

From: pathussey@lowerchurchillproject.ca
To: phussey@
Subject: Fw: Slide Deck for Mr. Marshall - meeting at 3pm
Date: Thursday, July 14, 2016 2:25:26 PM
Attachments: [.png](#)
[Presentation to CEO re Valard - 14-Jul-2016.pdf](#)

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----- Forwarded by Pat Hussey/NLHydro on 07/14/2016 02:25 PM -----

From: Jason Kean/NLHydro

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Cc: Gilbert Bennett/NLHydro@NLHydro, Lance Clarke/NLHydro@NLHydro, Paul Harrington/NLHydro@NLHydro

Date: 07/14/2016 01:52 PM

Subject: Slide Deck for Mr. Marshall - meeting at 3pm

John,

Attached is the slide deck for this afternoon's meeting with Mr. Marshall.

Cathy,

I would appreciate if you could print and provide Mr. Marshall a copy of the attached. He may wish to pre-read before the meeting.

Regards,

Jason



Presentation to CEO re Valard - 14-Jul-2016.pdf

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You owe it to yourself, and your family, to make it home safely every day. What have you done today so that nobody gets hurt?

Valard Performance Discussion

CEO Briefing, 14-Jul-2016

Boundless Energy



Take a
MOMENT
for Safety

Worker Recognition Program

- Designed to reinforce positive behaviours
- Very positive feedback has been received from the workforce

COMING SOON!

Thank you for
taking a moment for safety

You have been recognized for your
personal commitment to safety excellence.

Observer to complete and return this card to be
entered in the monthly safety draw.

FELT
LEADERSHIP
care • communicate • coach

Take a
MOMENT
for Safety

nalcor
energy

Being a safety leader while
practicing safe actions or behaviors
will soon give you the opportunity
to earn a C Card.

Stay tuned for more info about the
Lower Churchill Project's
Safety Recognition Program

FELT
LEADERSHIP
care • communicate • coach

Take a
MOMENT
for Safety

nalcor
energy

Purpose

- Provide background and relevant status information in preparation for meeting with Executives of Quanta and Valard.
- Discuss how we move forward.

Key Messages

Key Messages	Supporting Information
<p>1 Valard’s performance is driving the timing for construction completion of LITL and LTA</p>	<ul style="list-style-type: none"> • Scope of responsibility • Progress to-date • Critical Path to Complete
<p>2 Poor management and leadership from Valard is the underlying root cause</p>	<ul style="list-style-type: none"> • Poor Field Coordination and Management • HVac Line Completion – LD risk • ROW Clearing and Access Outlook • Quality Deficiencies
<p>3 Valard focused on justifying extension of LD grace period; not focusing on solutions.</p>	<ul style="list-style-type: none"> • Commercial Recap • LCMC’s Solves to the De-Risk Schedule
<p>4 Quanta Services, who hold the Parent Company Guarantee, can no longer stand by the sidelines.</p>	<ul style="list-style-type: none"> • Quanta breadth of capability • What we need moving forward
<p>5 We are at a critical point where action is required.</p>	<ul style="list-style-type: none"> • Getting to the Finish Line

Key Messages – *Anchoring Back*

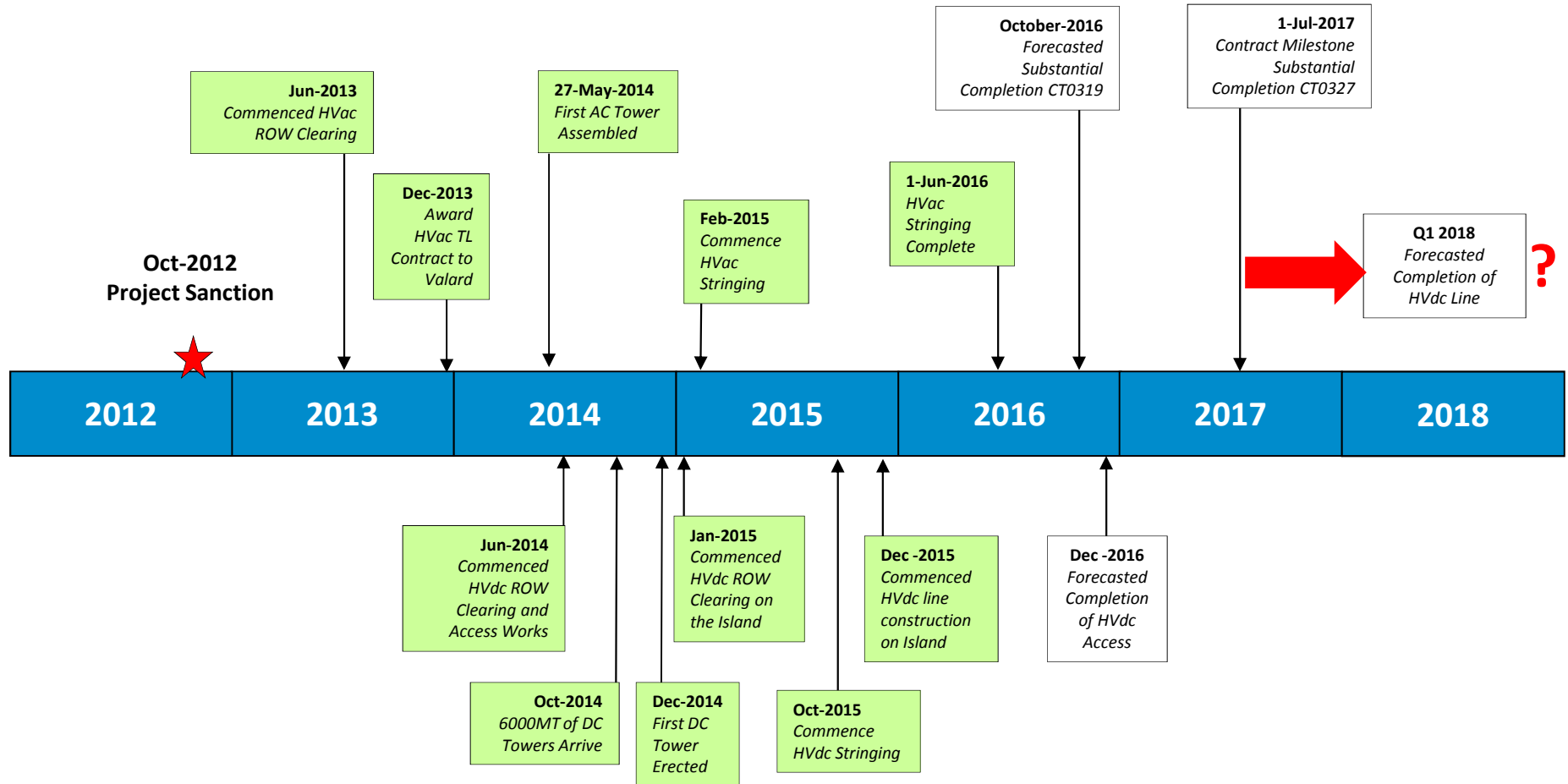
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1 Valard’s scope of responsibility is significant (largest LCP contractor by value)

