- tyx - turbine generator
- vrx - water supply & storage
- wvx - waste collection & treatment

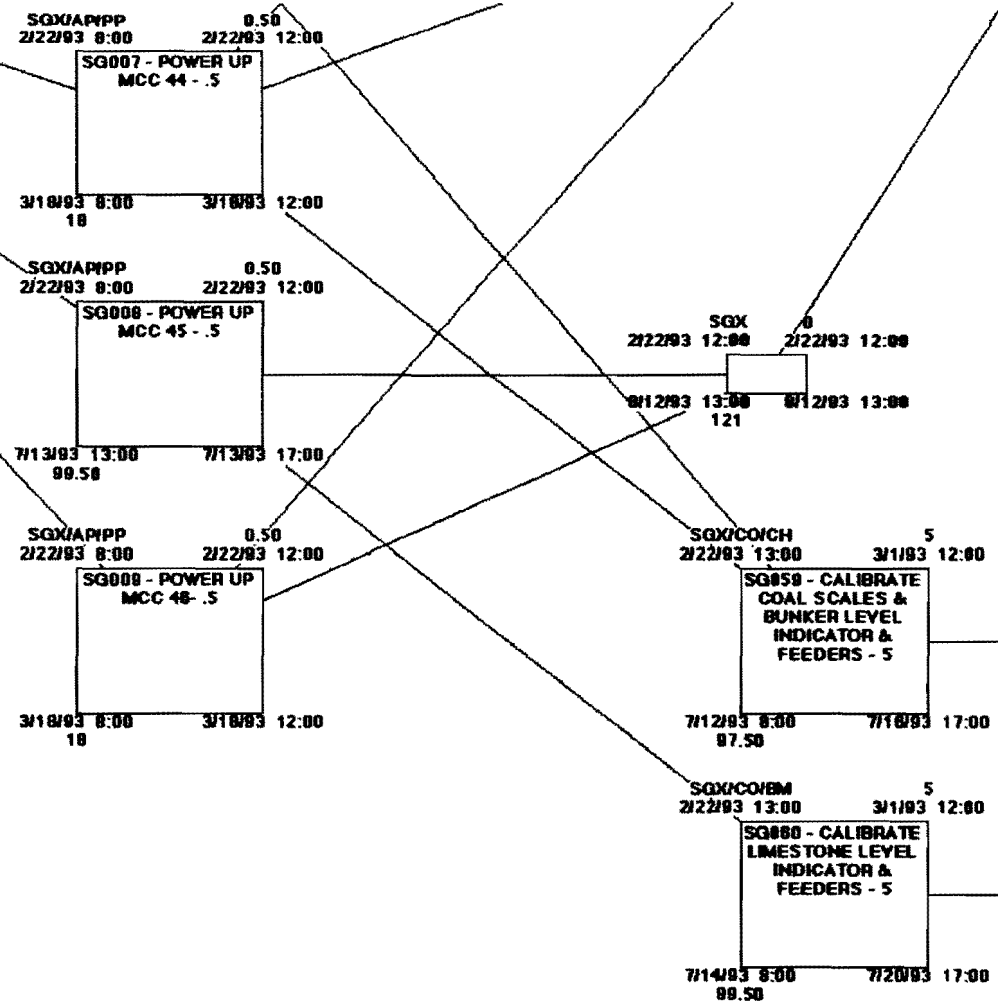


NOTE: NEEDED DEFINITION OF COMMERCIAL OPERATION - CONTRACT DATE FOR COMMERCIAL OPERATION IS THE AM OF 0807/93



**NOTE:**

Beginning of steam generation start up determined by contract date for operation of steam generator for steam line blowout. See list of contract dates.



