

Lower Churchill Project GE Grid Steering Committee

27-May-2016

Boundless Energy



Take a
MOMENT
for Safety

Successful Project

- Criteria for Success?
 - Safe
 - On time
 - Compliant with all technical requirements (to achieve a reliable electricity system)
 - Commercially aligned with expectations
 - Compliant with all aspects of the Agreement

Actual Project

- Current approach → **not successful**
- Major issues and concerns across all aspects:
 1. Construction Progress
 2. Construction Management
 3. Quality Management
 4. Engineering
 5. Procurement
 6. Forecasting / Reporting

Progress - Construction

- For CD0502, construction actual progress is 36.6% against the baseline progress of 68.0%.
- For CD0501, construction actual progress is 12.4% against the baseline progress of 30.5%.
- Muskrat Falls **will fail** if no immediate action.
- How will it get done?

GE Construction Management

- Not the “A” Team:
 - Lacking authority / influence / leadership.
 - Minimal construction management experience.
 - Not proactive and allowing subcontractor performance issues to continue.
 - Focused on commercial rather than execution - excessive concern about Claims from Pomerleau is affecting GE’s motivation to correct behaviors

GE Construction Management (cont'd)

- Support from home office is limited.
- Large turnover of site teams.
- No consistency in GE site management presence / no delegates in place for rotational coverage or vacations.

GE Construction Management (cont'd)

- Processes for construction management are not understood or implemented.
- Contract administration is virtually non-existent (change management, validation of progress payments, response to subcontractor, meetings, etc.)
- Lack of ownership of Labour Relations.

GE Quality Management - Construction

- Failure to comply with obligations per the Agreements
- Reliance on Subcontractors to manage quality
- Failure to provide sufficient number of competent personnel to assure quality of the Work
- Inadequate control of the Work

GE Quality Management - Procurement

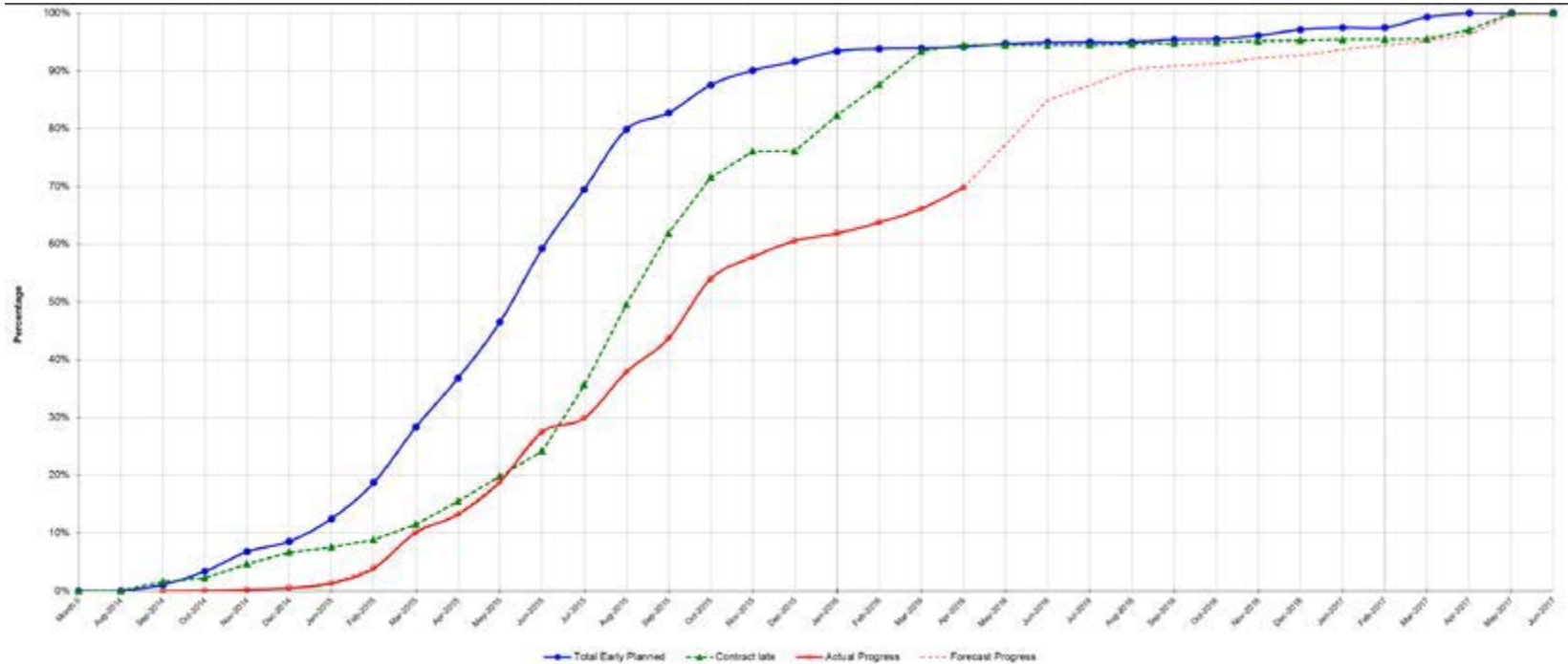
- Starting manufacturing without approved drawings, Company notification, or authorization.
- Implementation of NCR process is inadequate.
- Poor planning and no control around testing and shipping release process.
- Could result in re-work, schedule slippage, impacts on system reliability, integration, cost to Contractor.

Engineering

- Still not clear exactly how many deliverables required to complete scope - deliverable lists have grown in first half of 2016.
- Long duration to incorporate Company comments.
- Not keeping pace with procurement and construction.
- No recovery plan or sense of urgency.

Engineering Progress

(From GE Grid's CD0502 April Monthly Report)



Procurement

- Increase in Purchase Orders placed, however total number of POs planned has also increased.
- It is unclear:
 - Exactly how many POs are required to complete the scope of work.
 - If all long lead POs have been placed.
 - If all equipment manufacturing schedules meet ‘Required on Site’ dates.

4. Monthly Project Reporting

- CD0501 Monthly Project Reports
 - Dec 2015 through Mar 2016 – awaiting resubmission by GE
- CD0502 Monthly Project Reports
 - Oct 2015 through Mar 2016 – awaiting resubmission by GE

In Summary...

- Currently, GE Grid is not adequately staffed (numbers, experience, training) to deliver the project.
- Scale, complexity, and current status of the project is not recognized by GE.
- Processes are either non-existent or not being implemented and adhered to.

NEXT STEPS: SOLUTIONS ?

Steering Committee Assistance

- The challenge of recovering at Muskrat Falls requires immediate and focused attention by high caliber, experienced, senior personnel.
- Alternative subcontractors must be considered, in light of current performance issues at Muskrat Falls.
- Need to ensure that GE Grid has the right people, in the right place, doing the right things, at the right time.
- Implement immediate, substantial, and lasting change to ensure project success.
- **Action rather than words.**

Sharing our ideas in an open and supportive manner to achieve excellence.

Teamwork

Open Communication

Fostering an environment where information moves freely in a timely manner.

Honesty and Trust

Being sincere in everything we say and do.

Relentless commitment to protecting ourselves, our colleagues, and our community.

Safety

Respect and Dignity

Appreciating the individuality of others by our words and actions.

Leadership

Empowering individuals to help, guide and inspire others.

Holding ourselves responsible for our actions and performance.

Accountability