

Western Avalon Terminal Station T5 Tap Changer Replacement

Status Update Briefing– August 15, 2014

Boundless Energy



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(Incremental to Information Provided July 30)

Project Dashboard

PM - Western Avalon Transformer Project
Joe Yurchesyn

Safety

Quality

Schedule

Cost

Progress & Schedule Summary

1. T5 Transformer Modifications contract (supply and install) in place with CG Power (Transformer OEM)
2. Reinhauser Tap Changer parts manufacture in progress. Assembly starting next week for completion Sep 5.
3. Tap Changer Delivery – Air Freight through Halifax, Truck to WAV – 5 to 7 days - Planned Sep 13 (1 week delay)

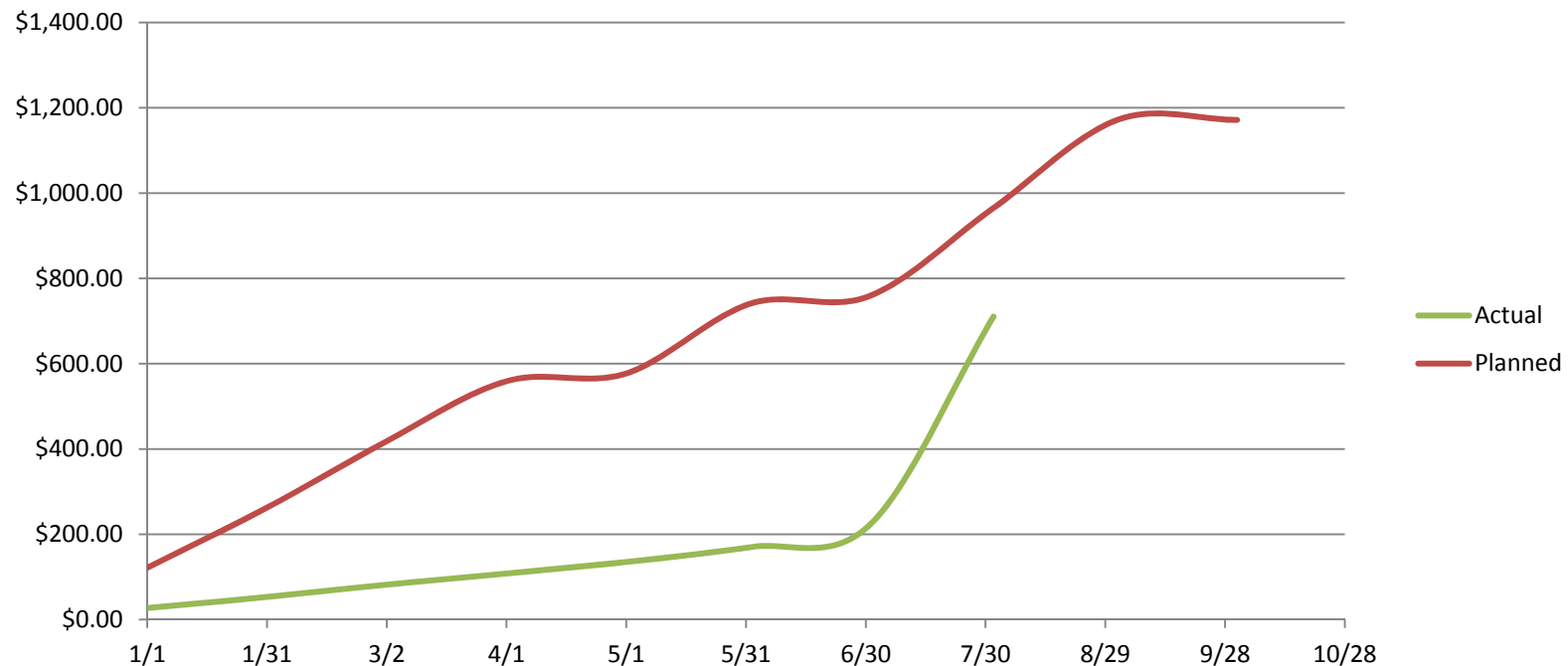
Progress & Schedule Summary

5. Site work is approximately four weeks; ready for commissioning by end September/early Oct with a planned in-service date of October 13th (1 week delay)
6. Risk Review undertaken August 7th . Action list spreadsheet developed.
7. Overall Schedule tracking 1 week later due to actual delivery times; Ready for Service date Oct 13 (See attached schedule)

Level 2 - Schedule S Curve

(Preliminary – Project Accounting in Process of Set-Up)

Western Avalon Transformer Project
2014 Costs (\$,000's)



Note: Forecast Final Expenditures (FFE) tracking with compliance with original budget. Actual Costs Aug 1 reflects contractual commitments for major equipment and install contracts to Aug 15.)