**STEAM GENERATION SYSTEM (sgx) - items to be installed prior to beginning of start up operations**

**• Mechanical construction**

- Closed cooling water system (HRX)
- Control air system (CAX)
- Controls (COX)
- House service air system (CAX)
- Soot blowing air system (CAX)
- Ash handling systems (ASX)
- Coal systems (CHX)
- Limestone systems (BMX)
- Inert bed systems (BMX)
- Natural gas systems (FGX)
- Sampling & analysis systems (SAX)
- Feed water systems (FWX)
- Mixed bed demineralizer (FWX)
- Building vents & drains (BSX)
- Boiler vents & drains (SGX)

**• Electrical construction**

- Primary power, 13.8 kv (PPX)
- High voltage systems, 4160 v (APX)
- Low voltage systems, 480 V (APX)
- Control systems, 120 v (COX)
- UPS systems, 120 v (APX)
- Direct current systems, 130 v (APX)

**• DCS**

- Software systems (COX)
- Hardware systems (COX)

**• Controls**

- Instrumentation piping & wiring (COX)

**• Chemical**

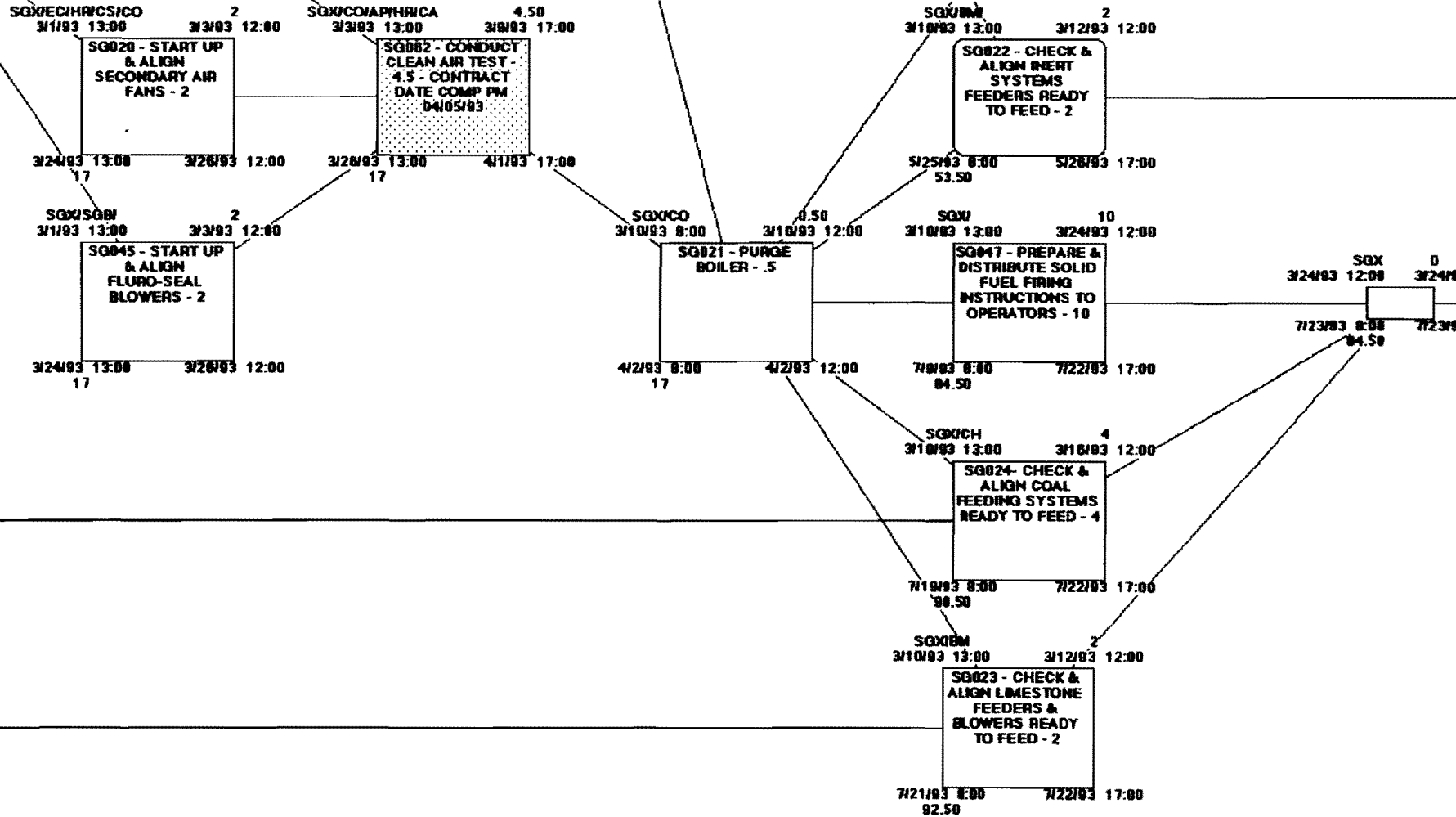
- Tanks, pumps, controls (COX, FWX, HRX)