315 HVac Lines (~\$270M)	350 HVdc Line (~\$880 M)	HVdc Clearing & Access (~\$450M)	Material Supply & Mgmt. (\$340 M)
<ul style="list-style-type: none"> ▪ Twin lines (247km) – Line Construction only, ROW clearing by LCMC <ul style="list-style-type: none"> – 1262 towers – >95% complete – Rectification of quality NCRs ▪ 735kV interconnect at CF underway ▪ Will not achieve Substantial Completion Date of 4-Aug-2016. <ul style="list-style-type: none"> – LDs Cap – 10% of Contract Price – Days 1 – 15: \$20k/d – Days 2 – 30: \$40k/d – >30 Days: \$60k/d 	<ul style="list-style-type: none"> ▪ Single line (1,086 km) – Line Construction (Part A - \$820M and ROW Mgmt. (Part B - \$60M) <ul style="list-style-type: none"> – 3229 towers – ~23% complete ▪ Critical path for construction completion of LIL and LTA ▪ Will not achieve Substantial Completion date of 1-Jul-2017 <ul style="list-style-type: none"> – LDs Cap - 10% of Contract Price – Grace period of 15 d – Days 16 - 45: \$350k/d – > 45 Days: \$750k/d 	<ul style="list-style-type: none"> ▪ Multiple packages and contractors (100% local) ▪ Envisioned as “Fit-for-Purpose” construction access ▪ Valard responsible to plan and manage (Part B), however they did not: <ul style="list-style-type: none"> – No access plan – “Gold-plated” access – Cost overrun ~ 150% ▪ LCMC stepped in Sep-2015 ▪ Work is now ~80% complete and not on critical path 	<div data-bbox="1533 898 1986 1037" style="background-color: #cccccc; text-align: center; padding: 5px;"> AC Rebuilds (\$20 M) </div> <ul style="list-style-type: none"> ▪ Procurement and material management by LCMC <ul style="list-style-type: none"> – Multiple suppliers ▪ LCMC operated Marshalling Yards ▪ All material delivered <ul style="list-style-type: none"> ▪ AC re-routes on Island ▪ Significant outage coordination ▪ Single contractor - Locke’s Electrical ▪ On time and on budget

