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IMMEDIATE PLACEMENT IN THE PUBLIC DOMAIN**

*This form is to be filled out (typed or hand-printed) by the person who announced the meeting (i.e., the person who issued the meeting notice). The completed form, and the attached copy of meeting handout materials, will be sent to the Document Control Desk on the same day of the meeting; under no circumstances will this be done later than the working day after the meeting.  
**Do not include proprietary materials.***

DATE OF MEETING

08/22/2002

The attached document(s), which was/were handed out in this meeting, is/are to be placed in the public domain as soon as possible. The minutes of the meeting will be issued in the near future. Following are administrative details regarding this meeting:

Docket Number(s)	<u>Project 689</u>
Plant/Facility Name	<u>Bechtel</u>
TAC Number(s) (if available)	<u></u>
Reference Meeting Notice	<u>8/13/02</u>
Purpose of Meeting (copy from meeting notice)	<u>To meet with Bechtel to discuss their construction scheduling software</u>
	<u></u>

NAME OF PERSON WHO ISSUED MEETING NOTICE

Joseph M. Sebrosky

TITLE

Senior Project Manager

OFFICE

NRR

DIVISION

NRLPO

BRANCH

Distribution of this form and attachments:

Docket File/Central File

PUBLIC

DF03

# Bechtel Power Scheduling Overview

May 7<sup>th</sup> 2002

5/6/2002

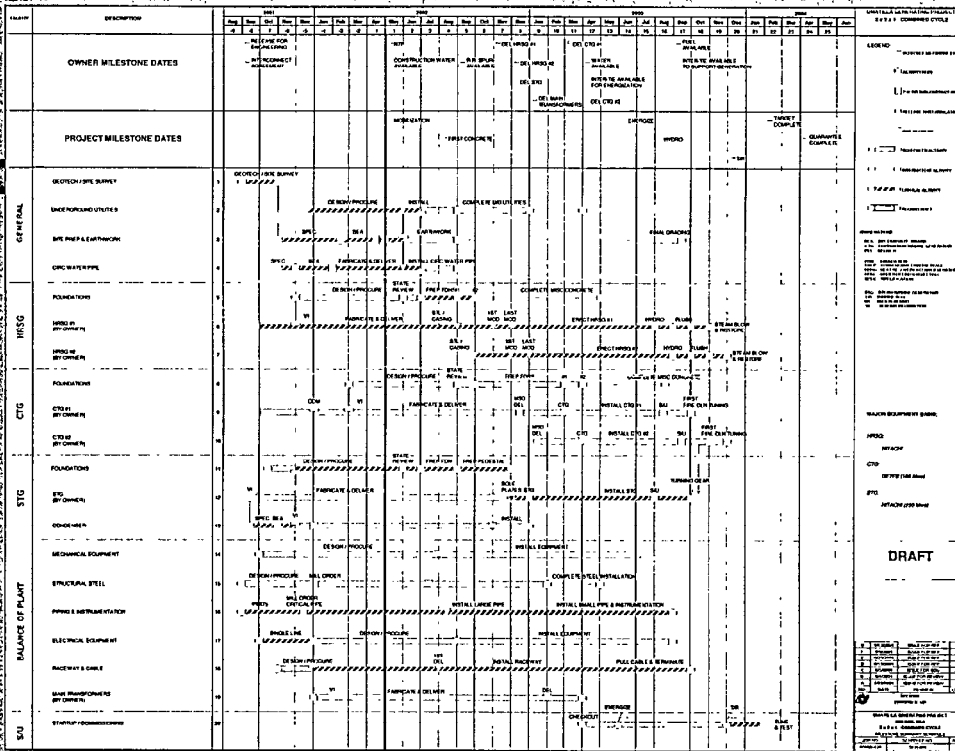
Bechtel Scheduling Overview

# MSS Development

## • Purpose:

- To communicate to Bechtel Management, Owner, Bank Engineers, and other off-project personnel the overall duration and key milestones.