Contracting Plan

1	T5 Transformer Modification (Supply & Install, Tap Changer)	T5 Transformer modifications - materials and install, tap chnager materials and install, supply to PAD	CG Power	6/23/2014 On-Site Sep 5	13-Oct	Ongoing
2	T5 Tap Changer	T5 Tap Changer Supply to CG Power (Sub-Contract)	Rheinhauser	6/23/2014 deliver to site Sep 13	13/10/2014 Rep on site for install	Ongoing

Risk Analysis

Third Party Facilitated Risk Workshop and Risk Register Spreadsheet produced for WAV Aug 7.

Major risks similar to, but less than those for SSD. Actions identify to risks where practical.

Risk Analysis – Example of Issues

- T5 Tap Changer Delivery – Timing, Damage
 - Expedite (air freight) and monitor;
- T5 Tap Changer – Installation/Failure
- T5 Transformer modifications
 - CG Power detailed plan - cutting and cleaning
- P&C Re-Connections
 - Oversight OEM recommendations, modifications and commissioning

Project Photos

**None Available at this time – Tap Changer parts in manufacture,
Assembly starts next week.**



Incremental Layout

#	Activity Name	Remaining Duration	Start	Finish	Comments	Calendar Grid																											
						June 2014				July 2014				August 2014				September 2014				October 2014				November 2014				December 2014			
						01	08	15	22	29	06	13	20	27	03	10	17	24	31	07	14	21	28	05	12	19	26	02	09	16	23	30	07
1	WAV Transformer	58d	16-Jun-14 A	31-Oct-14		[Summary bar from June 16 to Oct 31]																											
2	Project Milestones	26d	09-Sep-14	15-Oct-14		[Milestone diamonds at Sep 09, Sep 13, Sep 15, Oct 15]																											
3	Start of Construction	0d	09-Sep-14			[Start of Construction diamond at Sep 09]																											
4	Tap Changer on Site	0d		13-Sep-14		[Tap Changer on Site diamond at Sep 13]																											
5	Commissioning Complete	0d		15-Oct-14		[Commissioning Complete diamond at Oct 15]																											
6	PM Tasks	0d	30-Jun-14 A	07-Aug-14 A		[Summary bar from Jun 30 to Aug 07]																											
7	Develop Project Scope Statement	0d	30-Jun-14 A	25-Jul-14 A		[Actual Work bar from Jun 30 to Jul 25]																											
8	Prepare Safety Assessment & Safety Plan	0d	14-Jul-14 A	25-Jul-14 A	Contractor	[Actual Work bar from Jul 14 to Jul 25]																											
9	Finalize PSS & approve	0d	25-Jul-14 A	01-Aug-14 A		[Actual Work bar from Jul 25 to Aug 01]																											
10	Risk Workshop	0d	30-Jul-14 A	07-Aug-14 A		[Actual Work bar from Jul 30 to Aug 07]																											
11	Engineering	57d	16-Jun-14 A	31-Oct-14		[Summary bar from Jun 16 to Oct 31]																											
12	PCC	57d	16-Jun-14 A	31-Oct-14		[Summary bar from Jun 16 to Oct 31]																											
13	PCC Engineering	57d	16-Jun-14 A	31-Oct-14		[Actual Work bar from Jun 16 to Oct 31]																											
14	Perform P&C Prep - Isolation plan	15d	12-Aug-14	02-Sep-14	TRO	[Actual Work bar from Aug 12 to Sep 02]																											
15	Electrical	57d	16-Jun-14 A	31-Oct-14		[Summary bar from Jun 16 to Oct 31]																											
16	Engineering - Electrical	57d	16-Jun-14 A	31-Oct-14		[Actual Work bar from Jun 16 to Oct 31]																											
17	Procurement - Material	23d	23-Jun-14 A	13-Sep-14		[Summary bar from Jun 23 to Sep 13]																											
18	T5 Transformer Tap Changer	23d	23-Jun-14 A	13-Sep-14		[Summary bar from Jun 23 to Sep 13]																											