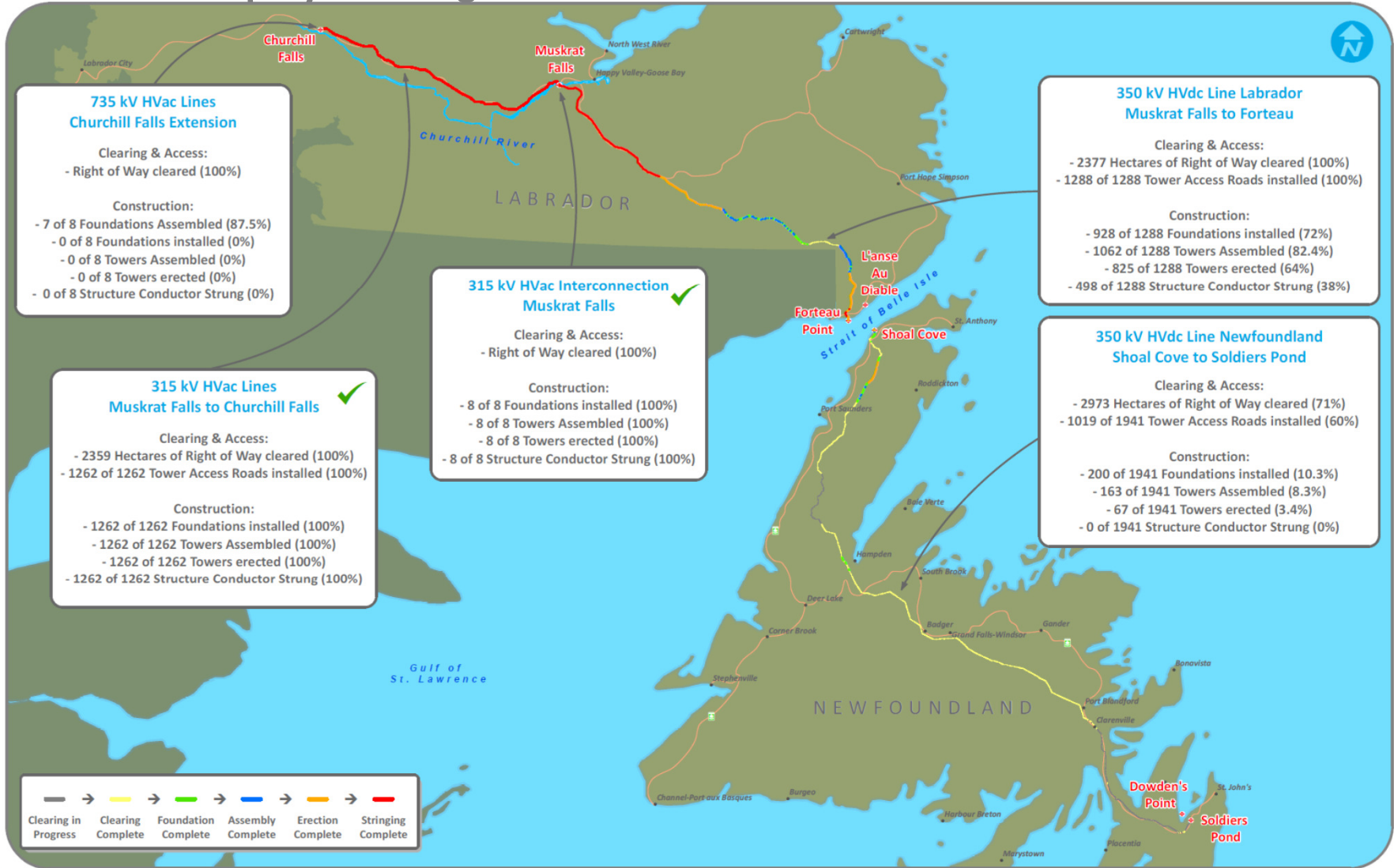
1

We've achieved a lot, however predictability of HVdc TL is low given Valard's performance to-date



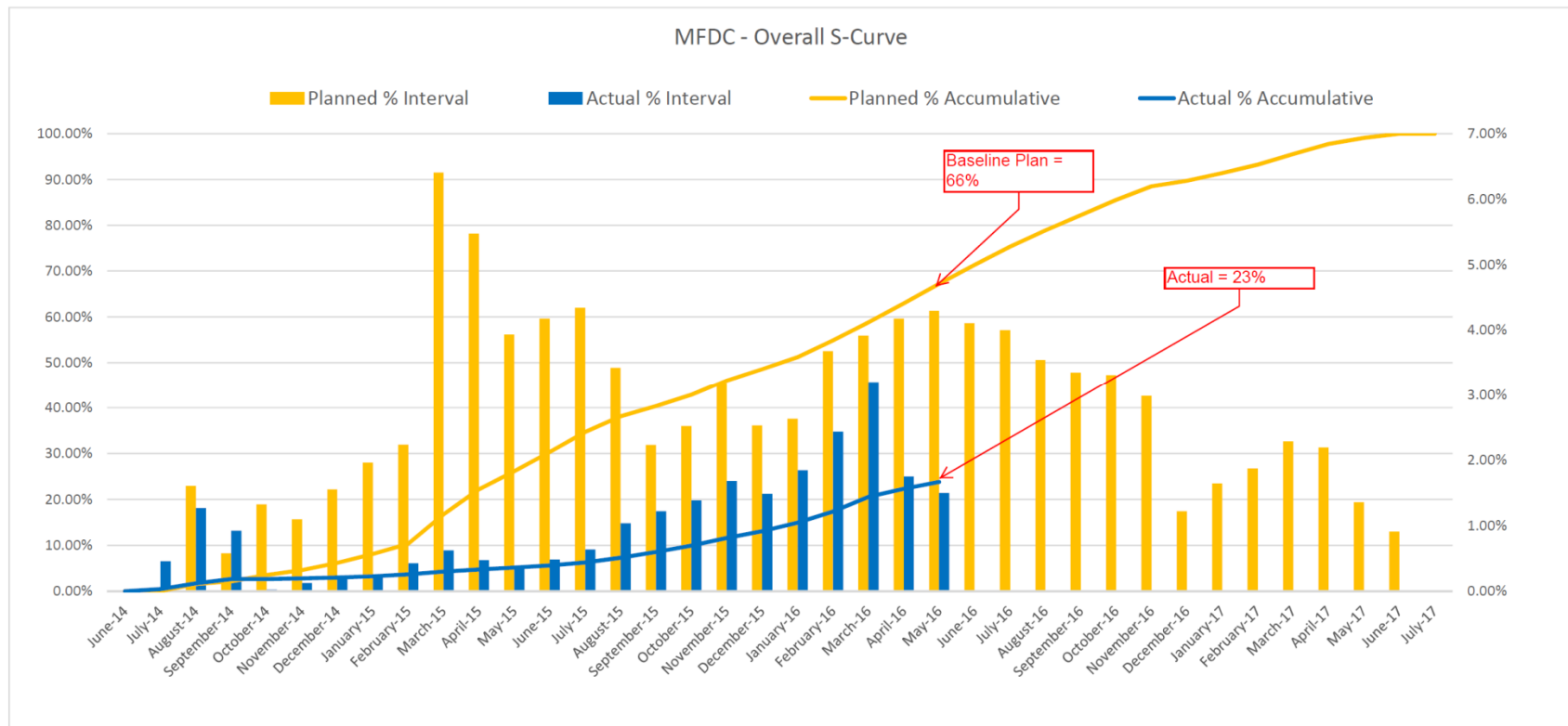
1

Valard’s lack of willingness to work concurrently in Labrador and Island has resulted in loss opportunity; plenty of areas on Island where crews can be deployed to regain schedule.