# Milestone Summary Schedule



12/15/2002

Bechtel Scheduling Overview

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# Level 2 Schedule

## • Purpose

- To communicate to on project personnel overall durations and major components of work

## • Large emphasis on Construction (by area) and Startup

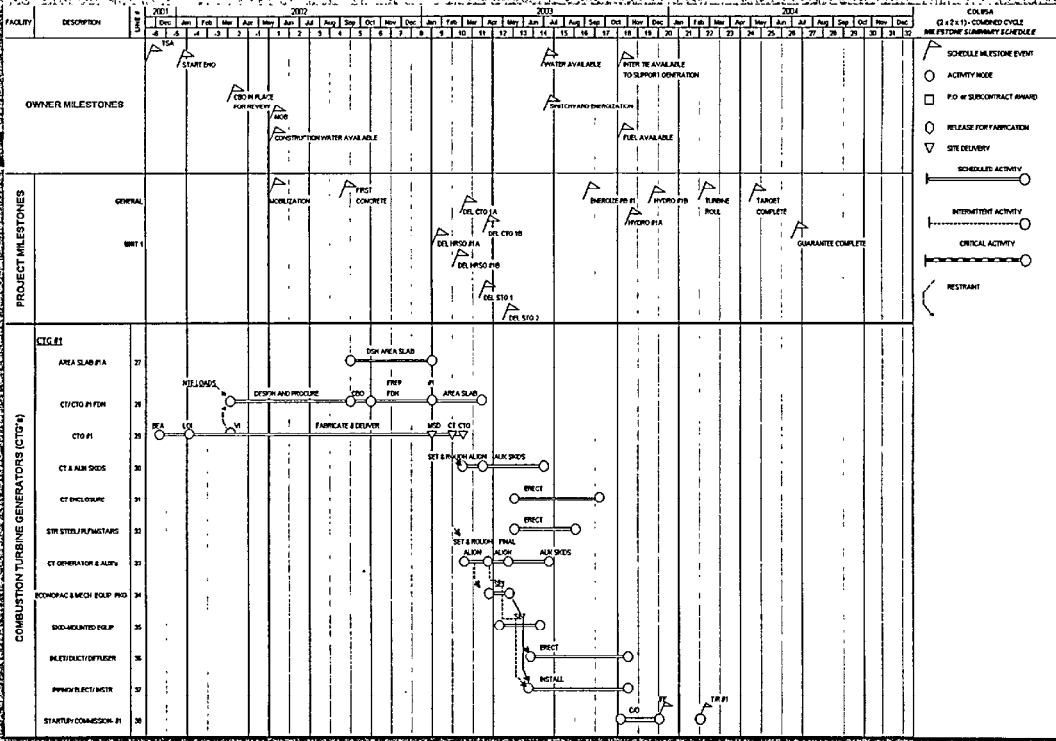
## • Used to establish the overall project plan for EPC

8/8/2002

Basics Scheduling Overview



# Level 2 Scheduling



8/8/2002

Electric Scheduling Overview

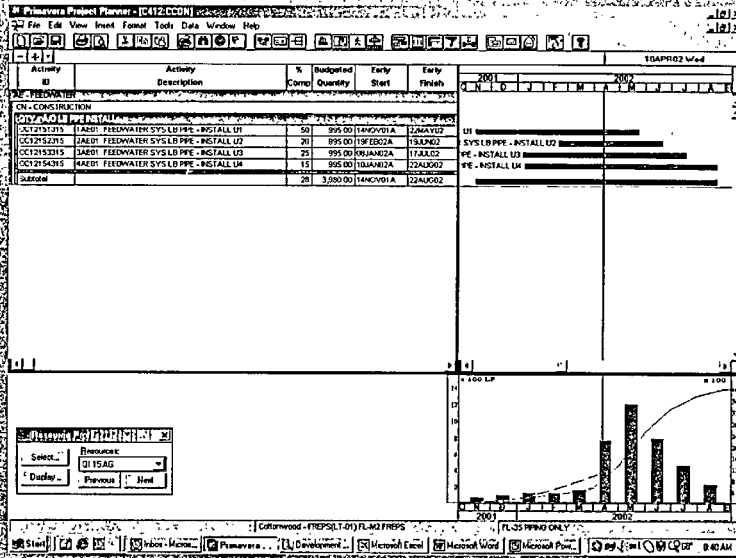
# Level 3 Schedule

## • Purpose

- CPM Schedule that allows the project to show impacts on other activities due to delays and changes.
- Integrates Engineering, Construction, Procurement, and Startup
- Evaluate impact to resources (Quantity and Job hours)



