

Integrated Project Schedule (IPS) Monthly Schedule and Progress Analysis

Cut off Date: 28 Oct 2015

Boundless Energy



Project Stewardship:
IPS Monthly Schedule & Progress Analysis

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(Attached PDFs)**

Intergrated Project Schedule (IPS)

Current IPS Structure

LCP Project

- 1) LTA - Labrador Transmission Assests
- 2) LITL - Labrador island Transmission Link
- 3) MFG - Muskrat Falls
- 4) Telecom Systems [level of detail being established](#)
- 5) Start-Up sequence

Nalcor Operations

- 6) Breaker Upgrades
- 7) System Protection and Control Upgrades
- 8) Energy Control center Upgrades
- 9) TL 267 and associated switchyard modifications

Transition to Operations Team

- 10) RFI - Ready for Integration
- 11) RFO - Ready for Operation
- 12) BTPO - Build the Production Organization

Maritime Link

[Schedule interface level of detail being established](#)

- 13) Maritime Link Start-Up activities related to LCP Start-Up sequence

1.0 Overall Summary Overall Analysis – Information page 1 of 4

1) Target Milestones

- * Target Milestone Overall = LTA Ready for Power Transmission (Power Available) = 04 July 2017
 Tracking Milestone = 18 May 2017 forecast date **(no change this month)**
- * Target Milestone Overall=LITL-1st Power Transfer Lab to Nfld = 18 July 2017 (Tracking Milestone) **(no change this month)**
- * Target Milestone Overall = MFGen First Power from Muskrat Falls = **(On hold, see below for details)**
 Tracking Milestone removed pending resolution of CH0007 remediation of schedule

NOTE: A tracking milestone simply indicates this month forecast completion date.

2) Overall Engineering/Construction/Commissioning Progress

Period Planned Progress:	2.5%	Cumulative Planned Progress:	44.5%
Period Forecast Progress	2.5%		
Period Earned Progress:	2.2%	Cumulative Earned Progress:	37.7%

Note: This months report now includes:

Nalcor Operations

- Breaker Upgrades page 37
- System Protection and Control Upgrades page 38
- Energy Control center Upgrades page 39
- TL 267 and associated switchyard modifications page 40

LCP/Nalcor Operations

- Line Rebuilds Soldiers Pond Area page 21 and page 41

Maritime Link

- Maritime Link page 42

1.0 Overall Summary Overall Analysis – Information page 2 of 4 LTA

1) Target Milestone

Target Milestone Overall = LTA Ready for Power Transmission (Power Available) = 04 July 2017

Tracking Milestone = 18 May 2017 forecast date (no change from last month)

NOTE: A tracking milestone simply indicates this month forecast completion date.

2) Overall Engineering/Construction/Commissioning Progress

Period Planned Progress:	3.3%	Cumulative Planned Progress:	57.6%
Period Forecast Progress	3.3%		
Period Earned Progress:	5.2%	Cumulative Earned Progress:	60.3%

3) Critical Path:

- CF Switchyard continues to be on critical path to LTA Power Available forecast for May 2017.
- Nalcor Pets projects now are in the LTA subcritical paths (see attached LTA Critical/Subcritical paths PDF)

4) Switchyards: no change from last month

- No change to completion date of static commissioning for either switchyard (CF, MF).

5) 315kV HVac Lines CF-MF: no change from last month

- HVac Seg 1/2 - line construction/stringing progressing with no change this month to HVac Seg 1/2 final inspection date which is end of line construction.

6) 735kV HVac CF Interconnection (Bus Extension): no change from last month

- CF 735kV -bus extension - TL construction start (foundations) not planned until June 2016.

1.0 Overall Summary Overall Analysis – Information page 3 of 4 LITL

1) Target Milestone

- Target Milestone Overall=LITL-1st Power Transfer Lab to Nfld = 18 July 2017 (Tracking Milestone) - **No change from last month**
- Target Milestone Overall=LITL-Ready for Sustainable Power Transfer Labrador to Newfoundland= 11 Nov 2017
Tracking Milestone = 22 Sept 2017 forecast date - **No change from last month**

NOTE: A tracking milestone simply indicates this month forecast completion date.

2) Overall Engineering/Construction/Commissioning Progress

Period Planned Progress:	2.8%	Cumulative Planned Progress:	31.9%
Period Forecast Progress	2.8%		
Period Earned Progress:	2.0%	Cumulative Earned Progress:	30.8%

3) Critical Path: **No change from last month**

- HVdc segment Seg 5 is driving the LITL critical path .
- HVdc segment Seg 4 lost 77 days float this month with 19 days float remaining to critical path .
- Schedule pressures increased this month on Seg 4 & Seg 5 after foundations & towers start delayed 3 months

4) SOBI Crossing

- Completion of the rock loading marine terminal
- Completion of placement /termination 1/3 land cables at Shoal Cove

5) HVdc Line

- HVdc Lab Seg 1 = final inspection date is Sep 2016 which is 44 days earlier than last month (see page 19)
- HVdc Lab Seg 2 = final inspection date is Sep 2016 which is 60 days earlier than last month (see page 19)
- HVdc Nfld Seg 3 = final inspection date is March 2017 which is 7 days later than last month (see page 19)
- HVdc Nfld Seg 4 = final inspection date is June 2017 which is 77 days later than last month (see page 19)
- HVdc Nfld Seg 5 = final inspection date is July 2017 - no change from last month

6) Converters / Switchyards / Sych Cond

- Converters/switchyards: Work progressing with no delay on completion date of static commissioning.
- Sych Cond: Work progressing with 4 day delay to completion date of static commissioning.