19	Order Tap Changer	0d	23-Jun-14 A	25-Jun-14 A		[Actual Work bar from Jun 23 to Jun 25]																											
20	Fabrication Period	17d	25-Jun-14 A	04-Sep-14		[Actual Work bar from Jun 25 to Sep 04]																											
21	Ship to site	9d	05-Sep-14	13-Sep-14		[Actual Work bar from Sep 05 to Sep 13]																											
22	Procurement - Installation Contract	0d	25-Jun-14 A	02-Jul-14 A		[Summary bar from Jun 25 to Jul 02]																											
23	Prepare & Issue Contract	0d	25-Jun-14 A	02-Jul-14 A		[Actual Work bar from Jun 25 to Jul 02]																											
24	Construction - T5 Transformer Tap Ch	31d	09-Sep-14	16-Oct-14		[Summary bar from Sep 09 to Oct 16]																											
25	LOTO	31d	09-Sep-14	16-Oct-14		[Summary bar from Sep 09 to Oct 16]																											
26	Isolate Work Zone	2d	09-Sep-14*	11-Sep-14		[Actual Work bar from Sep 09 to Sep 11]																											
27	Permit Holder	31d	09-Sep-14	16-Oct-14		[Actual Work bar from Sep 09 to Oct 16]																											
28	De-Isolate Work Zone	1d	15-Oct-14	16-Oct-14		[Actual Work bar from Oct 15 to Oct 16]																											
29	Contractor's Schedule	23d	11-Sep-14	08-Oct-14		[Summary bar from Sep 11 to Oct 08]																											
30	Mobilization to site	2d	11-Sep-14	13-Sep-14		[Actual Work bar from Sep 11 to Sep 13]																											
31	Equipment Set-up & Misc	2d	12-Sep-14	15-Sep-14		[Actual Work bar from Sep 12 to Sep 15]																											
32	Safety/Job Hazard Assessment	3d	12-Sep-14	16-Sep-14		[Actual Work bar from Sep 12 to Sep 16]																											
33	Transformer Maintenance Activities	14d	15-Sep-14*	01-Oct-14		[Actual Work bar from Sep 15 to Oct 01]																											
34	Pressurize Transformer	2d	30-Sep-14	02-Oct-14		[Actual Work bar from Sep 30 to Oct 02]																											
35	Perform Dew Point Test	1d	01-Oct-14	02-Oct-14		[Actual Work bar from Oct 01 to Oct 02]																											
36	Pull Vacuum	2d	01-Oct-14	03-Oct-14		[Actual Work bar from Oct 01 to Oct 03]																											
37	Vacuum Oil Fill	2d	02-Oct-14	04-Oct-14		[Actual Work bar from Oct 02 to Oct 04]																											
38	Transformer Testing	2d	03-Oct-14	06-Oct-14		[Actual Work bar from Oct 03 to Oct 06]																											
39	Clean Up Site	2d	04-Oct-14	07-Oct-14		[Actual Work bar from Oct 04 to Oct 07]																											
40	Demobilization	2d	06-Oct-14	08-Oct-14		[Actual Work bar from Oct 06 to Oct 08]																											
41	Electrical Construction	1d	06-Oct-14	07-Oct-14		[Actual Work bar from Oct 06 to Oct 07]																											
42	Comms	1d	06-Oct-14	07-Oct-14		[Actual Work bar from Oct 06 to Oct 07]																											
43	Make RTU changes & do Telecontrol pts check with ECC	1d	06-Oct-14	07-Oct-14		[Actual Work bar from Oct 06 to Oct 07]																											
44	Elect/P&C/Comms. Commissioning	7d	06-Oct-14	15-Oct-14		[Summary bar from Oct 06 to Oct 15]																											
45	Transformer T5 Tap Changer	7d	06-Oct-14	15-Oct-14		[Summary bar from Oct 06 to Oct 15]																											
46	Commission T5 Transf. Prot. & All Other Applicable P&C Connections	7d	06-Oct-14	15-Oct-14		[Actual Work bar from Oct 06 to Oct 15]																											

█ Actual Work ◆ Milestone
█ Remaining Work ▬ Summary
█ Critical Remaining Work