# Level 3 Schedule (Qty)

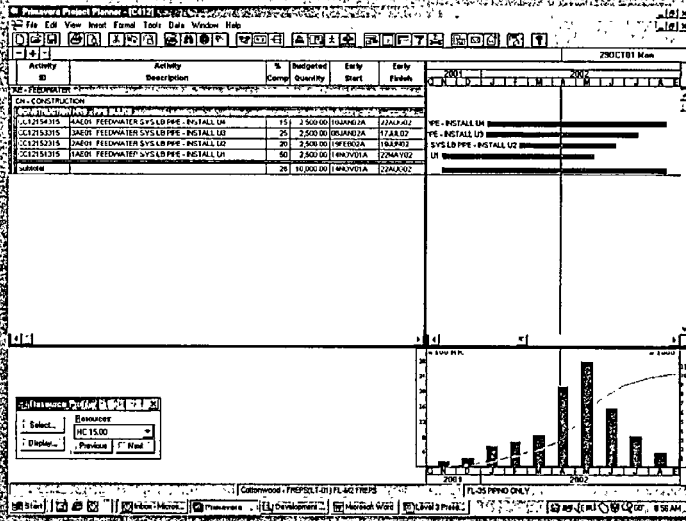


18/01/2002

Bedford Schedule Review

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# Level 3 Schedule (Job-Hours)



3/3/2002

Bechtel Schedule Overview

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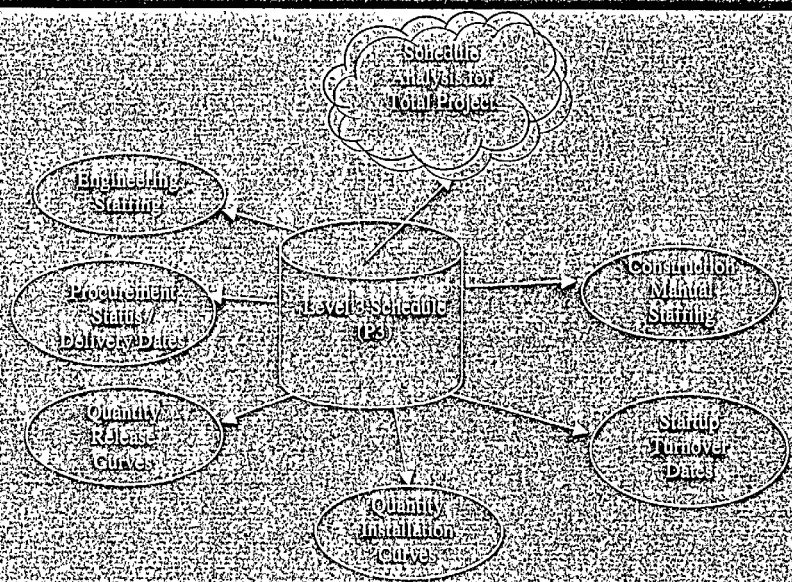
# Short Term Work Plan

- Engineering-4 week look ahead schedule that shows all deliverable from engineering to construction and procurement
- Construction-4 week look ahead schedule that show detailed work task and man power required to perform