7) SOP Transmission Line Rebuilds

- Work continues with reliance on outages. (see pages 21 and 41)

8) Transition Compounds / Grounding (Electrode) Stations

- Grounding stations work progressing with no delay on completion date of static commissioning.
- Transition compound civil/structures work to begin Apr 2016.

1.0 Overall Summary Overall Analysis – Information page 4 of 4 MFG

1) Target Milestone

Target Milestone: MFGen 1st power from Muskrat Falls = (**On hold**, see below for details)

2) Overall Engineering/Construction/Commissioning Progress

Period Planned Progress:	2.0%	Cumulative Planned Progress:	52.7%
Period Forecast Progress:	2.0%		
Period Earned Progress:	1.8%	Cumulative Earned Progress:	38.5%

3) Critical Path(s):

- [Diversion - River Closure \(priority 1a\) - see page 14](#)
- On schedule for start on 6 July 2016
- [Diversion - Winter Headpond El. 25m \(priority 1b\) - see page 15](#)
- On schedule for start on 26 Oct 2016
- [Diversion - Impoundment Full Supply Level El. 39m \(priority 1c\) - see page 16](#)
- (**On hold**, see below for details)

4) Reservoir Clearing:

- Labour transferred to ROW clearing in LITL, forecast for restart in July 2016 with completion in Dec 2016.

5) North Spur:

- Work progressing with all milestones forecast to be achievable.

6) Spillway

- Spillway: work is progressing on schedule for priority p1a: River Closure.

7) Transition Dams/North & South Dams

- Work began on Upstream Cofferdam (5) Groins 1&2 to EL 17m (2015 scope) CH0009

8) Powerhouse:

- A review of the C1 (Muskrat Falls Generation) work plan is underway, and implementation of an updated C1 schedule will remain on hold pending acceptance of agreed actions and mitigations plan.
- Work progressing on all areas and removal of ICS (Integrated Cover System) has started.

1.0 Overall Summary = Target Milestone

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Activity Name	Integrated Project Schedule				LCP Project Control																
	030 IPS Target Milestones				Updated: 28-Oct-15																
	Start	Delta-Last Month Start	Finish	Delta-Last Month Finish	2014		2015			2016			2017			2018			2019		
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Lower Churchill Project General																					
LCP Overall																					
Target MIL=Overall-LCP Project Phase 1 - Project Sanction		0d	17-Dec-12 A	0d																	
Target MIL=Overall-MFG Bulk Excavation - Construction Start	13-Jan-13 A	0d		0d																	
Target MIL=Overall-LITL-EA Release	21-Jun-13 A	0d		0d																	
Target MIL=Overall-LITL-SOBI Cable Systems - Ready		0d	11-Oct-16	0d																	
Target MIL= Overall-LTA-Ready for Power Transmission (Power Available)		0d	04-Jul-17	0d																	
Target MIL=Overall-LITL-1st Power Transfer Labrador to Newfoundland - Tracking Forecast	18-Jul-17	0d		0d																	
Target MIL=Overall-LITL-Ready for Sustainable Power Transfer Labrador to Newfoundland		0d	11-Nov-17	0d																	
Target MIL=Overall-Muskkrat Falls Powerhouse - First Power from Muskkrat Falls		0d	10-Dec-17	0d																	
Target MIL=Overall-LCP Phase 1 - READY FOR SYSTEM INTEGRATION TEST (Final)		0d	27-Mar-18	0d																	
Target MIL=Overall-Muskkrat Falls Powerhouse - Full Power from Muskkrat Falls		0d	06-Apr-18	0d																	
Target MIL=Overall-LCP Phase 1 - Comm Certificate Issued (Integration Test Complete)		0d	01-Jun-18	0d																	
Target MIL=Overall-LCP Phase 1 - Date Certain		0d	28-Feb-19	0d																	
LTA																					
Target MIL= LTA-Hvac Transmission Line - Right of Way (ROW) Clearing - Start	15-Aug-13 A	0d		0d																	
Target MIL= LTA-Hvac Transmission Line - Construction Complete		0d	12-Oct-16	0d																	
Target MIL= LTA-Muskkrat Falls Switchyard - Ready to Energize (Initial)		0d	01-Mar-17	0d																	
Target MIL= LTA-Churchill Falls Switchyard - Ready to Energize (Initial)		0d	01-Mar-17	0d																	
Target MIL= LTA-Ready for Power Transmission (Power Available) - Tracking Forecast		0d	18-May-17	0d																	
LITL																					
Target MIL= LITL-SOBI Landfall Protection (HDD) - Start	19-Nov-13 A	0d		0d																	
Target MIL= LITL-HVdc Transmission Line Right of Way (ROW) Clearing - Start	16-Jun-14 A	0d		0d																	
Target MIL= LITL-SOBI Landfall Protection (HDD) - Complete		0d	20-Oct-14 A	0d																	
Target MIL= LITL-SOBI Cable Systems - Ready for Power Transmission		0d	11-Oct-16	0d																	
Target MIL= LITL-Soldiers Pond Switchyard & Convertor Station - (Stand Alone Testing)		0d	15-Jun-17	0d																	
Target MIL= LITL-Soldiers Pond Synchronous Condensor - Testing 1/2/3 Complete		-4d	15-Jun-17	-4d																	
Target MIL= LITL-Muskkrat Falls Switchyard & Convertor Station - (Stand Alone Testing)		0d	16-Jun-17	0d																	
Target MIL= LITL-HVdc Transmission Line Construction - Complete and Connected		0d	17-Jul-17	0d																	
Target MIL= LITL-Ready for Sustainable Power Transfer Labrador to Newfoundland-Tracking Fo		0d	22-Sep-17	0d																	
MF Gen																					
Target MIL= MFG-MF Access Road - Ready for Use	30-Nov-12 A	0d		0d																	
Target MIL= MFG-North Spur Stabilization Works - Start	14-Mar-15 A	0d		0d																	
Target MIL= MFG-Powerhouse Crane - Commissioned		0d	18-Jan-16	0d																	
Target MIL= MFG-South Dam - Construction Start	18-Apr-16	0d		0d																	