1

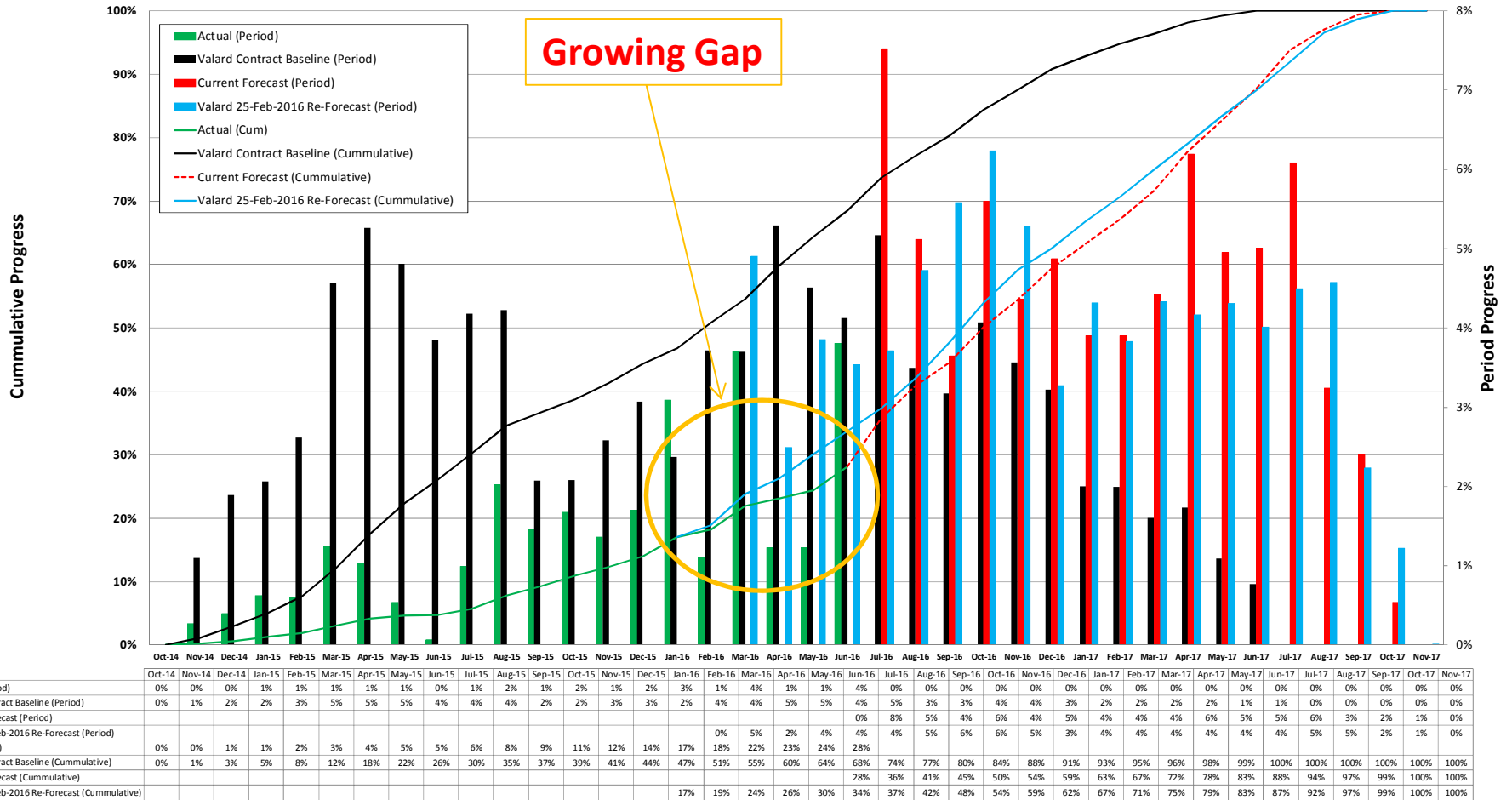
For HVdc line, Valard’s progress against approved Contract Schedule (i.e. orange curve) has been poor, forecasting 9 to 12 months late (March to June 2018). With our pushing, last February Quanta executives committed to end of Oct 2017.