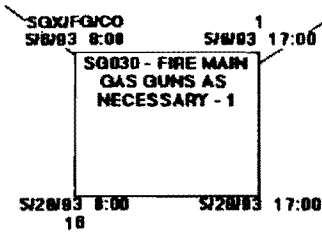
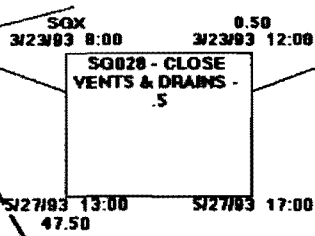
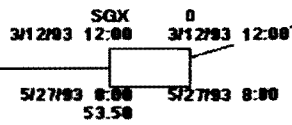
**• Boiler**

- Entire (SGX)

**• Emissions**

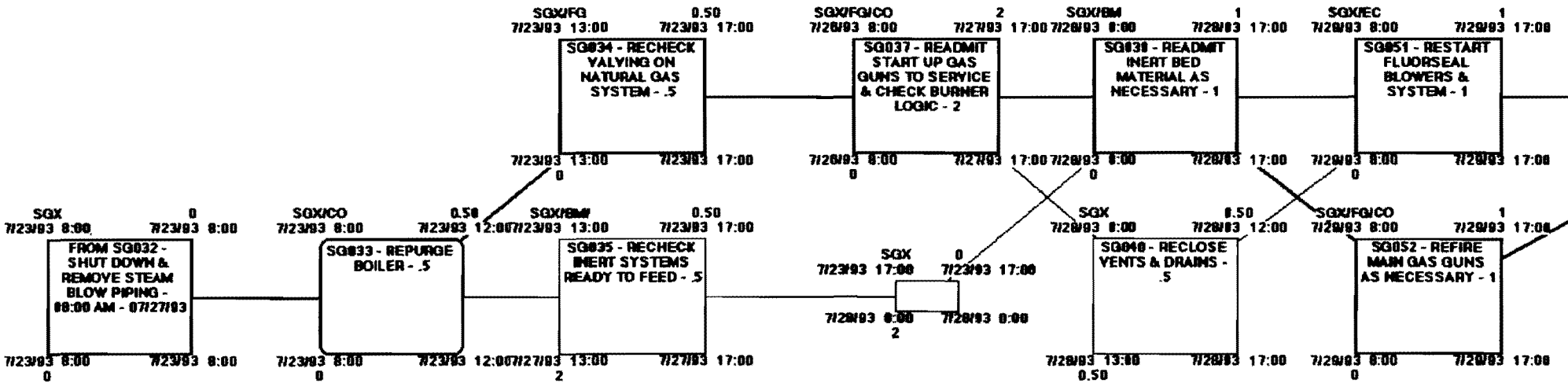
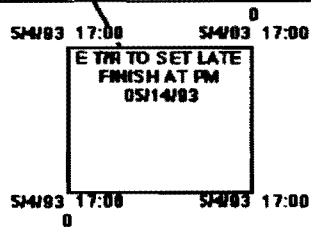
- Bag filter (CCX)
- ID fans (CCX)
- CEM system (COX)