Under review


Under review

- ◆ Milestone-Current
- ▽ Milestone - Last Month

1.0 Overall Summary = Target Milestone

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Corinne Russell
McInnes Cooper
Mar 29, 2018 08:48

		Integrated Project Schedule				LCP Project Control Updated: 28-Oct-15																		
Activity Name		Start	Delta-Last Month Start	Finish	Delta-Last Month Finish	2014		2015			2016				2017				2018		2019			
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Target MIL= MFG-River Diversion (priority 1a- River closure) - Complete			0d	05-Aug-16	0d									05-Aug-16										
Target MIL= MFG-North Spur - Ready for Winter Headpond (EL 25m)(priority 1b- winter head p			0d	15-Sep-16	0d									15-Sep-16										
Target MIL= MFG-South Dam - Construction Complete			0d	31-Oct-16	0d									31-Oct-16										
Target MIL= MFG-Reservoir Clearing - Complete			0d	16-Dec-16	0d									16-Dec-16										
Target MIL= MFG-Powerhouse - Unit 1 Ready to Turn			0d	04-Jul-17	0d													04-Jul-17						
Target MIL= MFG-North Spur Stabilization Works - Complete			0d	15-Aug-17	0d													15-Aug-17						
Target MIL= MFG-North Dam (RCC/CVC) - Complete			0d	03-Nov-17	0d													03-Nov-17						
Target MIL= MFG-Reservoir Impoundment EL39m (priority 1c- Impoundment to Full Service Lev			0d	19-Nov-17	0d													19-Nov-17						
Target MIL= MFG-Muskrat Falls Powerhouse - Unit 1 Ready for Operation			0d	10-Dec-17	0d													10-Dec-17						
Target MIL= MFG-Muskrat Falls Powerhouse - First Power			0d	10-Dec-17	0d													10-Dec-17						
Target MIL= MFG-Muskrat Falls Powerhouse - Unit 2 Ready for Operation			0d	30-Dec-17	0d													30-Dec-17						
Target MIL= MFG-Muskrat Falls Powerhouse - Unit 3 Ready for Operation			0d	25-Feb-18	0d													25-Feb-18						
Target MIL= MFG-Muskrat Falls Powerhouse - Unit 4 Ready for Operation			0d	06-Apr-18	0d													06-Apr-18						
Target MIL= MFG-Muskrat Falls Powerhouse - Full Power			0d	06-Apr-18	0d													06-Apr-18						

