

# Lower Churchill

Cost and Schedule Update

12 Feb 2015

Boundless Energy



Take a  
**MOMENT**  
for Safety

# FELT Initiative

# FELT Leadership – Pocket Guide



## FELT Leadership

The actions and behaviors exhibited by leadership to visibly demonstrate your personal commitment to safety excellence.



Felt Leadership is visibly demonstrated when leaders show they:

### CARE

- Get actively involved in safety
- Demonstrate a sincere personal concern for everyone's wellbeing
- Take the time to get to know employees & contractor's crew (convey why safety is important to each of them)
- Conduct regular walkabouts with a focus on safety & be visible in the field
- Focus on injury prevention by raising awareness through experiences, safety bulletins or lessons learned
- Engage individuals and take interest in their work & safety
- Address open safety issues (SWOPs, etc.) promptly
- Lead regular safety inspections & engage employees for input
- Monitor incident reporting & use the leading indicators to focus your attention
- Make contact with a team member who is injured (Medical Aid, First Aid, Near Miss)

### COMMUNICATE

- Speak-up on safety issues & performance
- Encourage open communication & work to draw team members into conversations about safety
- Set clear expectations on safety performance (including using proper tools & following procedures)
- Keep others informed on important safety matters
- Share your personal safety message
- Participate in crew tailboards & attend contractor's safety meetings
- Encourage individuals to suggest ways to work more safely together
- Share safety accomplishments
- Generate a safety brief after a near miss occurs
- Participate in the orientation process for new workers

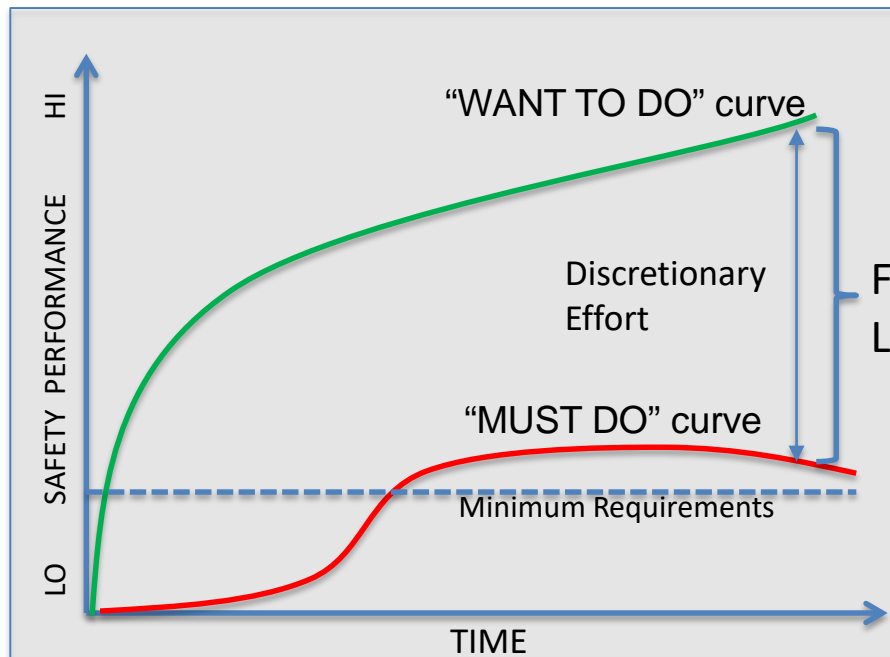
### COACH

- Reach-out to team members & inspire them to work safely
- Lead by example (walk the talk)
- Practice positive reinforcement
- Interact with individuals & provide constructive feedback
- Make personal contact with individuals who provide quality safety observations
- Coach individuals on unsafe actions & behaviours & how to work safer
- Review StepBack cards (share yours thoughts with the cardholder(s) & provide feedback on quality & completeness)
- Encourage team members to get involved in safety
  - Assist their co-workers
  - Share experiences & learnings
  - Never walk away when discussing safety



# FELT Leadership helps to unlock the benefit of ‘Discretionary Effort’

Discretionary effort is the level of effort people could give if they wanted to, but above and beyond the minimum required.



FELT LEADERSHIP

- CARE
- COMMUNICATE
- COACH

# Project Capital Cost

# Capital Cost – Anchoring back

- June 2014
  - Cap cost updated publically to \$6.99B
  - AFE rev 1 \$6.99B for MF,LIL,LTA approved
  - Project team’s view on cost at completion \$7.5B
    - 3 major contracts remaining – assumed total \$410M
- February 2015
  - Remaining 3 contracts bids received – total \$682M
    - Additional \$272M driven by contractors fear of labour productivity which increases Project Cost at Completion to \$7.77B
  - AFE Rev 2 for \$7.49B required to award upcoming contracts