# Level 3 Schedule



8/8/2002

Escorte Scheduling Overview

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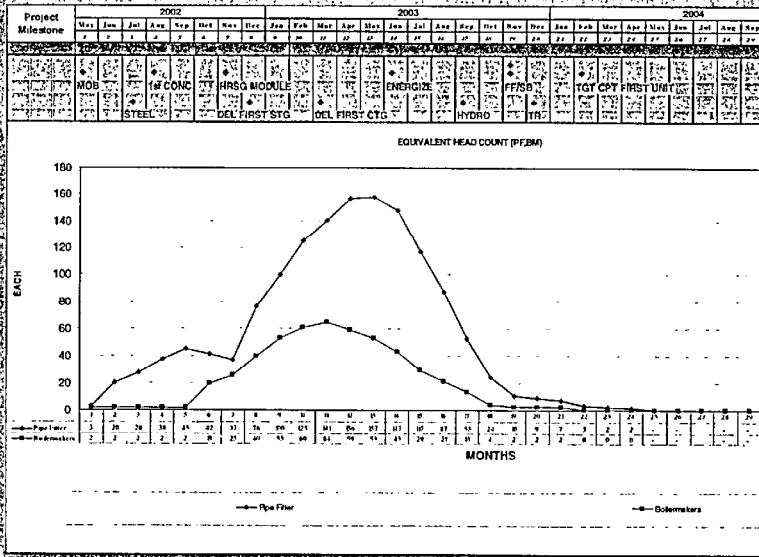
# Comparisons and Validation

- **Manpower Curves:** Look at percent of peak staffing as a percent of time compared to other similar projects.
- **Qty Comparison:** Review installation rates and overall duration to other similar projects.
- **Sustain Rates and Bulk commodity percent installed at major milestones** to other projects.
- **Compare key milestone dates and duration** to other similar projects.





# Monthly Grain Curves



8/13/2002

Bachtel Scheduling Overview

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# Sustain Rate & Bulk % Complete Comparison

Unit	LIMATILLA C. AVE. 12 EAST WINDYBROOK DRIVE	Actual				Schedule			
		Herrington	Phanco	Millennium	Gregory	Butler	Delta	Edison	Edison
		To Date 11/01	To Date 11/01	To Date 11/01	To Date 11/01	To Date 11/01	To Date 11/01	To Date 11/01	To Date 11/01
<b>A. SUSTAINED RATE COMPARISON</b>									
CONCRETE	1,432	1,598	1,536	842	1,474	1,866	13,238	1,847	
STEEL	1,120	1,112	1,112	79	1,144	1,111	119	1,111	
AVG LB PIPE	2,414	2,407	N/A	1,058	2,421	2,200	2,200	2,200	
BB PIPE	2,207	2,206	1,000	1,160	2,178	2,200	2,200	2,200	
SR PIPE	2,227	2,402	2,837	1,152	2,700	2,200	2,200	2,200	
HANDERS	2,200	N/A	N/A	N/A	2,200	2,200	2,200	2,200	
TRAY	1,222	1,058	1,012	1,048	1,047	1,000	1,040	1,040	
AVG CONDUIT	15,267	1,058	1,012	1,048	1,047	N/A	1,040	1,040	
AVG CONDUIT	1,000	N/A	3,880	4,838	10,800	N/A	N/A	N/A	
CABLE	17,068	108,228	10,207	10,038	18,170	118,648	118,228	118,228	
TERMINATION	6,088	7,818	N/A	2,152	8,970	8,848	7,208	7,208	
Note: 1. All areas are related to Cooper units. 2. Large bore pipe sustained into excluded work or supplied pipe. 3. Balance areas are by the LDR scope of work only. 4. Delta represents (B) excludes area table which are scheduled very late in the project. 5. Shaded projects have not been added to the average.									
<b>B. BULK CURVE QTY % COMPLETE AT START BOILER/HRSG ERECTION (1st MODULE)</b>									
CONCRETE	82%	82%	82%	82%	82%	82%	82%	82%	
STEEL	100%	100%	100%	100%	100%	100%	100%	100%	
AVG LB PIPE	100%	100%	100%	100%	100%	100%	100%	100%	
BB PIPE	100%	100%	100%	100%	100%	100%	100%	100%	
SR PIPE	100%	100%	100%	100%	100%	100%	100%	100%	
HANDERS	100%	100%	100%	100%	100%	100%	100%	100%	
TRAY	100%	100%	100%	100%	100%	100%	100%	100%	
AVG CONDUIT	100%	100%	100%	100%	100%	100%	100%	100%	
AVG CONDUIT	100%	100%	100%	100%	100%	100%	100%	100%	
CABLE	100%	100%	100%	100%	100%	100%	100%	100%	
TERMINATION	100%	100%	100%	100%	100%	100%	100%	100%	
Note: 1. Delta % has not been included because a system supplier delivery schedule due to Control Start Up.									

