

**From:** [brucedrover@lowerchurchillproject.ca](mailto:brucedrover@lowerchurchillproject.ca)  
**To:** [Frank Gillespie](#)  
**Cc:** [Scott O'Brien](#)  
**Subject:** Re: CH0032 - Presentation on AH issues for Paul.  
**Date:** Monday, November 2, 2015 4:34:54 PM  
**Attachments:** [CH0032 Project Update Issues With Andritz 2-Nov-2015.pptx](#)

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CH0032 Project Update Issues With Andritz 2-Nov-2015.pptx

Updated with Frank's comment.

**Bruce Drover**

**Package Leader - Hydro Mechanical Equipment**

**PROJECT DELIVERY TEAM**

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Bruce Drover---11/02/2015 03:45:14 PM---Comments? Bruce Drover

From: Bruce Drover/NLHydro

To: Frank Gillespie/NLHydro@NLHYDRO

Cc: Scott O'Brien/NLHydro@NLHYDRO

Date: 11/02/2015 03:45 PM

Subject: CH0032 - Presentation on AH issues for Paul.

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[attachment "CH0032 Project Update Issues With Andritz 2-Nov-2015.pptx" deleted by Bruce Drover/NLHydro]

Comments?

**Bruce Drover**

**Package Leader - Hydro Mechanical Equipment**

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# Lower Churchill Project

## CH0032 Hydro-Mechanical Package Update

2-Nov-2015

Boundless Energy



Take a  
**MOMENT**  
for Safety

# Organization



# Org Chart and Roles

- AH have not submitted an acceptable org chart with roles and responsibilities for the subcontractor model.
- Last execution plan document was rejected and is overdue for resubmission.
- Plan for back-to-back coverage on site is incomplete
- Overall team is undersized and lacks sufficient experience in some areas.

# Management

The main issue impacting quality and schedule performance on CH0032 is Lack of Management and Oversight.

- This applies to engineering, manufacturing and construction.
- Andritz increased the utilization of subcontractors since award but did not implement an organization to effectively manage them.

# Engineering

- Documentation from subcontractors is frequently of unacceptable quality. Issues include:
  - poor translation,
  - lack of integration in overall design or installation method,
  - misinterpretation of specifications.
- Andrtiz is not doing a “value added review” of subcontractor scopes – often just forwarding submissions from their subs to LCP. Review is done by LCP.

# Planning

- There have been changes in planning resources and AH has never fully satisfied LCP requirement for a full time planner with adequate skills and experience.
- Review effort by LCP greater than should be expected. High number of technical mistakes. Repeated failure to understand and incorporate comments.
- AH have still not provided an acceptable acceleration plan

# Planning

- A Constructability review has not been done by Andritz with their subs.
- Appears AH have failed to fully consider impacts of change in implementation strategy.
  - Examples:
    - Use of hydro-mobile scaffold instead of fixed scaffold. Lack of fully understanding accessibility to guides from the platform contributed to safety absolute – standing on toe boards with no fall arrest.
    - Grouping subcontractors embedded and non embedded parts in an activity – resulting in planned installation of embedded anchors after concrete supposed to be poured.


# Manufacturing

- AH Management and QA oversight of manufacturing is understaffed and inexperienced. They have made improvements but have not been able to consistently meet LCP requirements in a timely manner. QA documentation backlog is chronic and overall manufacturing is behind schedule. (this is not exclusive to China scope)

# Construction

- Site organization is extremely light. Individual resources are covering multiple roles. Result is an organization that is very sensitive to the slightest upset. This has been demonstrated by safety and labor relations events that temporarily crippled the AH management organization at site. Daily coordination could not continue while dealing with these issues.
- Assignment of Subs management team for coverage during turnarounds

# Construction

- AH relying on subcontractors to fill roles and responsibilities that should be by AH
- 
- Delays and low morale are quickly becoming the norm.



# Attitude

# Commercial

- Focus on commercial issues and extras at the expense of overall coordination and schedule management is obvious.
- Subcontractor Canmec appears to be very “extra” oriented. LCP is seeing frequent change requests that are frivolous or grossly overestimated. AH is passing these through to LCP without challenge.

# Commercial

- Opportunistic approach to changes
  - Negotiation from a position of perceived entitlement vs actual impact – for example anchor tolerances
- Inflexible stance during negotiations on schedule
  - Not willing to move on acceleration costs that are grossly overestimated
  - No sharing of risk

# Safety

- Safety attitude and effort not up to project standard. Several safety absolutes requiring a safety stand down already.
- Several fall arrest related issues indicate a lack of communication of requirements and learning from previous events.

# Quality

- The attitude that we are asking for more than they are used to still exists. We are not asking for favors – just contract compliance.
- After almost two years on the job they know the requirements and need the organization to implement them.

# Cooperation

- An uncooperative attitude was evident prior to the start of work. At the first coordination meeting between LCP, Astaldi and Andritz, subcontractor Canmec announced they would not start under the current conditions.
- Focus on problems continues. Subcontractor frequently over-states issues that in reality could be dealt with a cooperative effort in the daily coordination meetings.

# Cooperation

- Contractor is **not** making efforts to accelerate and meet the timeline for diversion.
- They continue to work to a schedule that will miss diversion by months.

# Cooperation

- LCP Package and Component team has made best efforts to negotiate a path forward in a cooperative manner. Letters, NCRs and other contract forms have been employed where required. Issues have been escalated with Andritz management in Canada and Linz Austria. Overall we have not been able to effect change in Andritz behavior. A new approach is required.



# New Approach

# Directive

- A change request is being drafted to Direct Andrtiz to begin working to the required timeline for diversions.
- The change request includes:
  - LCP's fair and reasonable assessed costs: \$3.4M
  - and bonus of \$2M for achieving ready for diversion on 15-Jun-2016.

# Executive Level Escalation

- LCP needs to bring these issues to the attention of Senior Executives in Andritz Hydro headquarters (Vienna) who can effect change in the Andritz Hydro Canada organization.

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