Under review

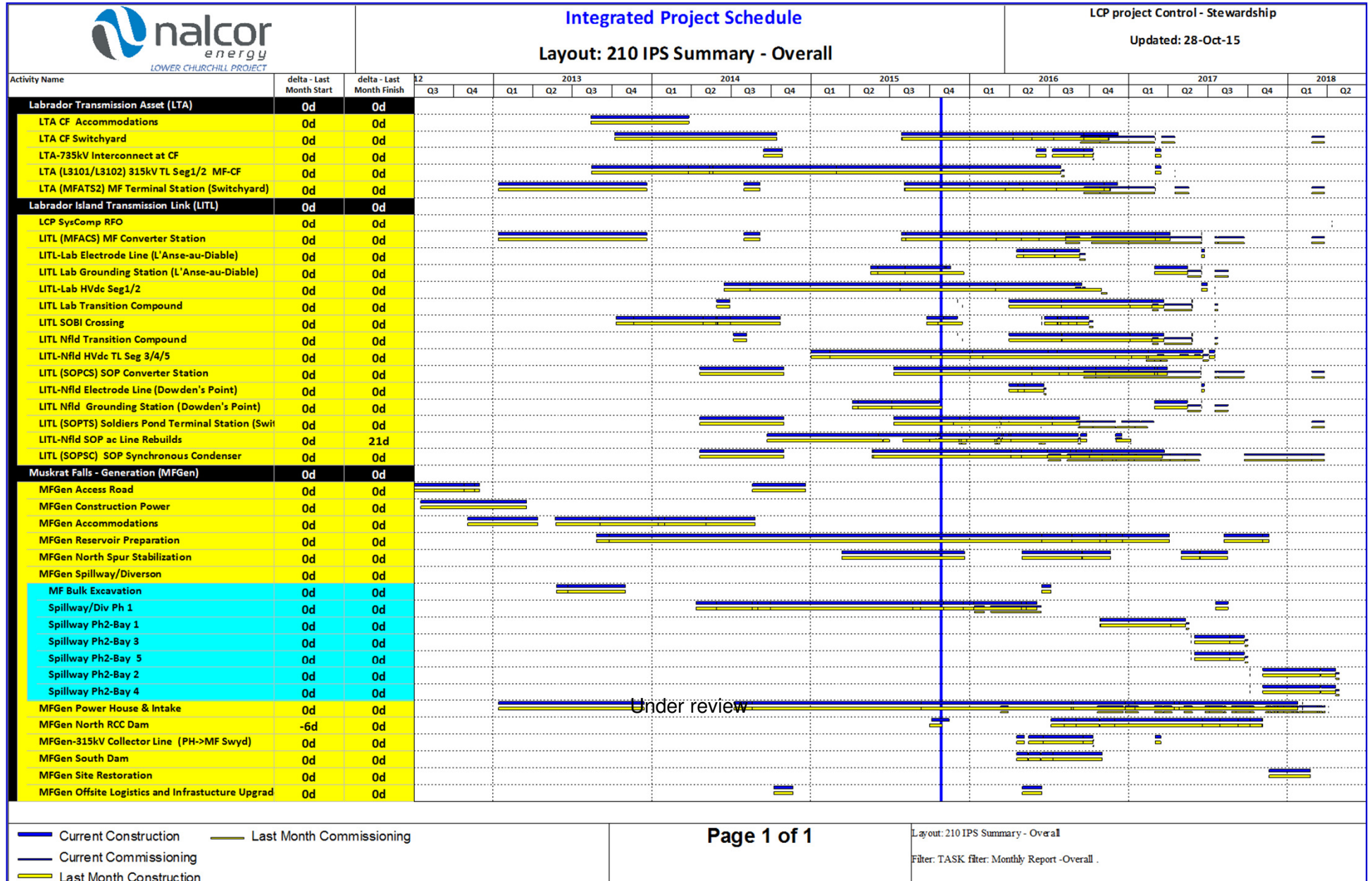
- ◆ Milestone-Current
- ▼ Milestone - Last Month