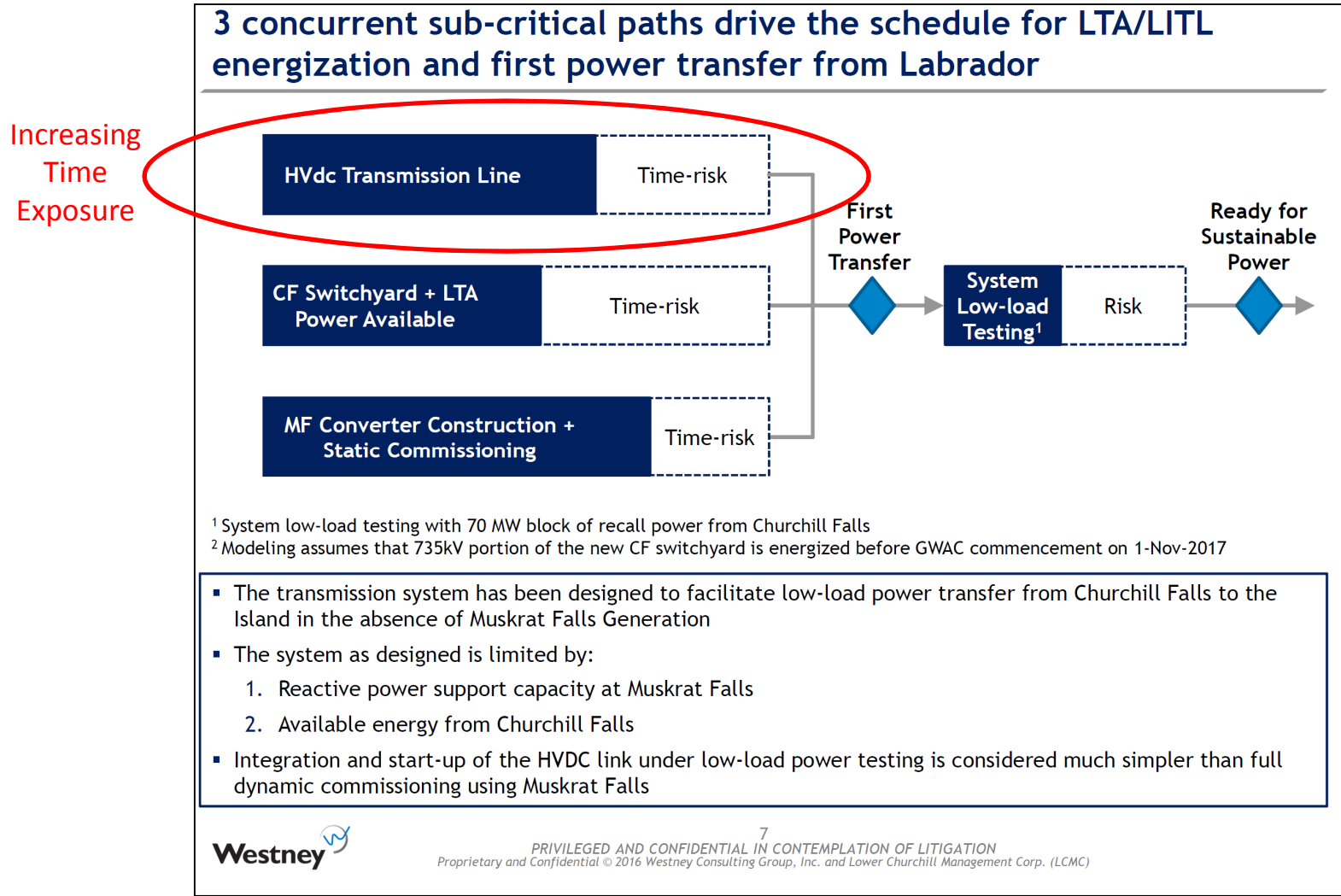
1

This commitment (blue line) has not been kept by Valard ... they do not appear motivated to get the Work done.

HVdc TL Overall Construction Progress
(Period Ending June 2016)



1 The net result is that the TL is squarely on the Critical Path, contrary to QRA findings; GE-Alstom risk is decreasing.



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2 Valard is underperforming expectations, largely driven by poor field coordination and management

Key risk: Valard's performance

Category	Details
Details	<ul style="list-style-type: none"> Valard has struggled to get organized on the HVdc line, while production and rework rates are outside expectations. Competency gaps are evident. Based upon slippage to-date, Valard will not be able to deliver to their contractual date of 1-Jul-2017, with a risk of slippage into 2018. LCMC will be exposed to incremental cost for maintaining access for extension. Systematic quality problems are leading to extensive rework, thus distracting from the forward progression of the line. It is highly probable that Valard will present a claim against in an attempt to seek relief from LDs
Mitigation	<ul style="list-style-type: none"> Valard, with its parent Quanta Services, must develop and resource a re-baseline plan that demonstrates their ability to deliver the Project without further delay Adequate experienced PM and CM leadership must be deployed by Valard in order to rejuvenate the site teams Additional foundation and stringing crews are needed LCMC and Valard must address open commercial issues and agree the basis upon the TL will be completed in as timely a fashion as possible LCMC to ensure strong QA oversight over critical works

Progress to-date

	Installed (Oct '14 – June '15)	To-Go
Foundations	941	2,288
Guy Anchors	699	2,082
Tower Erection	725	2,504
Stringing	385	2,844

Notes:

- Total structure count for HVdc TL is 3,229
- Installed as extracted from Valard's June 2016 Monthly Progress Report
- Installed is reflective of Code 1 – all documentation in-place, thus likely short by ~200 structures
- The above installed quantities are reflective of the HVdc TL only and do not consider the total of 1,288 towers completed by Valard on the HVac TL in the period of Jan 2014 to Mar 2015.

2

HVac Line: Despite strong production rates, quality rework on the AC line will result in Valard missing the Substantial Completion Date

Current Status

- Stringing Complete
- Counterpoise forecasted to be complete by early August
- Reclamation underway – forecast completion by late fall
- 2 of 3 camps demobilized
- Anticipate Valard achieving substantial completion late September

Activity	Cumulative Structures Reported from 19-Jun-16 to 25-Jun-16	Weekly Total From 25-Jun-16 to 2-Jul-16	Cumulative Total to Date	Percentage Complete	Planned Weekly Total	Cumulative Planned Total to Date	Planned Percent Complete	Total Deviation (in number of structures)
Structure Assembly	1262	0	1262	100.00%	0	1262	100.0%	0
Foundation Installation	1262	0	1262	100.00%	0	1262	100.0%	0
Erection	1262	0	1262	100.00%	0	1262	100.0%	0
Plumbing	1082	0	1082	100.00%	-	-	-	-
Counterpoise	914	104	1018	80.67%	-	-	-	-
Conductor Stringing	1262	0	1262	100.00%	16	1204	95.4%	58
Conductor Tie In	1262	0	1262	100.00%	16	1204	95.4%	58
OHSW Stringing	1262	0	1262	100.00%	16	1204	95.4%	58
OHSW Tie In	1262	0	1262	100.00%	16	1204	95.4%	58
OPGW Stringing	650	0	650	100.00%	8	610	93.8%	40
OPGW Tie In	650	0	650	100.00%	8	593	91.2%	57
Reclamation	218	0	218	17.27%	-	-	-	-

Current Focus Areas

- Rectification of open foundation NCRs related to concrete
- Commence of Completion Walk downs



2

Similarly, plenty of effort wasted addressing Nonconformances and Rework on the HVdc TL.

Foundation removal due to poor work methods and inadequate supervision



S1-70 Leg C, reclamation of grillage footing, saturated founding base and backfill.

Rework at Valard's Cost



S1-70, Leg A, Grillage Placement on prepared founding base with groundwater control.