# AFE Rev – Required June 2014

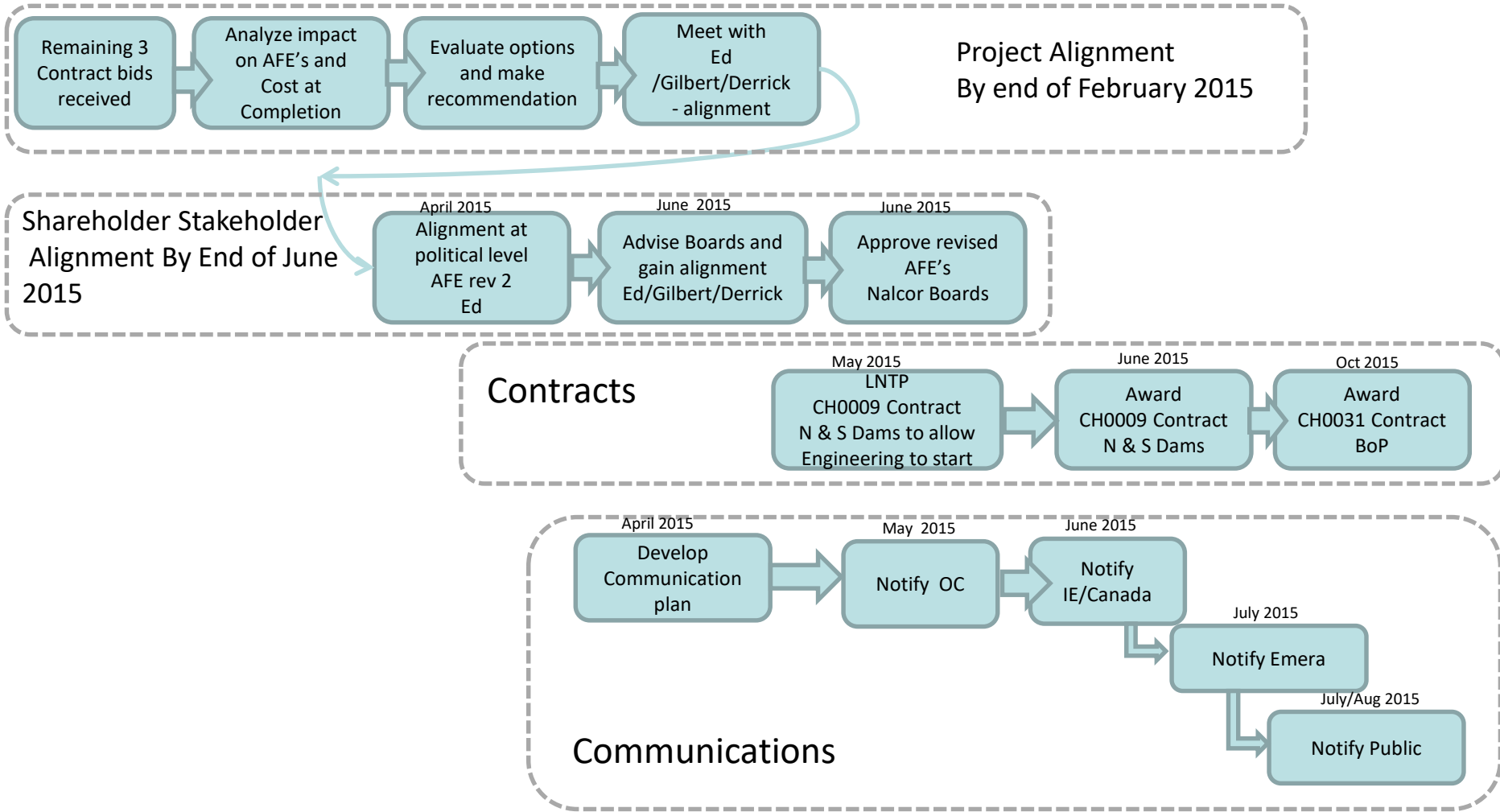
- AFE Rev 2 will suffice until mid 2016 and includes ~\$188m contingency
- Cost Drivers
  - AFE Rev 1 to AFE Rev 2
    - \$6.99B to \$7.49B
    - Combination of Reliability, Productivity, Market drivers
  - Project Cost at Completion June 2104 to Feb 2015
    - \$7.5B to \$7.77B
    - Exclusively driven by N Spur, N&S Dam and Balance of Plant contractor bids reflecting the bad productivity reputation of civil Projects in NL.



# AFE Rev 3 – Required Mid 2016

- AFE Rev 3 - \$7.77B
  - Will take project through to completion assuming the 4% contingency is adequate and there are no major contract defaults, claims or geotechnical issues
  - Other assumptions
    - RFI/RFCI, BTPO costs are not Project Costs
    - HVGB pre build, TL 240 reroute and construction power asset costs are paid by Hydro ~ \$50M
    - ~\$41M Forex exposure is not a Project Cost
    - Astaldi recover delays to Powerhouse/Spillway construction
    - \$10M Bond recovery from GWF default

# Potential Sequence of Way Forward



# Schedule Concerns

- LTA/LIL – no schedule concerns
- SOBI – no schedule concerns
- MF – Schedule delay concerns
  - Astaldi have lost 6 to 9 months in 2014
  - Difficult 2014/15 winter conditions will impact recovery
  - Astaldi reorganization taking time to take full effect
  - Uncertainty regarding Astaldi performance post reorganization
  - We are eating into the built in schedule float and that puts the December 2017 First Power Date under threat but we are not projecting schedule delay at this time

# Communications

- External messaging needs to focus on the AFE Rev 1 to Rev 2 changes of \$500M
- Reliability \$120M
  - Improvements to converter design, filters, synchronous condensers, Increased tower steel and foundations.
- Productivity \$80M
  - Increased camp costs because of increased construction labour hours resulting from lower productivity
  - Difficult terrain on ROW clearing
- Market \$300M
  - Poor productivity reputation resulting in higher Contractor risk premiums for NL work is driving up forecasts

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