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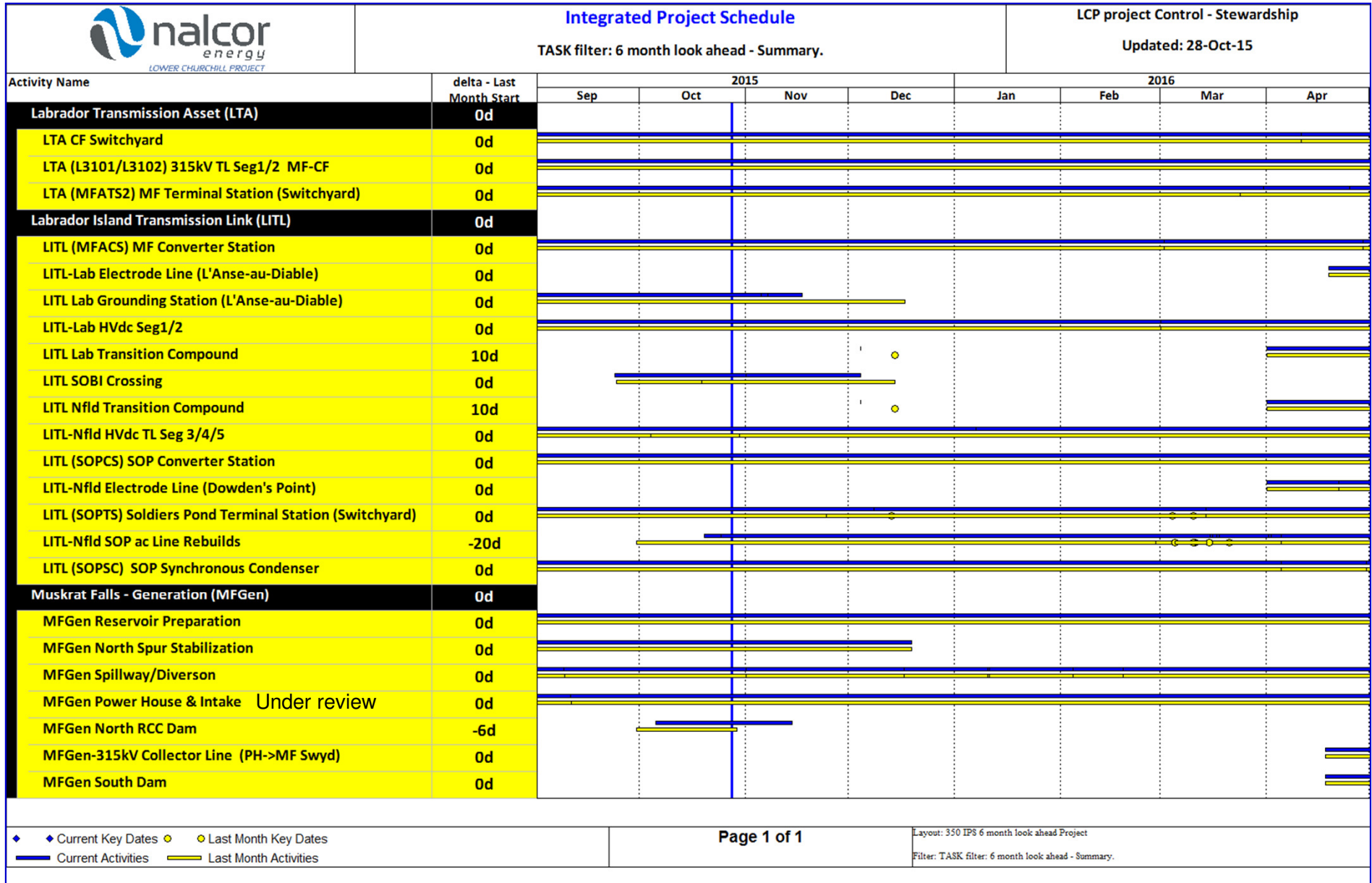
Project: IPS Current curz1

Layout = 030 IPS Target Milestones Filter = TASK filter: ipsTarget Milestones.

1.0 Overall Summary = Overall Summary Schedule - Actual and forecast dates with no baseline



1.0 Overall Summary = Overall 6 Month Look Ahead



1.0 Overall Summary = Overall Engineering/Construction/Commissioning Progress Curve

Overall progress curve will return when
Muskrat Falls Generation review complete


1.0 Overall Summary = Overall Engineering/Construction/Commissioning Progress Table

LCP - Overall 2015 Oct									
This Reporting Period									Next Month
	Weight	Period %				Cumulative % *2			Forecast %
	Factor %	Plan *1	Forecast	Earned	Var-Forecast	Plan	Earned	Variance	Period %
	A	B	B1	C	C-B1	E	F	F-E	G
Labrador Transmission Asset (LTA)	11.1%	3.3%	3.3%	5.2%	1.9%	57.6%	60.3%	2.7%	3.2%
Labrador Island Transmission Link (LITL)	42.2%	2.8%	2.8%	2.0%	-0.8%	31.9%	30.8%	-1.1%	3.4%
Muskrat Falls Generation (MFGen)	46.7%	2.0%	2.0%	1.8%	-0.2%	52.7%	38.5%	-14.2%	1.9%
LCP-Overall	100.0%	2.5%	2.5%	2.2%	-0.2%	44.5%	37.7%	-6.8%	2.7%
Last Reporting Period									
	Weight	Period %			Cumulative %				
	Factor %	Plan		Earned	Plan	Earned			
	A	B		C	E	F			
Labrador Transmission Asset (LTA)	11.1%	2.5%		3.3%	54.3%	55.1%			
Labrador Island Transmission Link (LITL)	42.2%	2.0%		1.8%	29.1%	28.8%			
Muskrat Falls Generation (MFGen)	46.7%	2.0%		1.9%	50.7%	36.7%			
LCP-Overall	100.0%	2.1%		2.0%	42.0%	35.4%			

*1 Plan represents Sep 2015 rebaseline for LTA/LITL and partial MFG. Remaining MFG uses June 2014 baseline