2

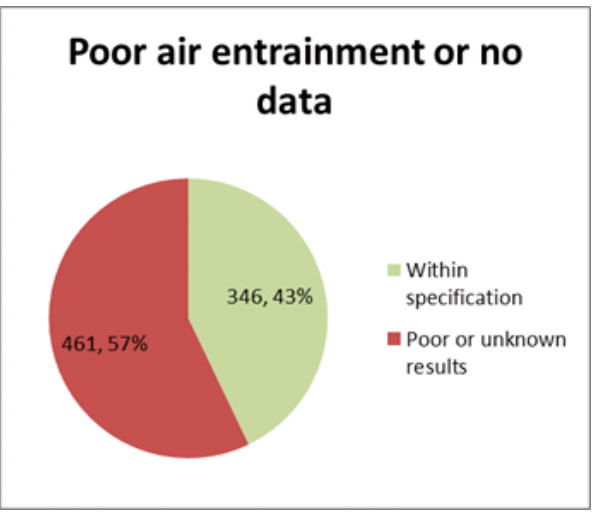
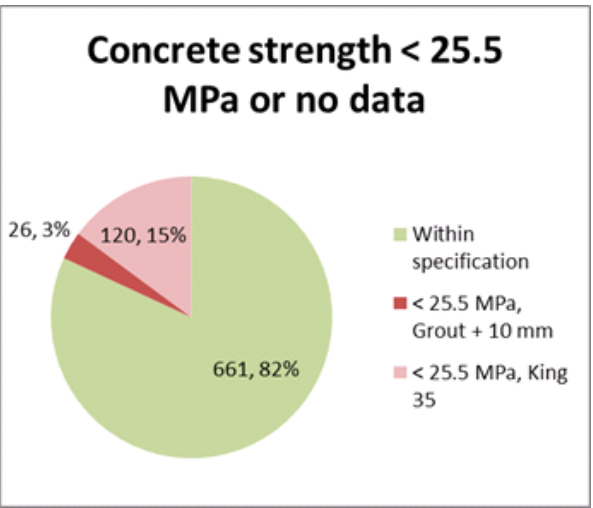
Unwillingness to accept Contractual responsibilities for Access Management has costed LCP significantly

	<u>Details</u>
Underestimation of the work and lack of management by Valard	<ul style="list-style-type: none"> ▪ The effort required to construct access was underestimated – the project’s design philosophy did not contemplate establishment of a permanent access network for construction or operations; no consideration was made for reliability gains to LITL that permanent line access would provide ▪ Valard has not fulfilled its contractual obligation for access management – no planning, swayed from “fit-for-purpose,” push for all-season ▪ Grossly higher road spec on HVdc than on Hvac where Valard was paying the bill
Much effort has been made to mitigate the potential impact	<ul style="list-style-type: none"> ▪ LCMC has added additional resources to increase field planning and work management, thereby reducing performance cost risk prevalent with T&M contracts ▪ Significant amount of Island access has been completed and will support O&M activities, thereby enhancing overall LITL reliability ▪ Access has progressed to a point that it cannot be considered a constraint to TL construction
Residual risk remains	<ul style="list-style-type: none"> ▪ Valard’s demand for “all-season” access is threatening winter zone strategies (segment 2 structures 1-235 and Terra Nova); further compounded by “uncharacteristically” mild winters ▪ Uncertainty remains for Long Range Mountains and impact of spring break-up on access roads (in particular St. Paul’s River Road) ▪ Valard likely to request LD deferment for lack of “all-season” access

2 Significant forward momentum and costs has been loss due to rework by Valard’s failing to adhere to the Technical Spec.

Rework Area 1: Concrete Foundations on HVac Line

Background	<ul style="list-style-type: none"> 616 (49%) of the lattice tower structures (out of a total 1262) on the 315 kV HVac TL in Labrador are installed on a rock surface. Including legs of self support structures there are a total of 807 rock foundations. For bonding a concrete pad is installed underneath the steel foundation.
Issues	<ul style="list-style-type: none"> It was discovered that the contractor Valard performed a poor job installing the concrete pad at some locations. Those results did not meet project and technical specifications, namely: <ul style="list-style-type: none"> Compressive strength found to be low (should be ≥ 30 MPa) Air entrainment out of specification (should be within 3-8%) No testing data available for some locations (unknown) Some of these locations already had the towers erected and were strung. <ul style="list-style-type: none"> Where towers were erected and strung, directed given to repair For locations that were not, Valard replaced the concrete and then erected the towers. <ul style="list-style-type: none"> 148 foundations were busted out and replaced on Valard’s own recognizance.



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3

Our commercial position is strong, while Valard sees the potential for their 9% margin to be eradicated by LDs, hence the commercial position and efforts to shed indirect costs.

315 HVac Lines (CT0319-001)

- Contract Value: \$270M
- Unit Price
- Paid to-Date: \$202M
- Short Paid: \$153k
- Change Orders: ~1.5% of award value (excluding 735kV scope addition)
- Disputed Items
 - ~\$1.2M for rock busting
 - View our position as strong
- Claims: None
- LDs: Forecasting entitlement to ~\$3 to 4M

350 HVdc Line (CT0327-001)

- Contract Value: \$880M
- Unit Price (Part A) + Reimbursable (Part B)
- Paid to-Date: \$191M
- Short Paid: \$15M (Part B and NCRs)
- Change Orders: Forecasting 2 to 4% of award value – related to foundations
- Disputed Change Orders: None
- Claims: None, but Valard positioning for:
 - Access
 - Geotechnical
 - Availability of Tower Material
- LDs: Forecasting entitlement to ~\$80M

3

We are focus on solutions to reduce schedule risk.

