

Sunnyside Replacement Equipment

Status Update Briefing– August 29, 2014

Boundless Energy



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(Incremental to Information provided Aug 15)

Project Dashboard

PM - Sunnyside Transformer Project
Joe Yurchesyn

Safety

Quality

Schedule

Cost

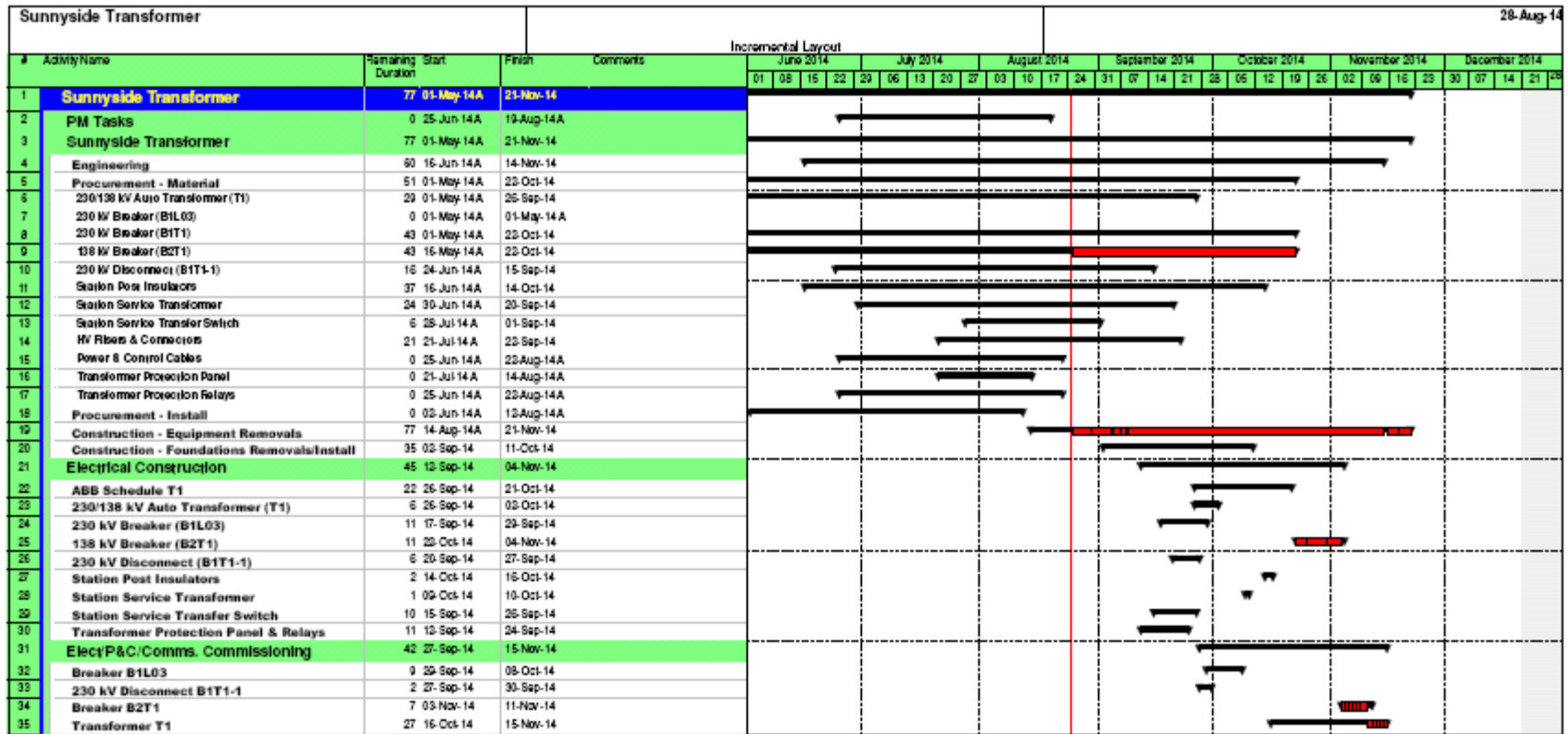
Progress & Schedule Summary

1. Factory Acceptance Testing has commenced. The period of testing has been extended by ABB to investigate a technical issue observed during one of the tests (Partial Discharge).
2. TRO has isolated all field equipment and safe work permits are in place for the contractor.
3. ICM - Installation Contractor started work.