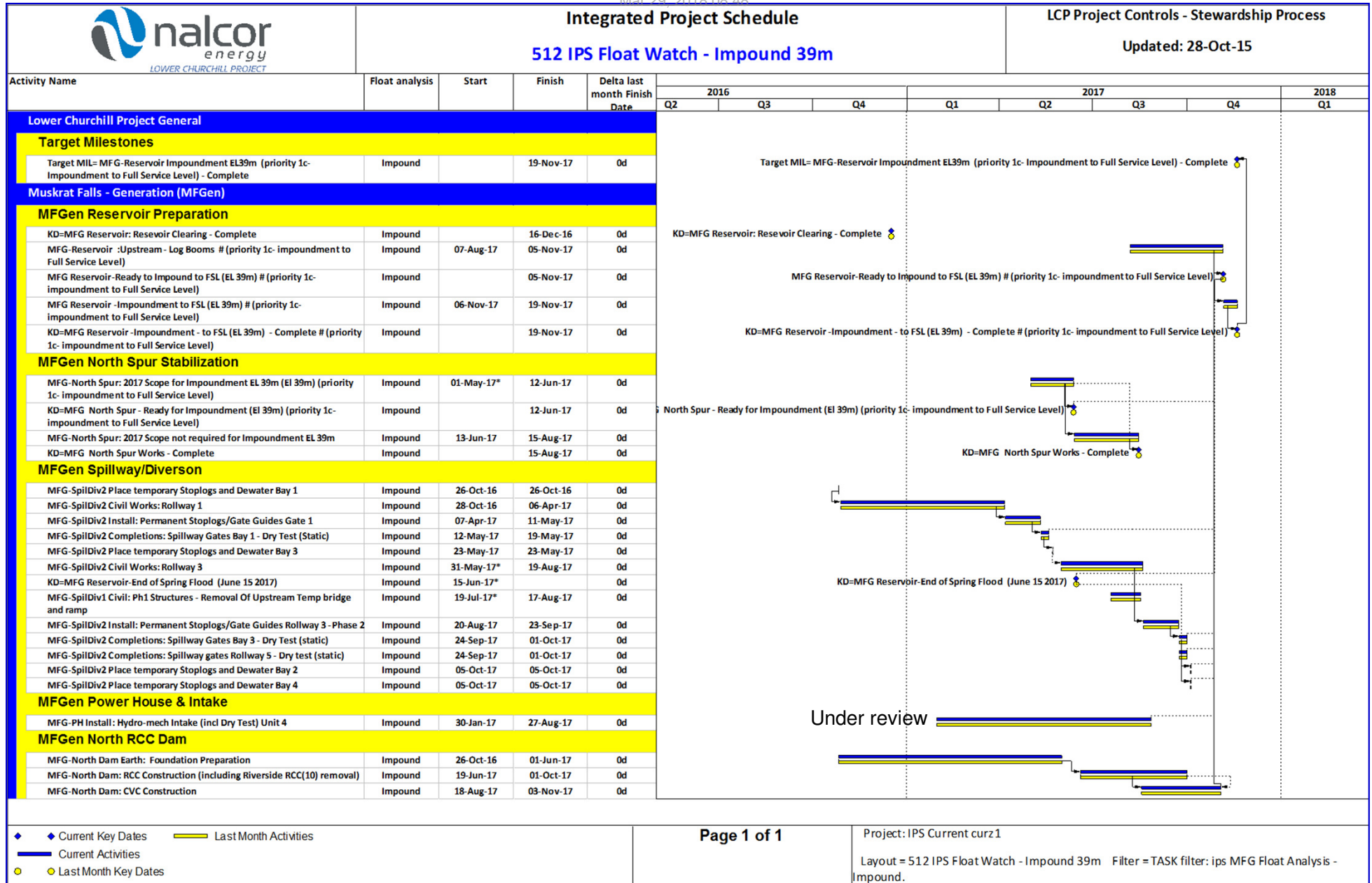
*2 MFG cumulative planned progress uses June 2014 baseline until MFG update available