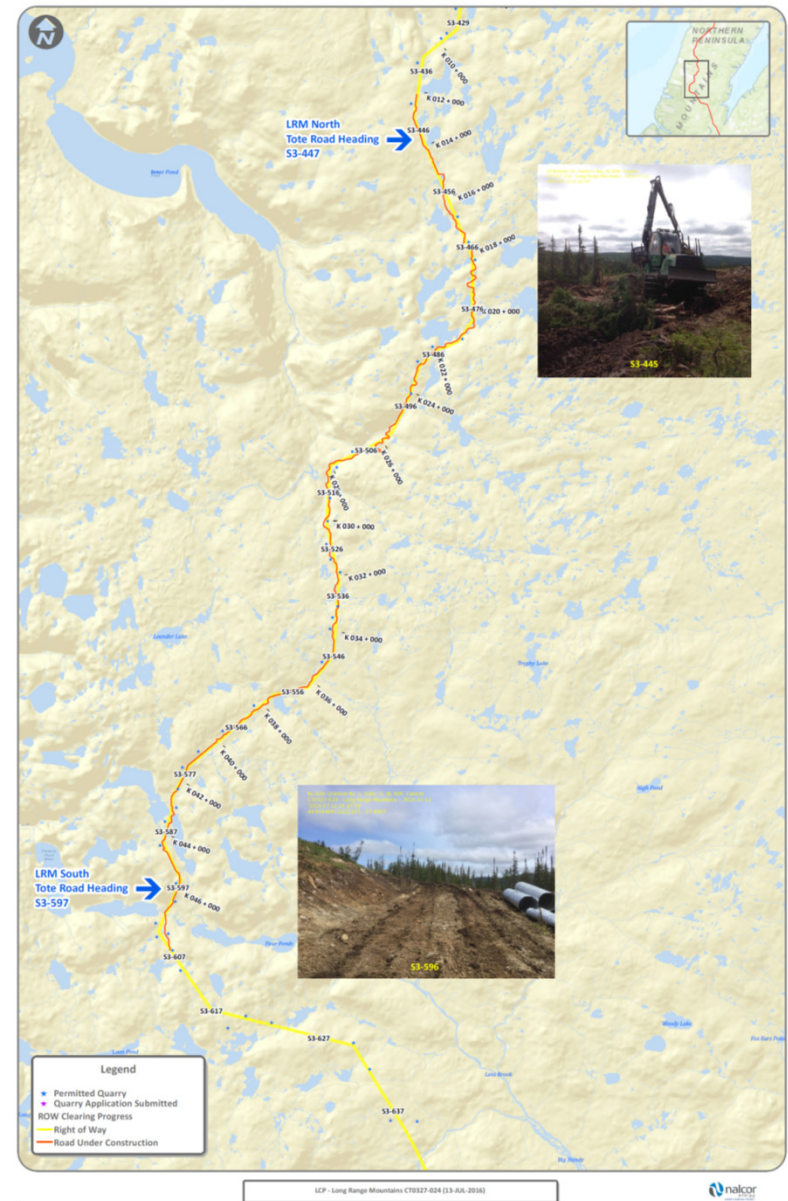
Solve 1: Alternate Rock Foundation (i.e. macro-pile)

- Current rock foundation is labor intensive, in particular for deep rock applications, requiring both significant excavation, rock leveling, and concreting. Not profitable for Valard.
- Approved design for alternate foundation (i.e. macro-pile) ready for build. Awaiting final proposal from Valard. Plan is to use competent subcontractor LEG.



3 Solve 2: Decision made by LCMC to establish all-rock road access in LRM to improve constructability, thereby de-risk TL build.