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Bechtel Scheduling Overview

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# Milestone Comparison

PROJECT NAME REGION LOCATION CONFIGURATION	Project A N America 1x1x1 0	Project B N America 1x1x1 0	Project C N America 1x1x1 0	Project D N America 1x1x1 0
<b>MILESTONE</b>				
<b>DURATION BETWEEN MILESTONES:</b>				
START DETAIL ENGINEERING - MOBILIZATION	27	63	99	68
MOBILIZATION - FIRST STRUCTURAL CONCRETE	40	35	15	49
CTG AWARD - DELIVERY OF 1st CTG	119	174	147	195
CTG ERECTION - TURBINE ROLL	116	84	82	111
CTG ERECTION - FIRST FIRE	106	74	81	101
FIRST FIRE - START PERFORMANCE TEST	20	17	27	32
STG AWARD - DELIVERY OF 1st STG	134	136	148	233
STG ERECTION - TURBINE GEAR	72	106	63	93
STG ERECTION - TURBINE ROLL	82	112	76	104
HRSG AWARD - DELIVERY OF PRESSURE PARTS	98	126	116	183
HRSG MODULE ERECTION - HYDRO	87	49	73	126
HRSG MODULE ERECTION - FIRST STEAM BLOW	112	109	121	137
START HYDRO - START CLEANING/BOILOUT	10	44	10	07
START HYDRO - FIRST FIRE	28	80	19	31
CHEMICAL CLEAN - STEAM BLOW	16	15	09	05
START STEAM BLOW - TURBINE ROLL	10	10	11	10
ENERGIZATION - STG TURBINE ROLL	46	51	51	62
START PIPING AVG - STG TURBINE ROLL	113	139	115	152
START RACEWAY - STG TURBINE ROLL	105	134	117	141
START CABLE - STG TURBINE ROLL	96	118	80	132
STG TURBINE ROLL - START PERFORMANCE TEST	10	07	11	01
START PERFORMANCE TEST - COMPLETION (See Note)	10	14	12	17
TARGET - GUARANTEED COMPLETION	34	30	00	20
MOBILIZATION - COMPLETION (See Note)	213	218	187	301
NTP - COMPLETION (See Note)	218	140	187	283
FIRST CONCRETE - COMPLETION (See Note)	173	183	177	252

6/8/2002

Bechtel Scheduling Overview

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# TEAMWORKS

## o Purpose

o TEAMWORKS™ provides engineering, procurement, construction, project management and startup with a database management system to track and support the status of equipment and materials. Access is provided in the Edit mode or View mode. The data managed by the TEAMWORKS™ database is stored in the form of horizontal records, which can have one or many columns or fields to hold the data.

o The TEAMWORKS™ application manages the following general types of information: mechanical equipment, electrical equipment, piping lines, pipe spools, hangers, welds, valves, specialty items and structural steel.

# TEAMWORKS

## • Statusing:

- TEAMWORKS™ uses milestone-based statusing for commodities.
- The user enters milestone dates against a line item, then an internal calculation is performed to determine the percentage complete and the equivalent quantity-to-date credit for that line item.
- The user can then generate summaries to report the status of the line items.