Progress & Schedule Summary (cont'd)

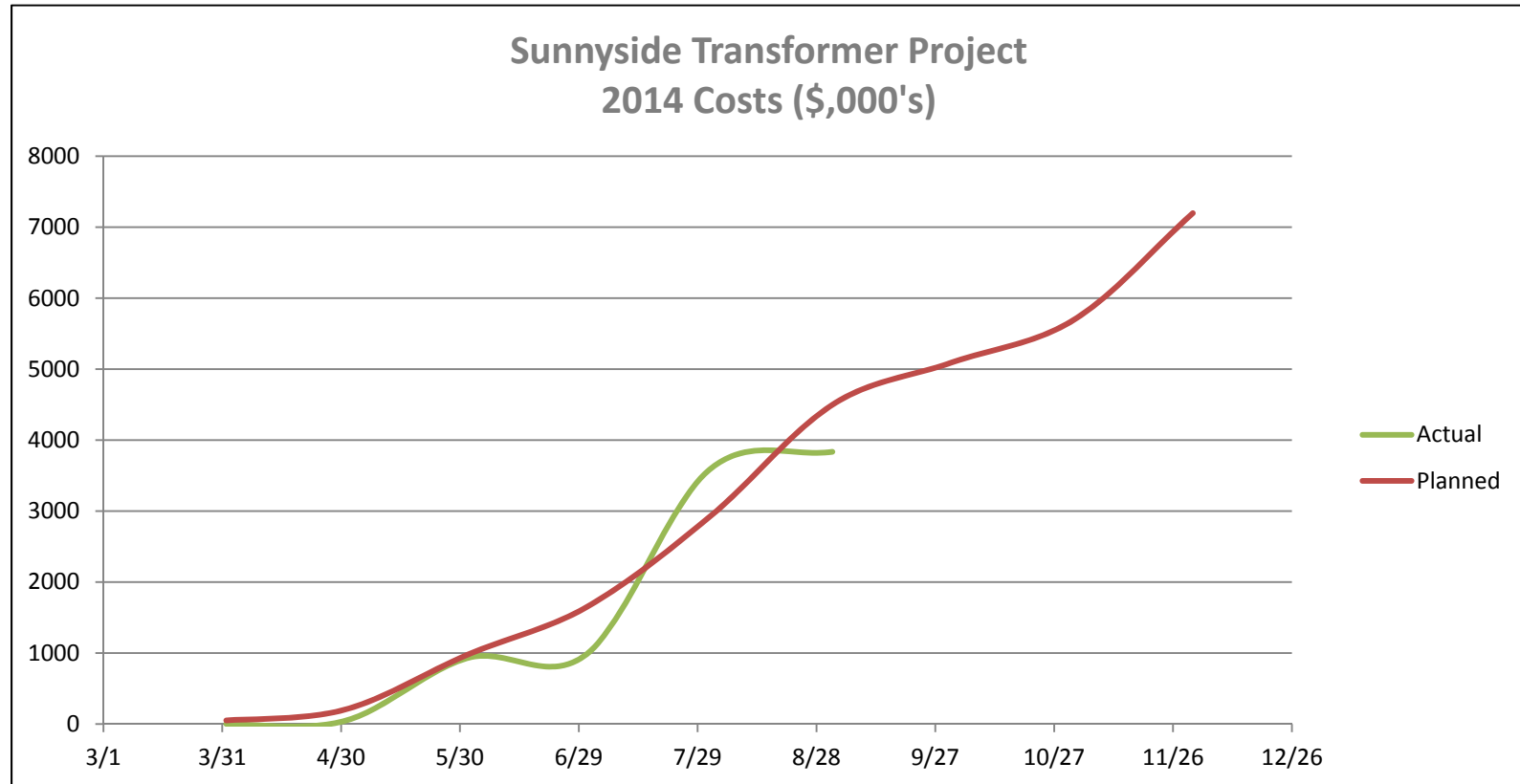
4. 230kV Disconnect (B1T1-1), 138kV Breaker (B2T1) and 230kV Breaker (B1L03) disassembled.
5. Civil Contractor to mobilize to site on September 2.
6. Overall schedule tracking with plan; Ready for Service date by end November 2014 (See attached schedule showing progress to date).