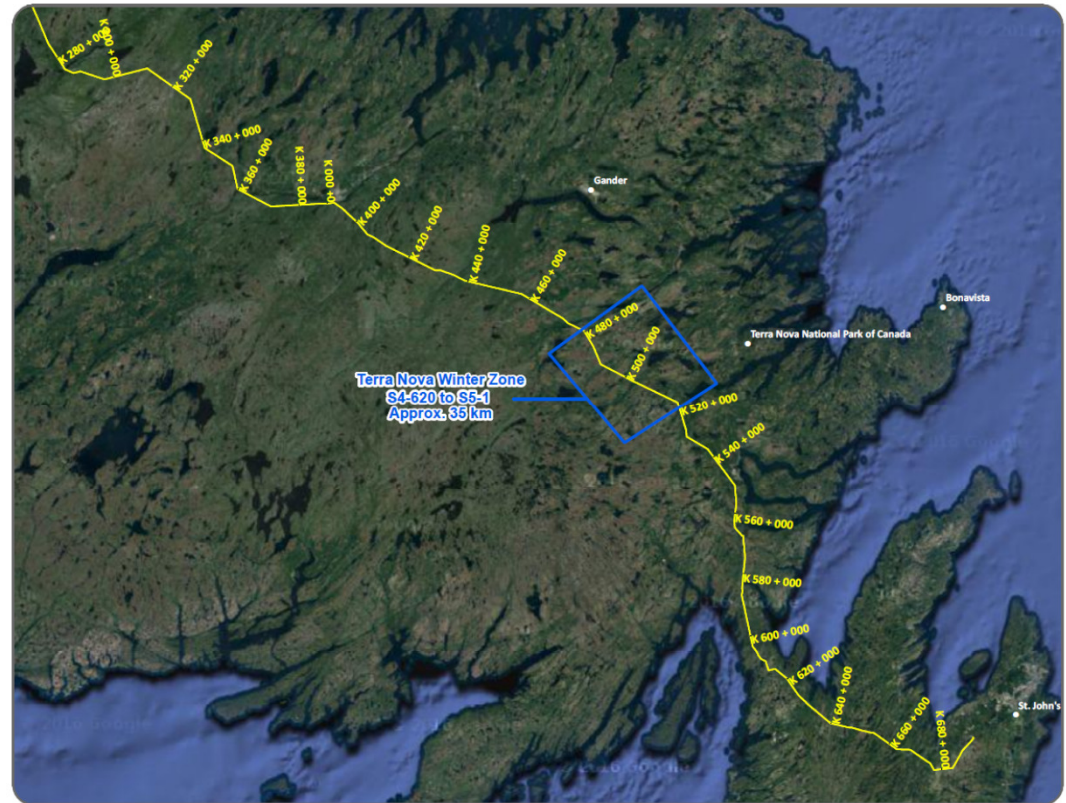
Incremental Capital Investment \$30M



3

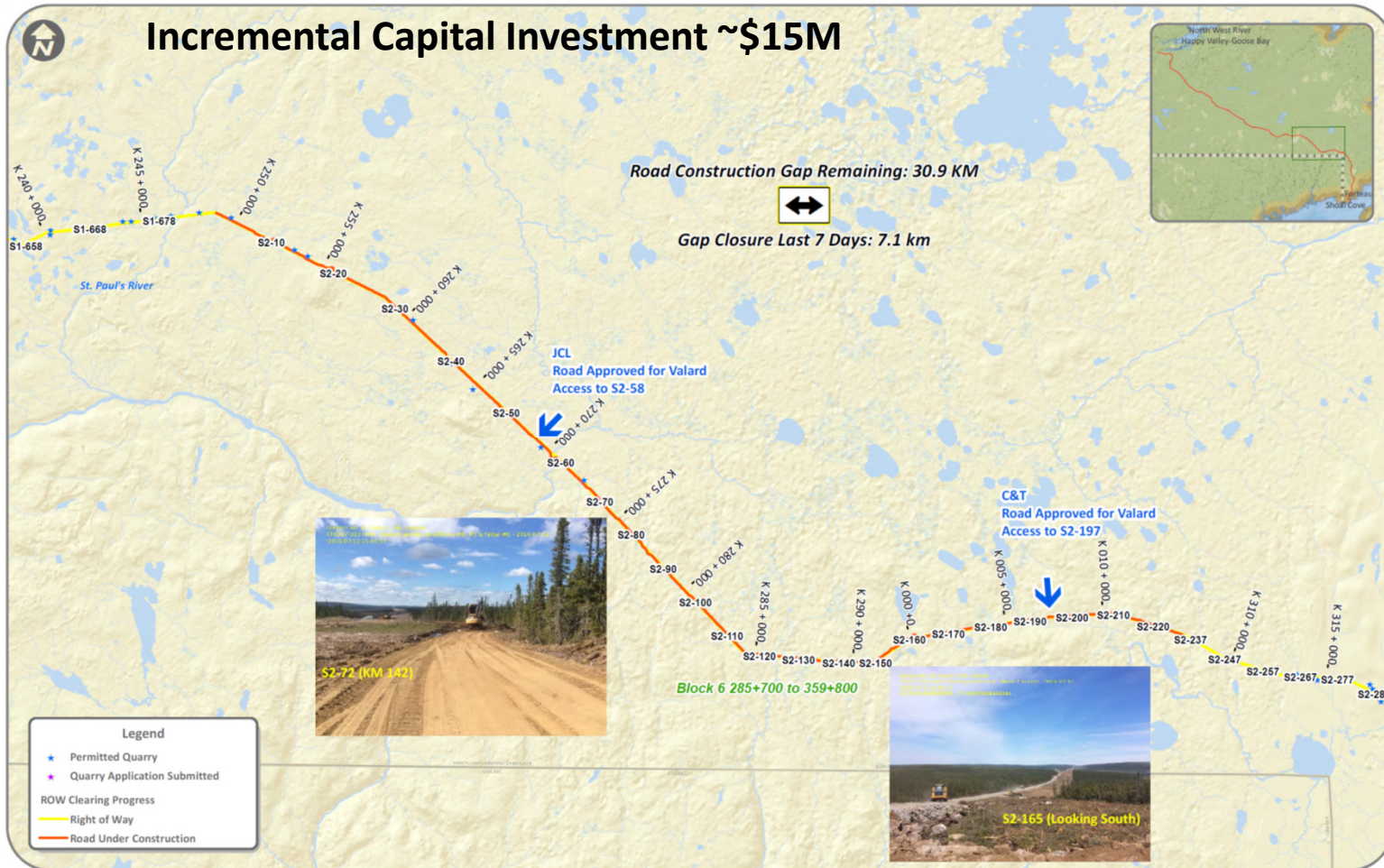
Solve 3: Removing winter-only construction restriction in Eastern NL

- Terra Nova Winter Zone (TNWZ), is planned for construction in winter 2016/17 - ~40km long (100 structures)
- Dominated by boggy terrain, making temporary winter access more cost effective, but unpredictable due to winter conditions
- Decision made to install “conventional” access in this region
- Target completion by in early Q4.
- Incremental Capital Investment \$12M



3

Solve 4: Removing winter-only construction restriction for interior of Labrador (235 structures)



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4

Valard's parent, Quanta Services ("Quanta"), have capability and a strong balance sheet.

Quanta is ...



289. Spectra Energy 69.38

290. Quanta Services 69.37

291. National Oilwell Varco 69.35





UTILITY

RANK	FIRM	2009 REVENUE (\$ MIL.)	% CHG. '08-'09
1	QUANTA SERVICES INC.	2,076.1	+61
2	HEWLETT & PACKARD INC.	1,236.0	+140
3	HEWLETT PACKARD CORP.	996.4	+7
4	TECHNIPOL	984.2	-3
5	WYDOR INC.	793.2	N/A



Quanta Services

29



America's Top Private Fleets



- The Top Specialty Contractor serving Utility Industry
 - NYSE: PWR
 - S&P 500 company
 - #397 on the *Fortune* 500; Number 1 among E&C companies for profits as a percentage of revenues; 15th fastest growing company for one-year revenue growth.
 - Largest utility specialty contractor in North America
 - Ranked #1 utility specialty contractor by *Engineering News-Record*
 - Numerous safety and innovation awards
 - Ranked #1 publically traded company based in Houston



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4

While a significant volume of work remains, Quanta has the potential to deploy additional resources across the linear project in order to minimize schedule delay.

Quanta is ...

- Built on the collective strengths of industry-leading contractors
 - More than 45 local and regional operating units
 - More than half are active in the Electric Power Sector

4 What we need from Quanta:

1. Mobilization of additional foundation and stringing crews
 - 4th Stringing Crew from one of its subsidiaries (e.g. Irby or PAR Electric)
2. Active and visible leadership engagement
3. Commitment to work to resolve commercial issues and re-set the behaviours

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5

Getting to the Finish Line

Achieving April 2018 Energization of LITL – LTA requires:

- LCMC minimizes access and seasonality constraints to the extent practical
- Solving HVdc Conductor file and mobilization of 4th stringing crews
- We must sanction the alternate rock foundation (macro-pile)
- Valard must commit to a plan that supports energization by end of Dec 2017
- Valard must mobilize a Project Director and additional CM resources who are focused on delivering a quality product, not devoting to managing LDs
- Commercial Reset – LDs reset in turn for waiver of all historical issues. LDs linked to Dec 2017 completion schedule.

5

Path forward

- LCP has reached a critical decision point concerning the path forward with Valard.
- We must reset and move forward.
- LCMC believe that remaining with Quanta – Valard is the optional solution for the Project.

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