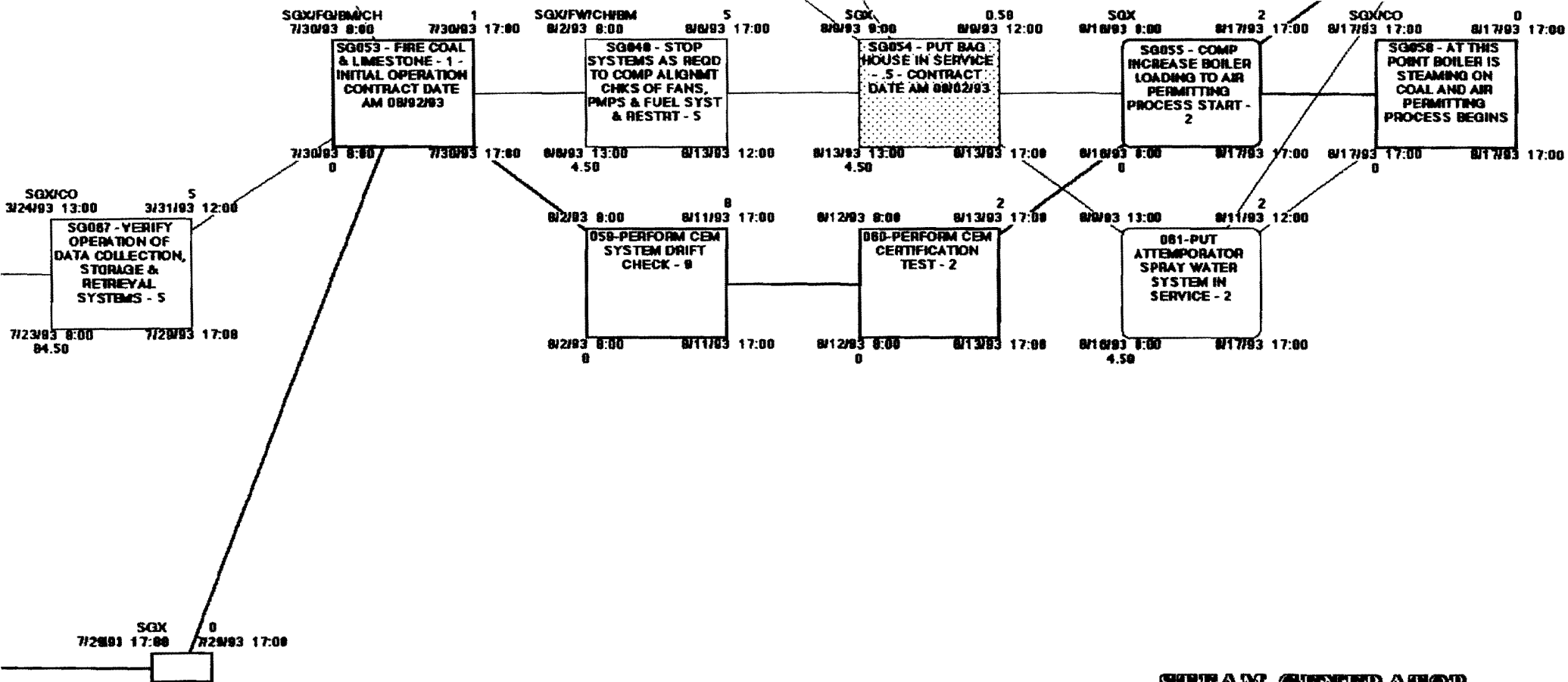




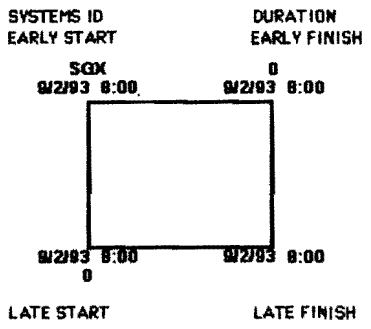
3 12:00

3 8:00





Note: in systems id, letter x indicates system master id



Activity Key

RESERVED ACTIVITY NUMBERS

- SG049
- SG050

- LAN SG001
- HAN SG058

Issue #1 & 2 - not used  
 Issue #3 - October 9, 1992  
 Issue #4 - October 29, 1992  
 Issue #5 - November 4, 1992  
 Issue #6 - December 21, 1992  
 Issue #7 - January 4, 1993  
 I7 sg1 stup - lmw50% or stw60%  
 disk 333

# STEAM GENERATOR START UP (SGX)

Network Model for T. B. Simon  
 Power Plant Unit 4  
 Michigan State University  
 East Lansing, Michigan

- Robert Ellerhorst - Director of Utilities
- Roy Gies - Start Up Manager
- Ron McClintic - Technical Supervisor
- Richard Wever - Construction Superintendent
- Jim Simons - Construction Project Representative

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 Consulting Engineer  
 323 Hiawatha Drive  
 Mt. Pleasant, Michigan 48858  
 ph 517 772 2537