TEAMWorks (TEAMWorks Version 1608.21600 Pro[65])

File View Reports Tools Apps Window Help

Ready

**Edit Table**

- Lines
- Spools
- Bulk Pipe
- Welds
- Valves
- Hangers
- Specialty Items
- Vents and Drains
- Instruments
- Equipment
- Steel
- Dives Steel

OK  
Cancel  
Help

Filter/Sort  
 Record Mode

Add  
Delete  
Edit  
Copy  
Reload

TEAMWORKS (TEAMWORKS, Version 103.24600, Project) [Edit] [Print]

File Edit View Reports Tools Apps Window Help

Technical Packaging Status

Tag No.	Delivery	Stage Date	Fabrication Date	ELT Date	Punch Compl Date	Percent Complete	Quantity To Date
210-PS-VAG-66-1411	06/09/02	06/09/02	06/09/02	06/09/02		80.00	4.0
210-PS-VAG-600-1411	03/13/02	06/09/02	06/09/02	06/30/02	07/21/02	100.00	5.7
210-PS-VAG-601-1411	03/13/02	06/09/02	06/09/02	06/30/02	07/21/02	100.00	6.0
210-PS-VAG-602-1411	03/13/02	06/09/02	06/09/02	06/30/02	07/21/02	100.00	4.7
210-PS-VAG-603-1411	03/13/02	06/09/02	06/09/02	06/30/02	07/21/02	100.00	4.4
210-PS-VAG-604-1411	03/13/02	06/09/02	06/09/02	06/30/02	07/21/02	100.00	3.6
210-PS-VAG-605-1411	03/13/02	06/09/02	06/09/02	06/30/02	07/21/02	100.00	3.8
210-PS-VAG-606-1411	03/13/02	06/09/02	06/09/02	06/30/02	07/21/02	100.00	3.8
210-PS-VAG-607-1411	03/13/02	06/09/02	06/09/02	06/30/02	07/21/02	100.00	4.2
210-PS-VAG-608-1411	03/13/02	06/09/02	06/09/02	06/30/02	07/21/02	100.00	4.2
210-PS-VAG-609-1411	06/09/02	06/09/02	06/09/02	06/09/02	07/21/02	100.00	4.0
210-PS-VAG-610-1411	03/13/02	06/09/02	06/09/02	06/09/02	07/21/02	100.00	9.0
210-PS-VAG-611-1411	03/13/02	06/09/02	06/09/02	06/09/02	07/21/02	100.00	9.0
210-PS-VAG-612-1411	03/13/02	06/09/02	06/09/02	06/09/02	07/21/02	100.00	9.0
210-PS-VAG-613-1411	03/13/02	06/09/02	06/09/02	06/09/02	07/21/02	100.00	9.0
210-PS-VAG-614-1411	03/13/02	06/09/02	06/09/02	06/09/02	07/21/02	100.00	9.0
210-PS-VAG-615-1411	03/13/02	06/09/02	06/09/02	06/09/02	07/21/02	100.00	9.0
210-PS-VAG-616-1411	06/09/02	06/09/02	06/09/02	06/09/02	07/21/02	100.00	8.0
210-PS-VAG-617-1411	06/09/02	06/09/02	06/09/02	06/09/02	07/21/02	100.00	8.0
210-PS-VAG-618-1411	06/09/02	06/09/02	06/09/02	06/09/02	07/21/02	100.00	8.0

Ready 1 of 10750



TEAMWorks [TEAMWorks Version 1.03 24600 Project] File View Reports Tools Apps Window Help

Partial Quantity Credit For Spools

Credit Calculation Name: DEFAULT

Select Calculation Method:

- Method 1 - Manual Entry  
Enter Percent Complete In Table  
Calculate Quantity To Date
- Method 2 - Sequenced Milestones  
Enter Milestone Completion Date In Table  
Calculate Percent Complete  
Calculate Quantity To Date
- Method 3 - Non-Sequenced Milestones  
Enter Milestone Completion Date In Table  
Calculate Percent Complete  
Calculate Quantity To Date

Data Fields Used For Calculation:

Select Fields For:

Total (Design) Quantity: CLENGTH

Percent Complete: PCNTCOMPL

Quantity to Date: QTYTODATE

Conversion Factor: 3.994324894063

Milestones For Earning Partial Credit:

Field Name	Percentage
STAGE	10
FABDATE	35
ELTDATE	35
INSTALLED	20
Total %: 100	

Filter: [ ] Edit Filter

Ready

08/10/02 1 41 47 PM Percent Complete Summary Page 1  
TEAMWORKS v1.4.1 TEAMWORKS Version 1.02 24800 Pxx'xxx

Selection criteria ((SPOOL\_DIAMETER = SPLICOST\_DIAMETER (\*) AND  
(SPOOL\_CLASS = SPLICOST\_CLASS (\*) AND (SPOOL\_ADV\_BEL\_RACK =  
SPLICOST\_ADV\_BEL\_RACK (\*) AND (SPOOL\_VERSION = SPLICOST\_VERSION (\*) AND  
SPOOL\_DELETED='N'

Center-Line Length	Percent Complete	Quantity
04470.28	0	0.0
Percent Complete 30		
8949.24		894.9
Percent Complete 35		
6.80		1.4
Percent Complete 45		
5518.27		2482.2
Percent Complete 80		
27266.91		23892.5
Percent Complete 100		
2672.41		2672.4
127905.11		35747.5

\*\*\* END OF REPORT \*\*\*

Print  
Close  
Zoom  
Whole Page



# Setroute

## Purpose:

- Setroute™ provides engineering, procurement, construction, project management and status with a database management system to track and support the status of electrical commodities. Access is provided in the Edit mode or View mode. The data managed by the Setroute™ database is stored in the form of horizontal records, which can have one or many columns or fields to hold the data.
- The Setroute™ application manages the following general types of information: cable, raceway, terminations, jumpers, and equipment.

# Setroute

## o Statusing:

- o Setroute™ uses code-based statusing of room modalities.
- o Engineering will release the line item to the jobsite, changing the primary status to a "J". The primary status will be updated to a "C" when construction of the line item is complete.
- o A Construction Status field is used to provide intermediate statuses of the line item during construction.
- o The user can then generate summaries to report the status of the line items.

SETROUTE - REDBUD ENERGY PROJECT

File View Report Tools Window Help

Open Table

- Cables
- Raceways
- Equipment
- Jumpers
- Terminations
- Cable Routes
- Blocks and Points
- Cable Codes
- Raceway Codes
- Equipment Codes
- Color Codes
- Cable Banks

OK

Cancel

Help

Ready

CAPS 9:37 AM

SETROUTE: REDBUD ENERGY PROJECT

File Edit View Report Tools Window Help

Cable 210AA11AXG

ID:	210AA11AXG	Status:	Pre: 30.00	Length:	0.00	Last Revision:	US/20/02
Card Rev:		Const:	214.00	Eng:	214.00		1:56:16 PM
		Hold:	0.00	Act:	0.00		MC

Data  Misc

Number of Cables:	1	Preliminary Lgth:	0.00
Cables per Bundle:	1	Separation Group:	
Cable Code:	FKA	Safety Code:	
Service Level:	X	Revision:	
Add'l Serv Level:		Facility:	
Secondary Status:		System:	AA
Drawing Number:	000-EG-AA-011	Start-up System:	21AA01
FROM Equipment:	210AAE353	TO Equipment:	210DJD101C

Ready FILTER CAPS 10.47 AM

OK Close Help

Terms Route Notes Reels

SETROUTE - REDBUD ENERGY PROJECT

File Edit View Report Tools Window Help

Cable Raceway Equipment Jumper Termination

ID: 210AA03ASA Number of Cables: 1  
Cable Code: A78  
Engineering Lgth: 167.00  
Cut Length: 210.00

Construction Status: 3 - Turned Over For Testing

Installed Length: 0 - Cable Cut From Reel  
1 - Partially Installed  
2 - Installed (Not Inspected)

Megger Device: 3 - Turned Over For Testing  
4 - Testing Complete  
5 - Released To Start-Up  
6 - Start-Up Check Complete  
7 - Turned Over To Client

Save Close Help Edit

Ready CAPS 10:49 AM