1.0 Overall Summary Float Watch: C1: Diversion- Winter Head Pond (25m) Priority P1b

		Integrated Project Schedule 511 IPS Float Watch-Winter Head Pond 25m					LCP Project Controls - Stewardship Process Updated: 28-Oct-15							
Activity Name		tjcp ips y Float analysis	Start	Delta last month Start Date	Finish	Delta last month Finish Date	2016							
							Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
HeadPond														
MFGen Reservoir Preparation														
MFG-Reservoir :Upstream & Downstream- Log Booms # (priority 1b- winter head pond establishment)		HeadPond	15-Jun-16	0d	23-Aug-16	0d								
MFG Reservoir - Ready for Winter Headpond (EL 25m) # (priority 1b- winter head pond establishment)		HeadPond		0d	25-Oct-16	0d								
KD=MFG Reservoir-Ready for Winter Headpond (EL 25m) # (priority 1b- winter head pond establishment)		HeadPond		0d	25-Oct-16	0d								
MFG Reservoir - Winter Head Pond (EL 25m) # (priority 1b- winter head pond establishment)		HeadPond	26-Oct-16	0d	09-Nov-16	0d								
KD=MFG Reservoir-Winter Headpond (EL 25m) - Complete # (priority 1b- winter head pond establishment)		HeadPond		0d	09-Nov-16	0d								
MFGen North Spur Stabilization														
MFG-North Spur: 2016 Scope for Winter Head Pond EL 25m (priority 1b- winter head pond establishment)		HeadPond	01-May-16*	0d	15-Sep-16	0d								
KD=MFG North Spur - Ready for Winter Headpond (EL 25m) (priority 1b- winter head pond establishment)		HeadPond		0d	15-Sep-16	0d								
MFGen Power House & Intake														
MFG-PH Powerhouse: Install Intake Channel Cofferdam (9) EL 26m(priority 1b- winter head pond establishment)		HeadPond	09-Oct-15 A	323d	25-Oct-16	0d								
MFGen North RCC Dam														
MFG-North Dam: Upstream Cofferdam(5) to EL 26		HeadPond	05-Aug-16	0d	25-Oct-16	0d								
MFG-North Dam: Downstream Cofferdam(6) EL 9m - Install		HeadPond	05-Aug-16	0d	02-Sep-16	0d								
KD=MFG North Dam - Upstream Cofferdam(5) Complete to EL 26m		HeadPond		0d	25-Oct-16	0d								
Diversion														
MFGen Reservoir Preparation														
KD=MFG Reservoir-River Diversion - Complete # (priority 1a- River closure)		Div		0d	05-Aug-16	0d								
MFGen Spillway/Diverson														
KD=MFG Reservoir-End of Spring Flood (June 15 2016)		Div	15-Jun-16*	0d		0d								
MFG-SpilDiv1: Civil Works:Cofferdams 1 & 2 Removed**		Div	15-Jun-16	0d	06-Jul-16	0d								
KD=MFG-SpilDiv1: Cofferdams 1 & 2 - Removed**		Div		0d	06-Jul-16	0d								
MFGen North RCC Dam														
MFG-North Dam: Upstream Cofferdam (5) Groins 1&2 to EL 17m (2016 scope) **		Div	06-Jul-16	0d	05-Aug-16	0d								

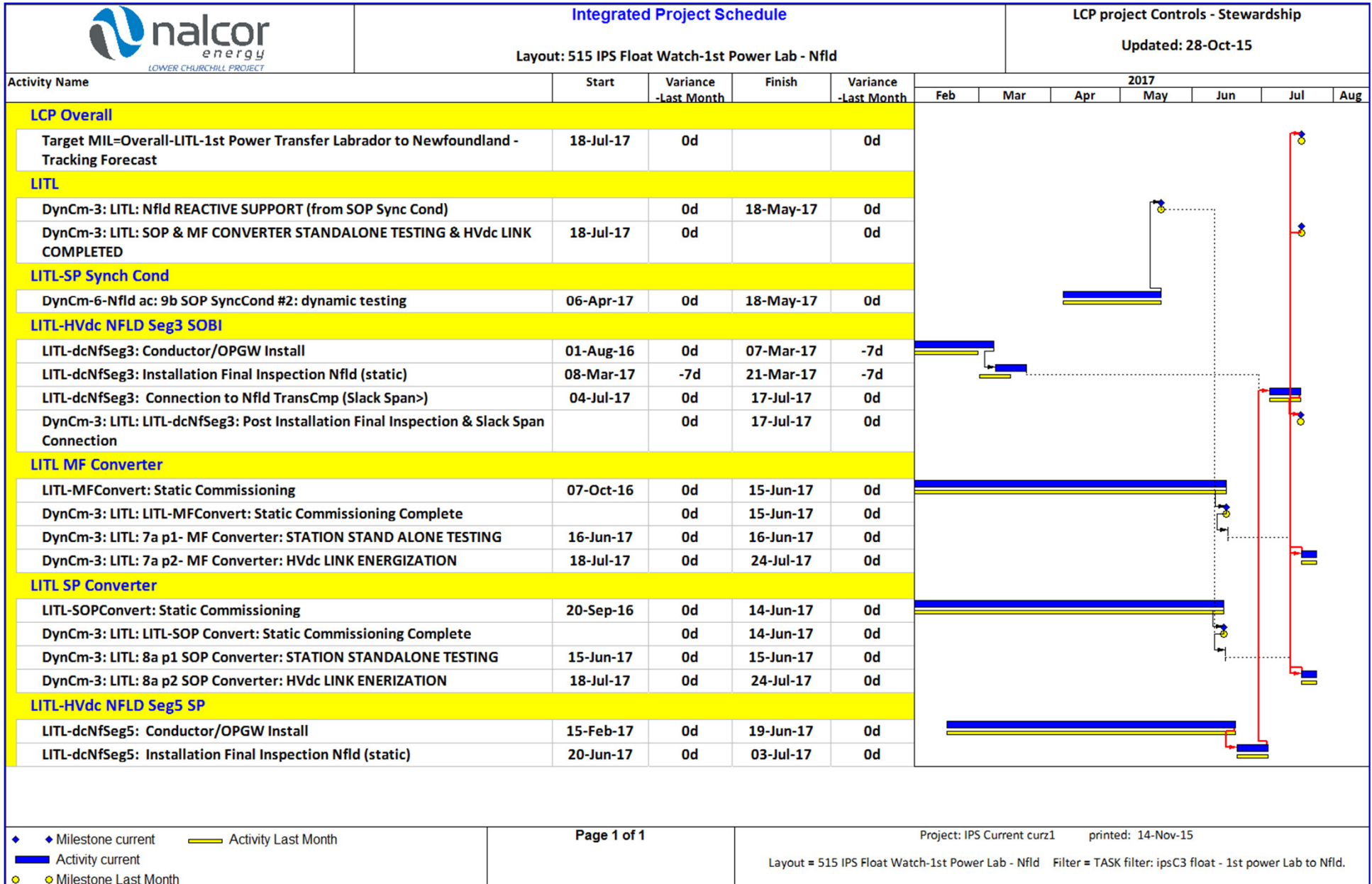
◆ Current Key Dates — Last Month Activities
 — Current Activities
 ○ Last Month Key Dates