Level 2 - Schedule Summary



Level 2 - Schedule S Curve

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



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

Contracting Plan

Item	Contract Title	Scope of Work	Contractor	Scheduled Start Date	Scheduled Finish Date	Manufacture/ Construction Status
1	T1 Transformer	T1 Transformer supply to PAD	ABB	19-Jun	20-Sep	Ongoing
2	B1L03 230 kV Breaker	Breaker supply	Nalcor Stores	1-May		Stored
3	B1T1-1 230 kV Disconnect	Disconnect supply (except insulators)	Pro-Energy		15-Sep	Ongoing
4	B1T1-1 230 kV Disconnect Insulators	Disconnect Insulators (Use stock and replace)	Nalcor Stores	1-May	15-Sep	Ongoing; Stock replace Oct 22
5	B1T1 230 kV Breaker	Breaker supply	TBD		Summer 2015	Not Started; Breaker order
6	B2T1 138 kV Breaker	Breaker supply	Siemens	23-May	22-Oct	Ongoing
7	Installation Contract	Removal of existing T1, P&C work, B1L03, B1T1-1, B2T1, other equipment, civil works and fdns; Installation of new pad; Connection of new transformer, including: cables, panels, connections, commissioning	Industrial Commercial Maintenance Limited	18-Aug	15-Nov	On-Site Aug 18
8	Station service Transformer	Stn Service Transformer supply		4-Jul	20-Sep	Ongoing
9	Station service Transfer Switch	Transfer switch supply	TBD	1-Aug	11-Sep	Tendered
10	HV Risers & Connectors	Risers and Connectors supply	TBD	25-Jul	19-Sep	Tendered
11	Power & Control Cables	Cables supply		30-Jun	22-Aug	Ongoing
12	Transformer Protection Panel	Panel supply		25-Jul	14-Aug	Tendered
13	Transformer Protection Relays	Relay supply		30-Jun	22-Aug	Ongoing

Risk Analysis

Third Party Facilitated Risk Workshop held July 23 and Actions Review August 7.

50+ risks and tasks identified.

Risk Register used to manage risk during Project Execution.

Risk Analysis – Example of Issues (cont'd)

- T1 Delivery – Timing, Logistics, Damage – ABB logistics done, spare bushing being considered.
- B1T1-1 230 kV Disconnect – September 15 delivery
 - Expedite and monitor;
- B1L03 230 kV Breaker in Stores – Storage
 - Inspect and monitor

Risk Analysis – Examples of Issues (cont'd)

- Long Lead Miscellaneous Items – missed or delayed – Checking list and ongoing status reviews.
- T1 (Other Equipment) Failure – Infant failure, Transport/Install damage – FAT Test, transport assessment.
- Site hydrocarbon in foundations soil.
 - Inspections have showed that this is unlikely an issue, remove if required.

Risk Analysis – Examples of Issues (cont'd)

- Outage requirements.
 - Coordinate outages with other projects.

Project Photos

Transformer Status – Aug 29, 2014

- **Factory Acceptance Testing – commenced**
- **ABB investigating technical issue observed during one of the tests (Partial Discharge).**
- **Delivery – September 26**

Photo 1 – Assembled Transformer T1



Photo 2 – 138kV Breaker (B2T1) Removal



Photo 3 – 230kV Disconnect B1T1-1 Removal