1.0 Overall Summary Float Watch: C1: Diversion - Impoundment (39m) Priority P1c

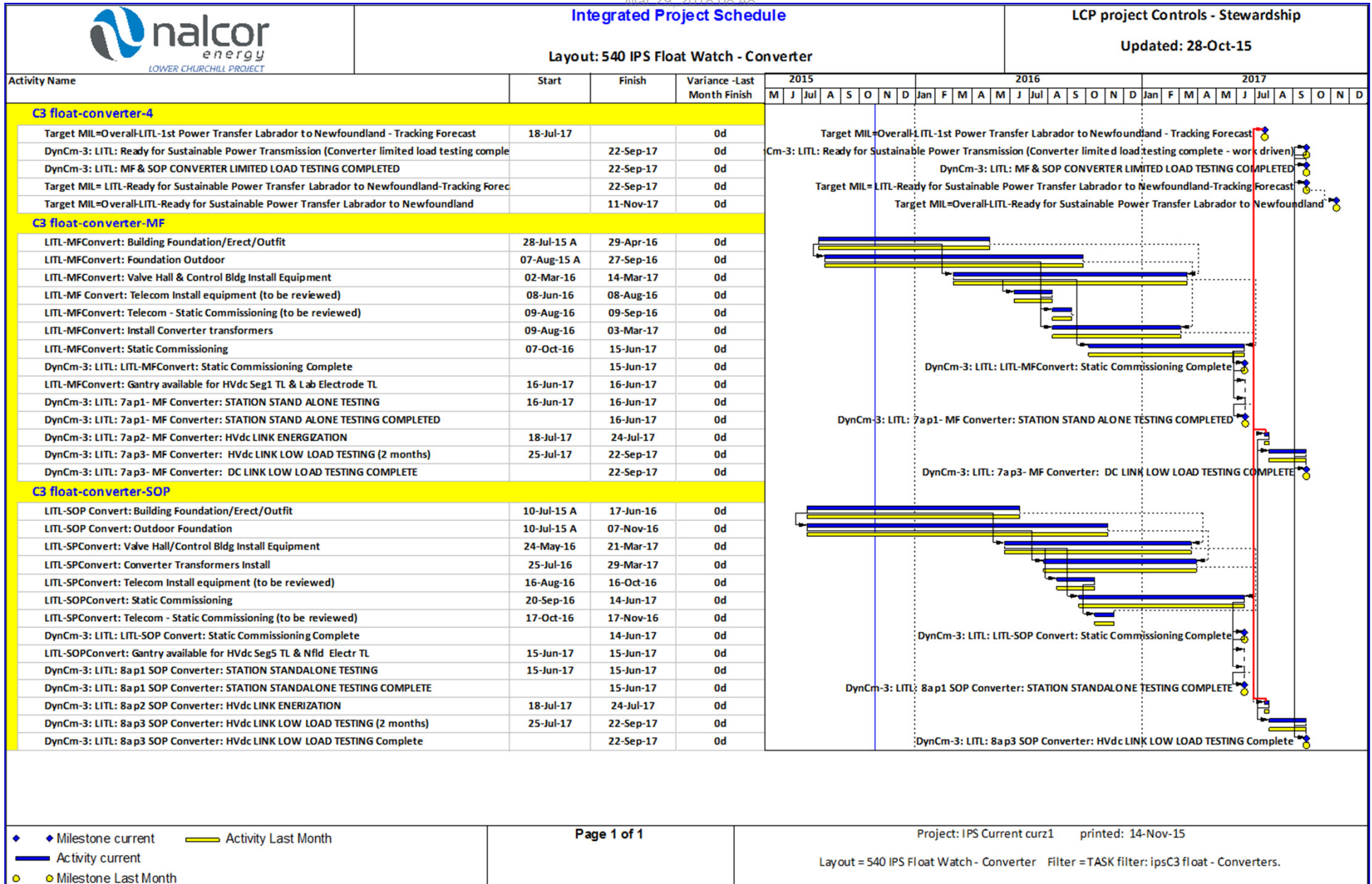


◆ Current Key Dates ■ Last Month Activities
 ■ Current Activities
 ● Last Month Key Dates

1.0 Overall Summary **Float Watch: C3-C4 – 1st Power Transfer Lab - Nfld**

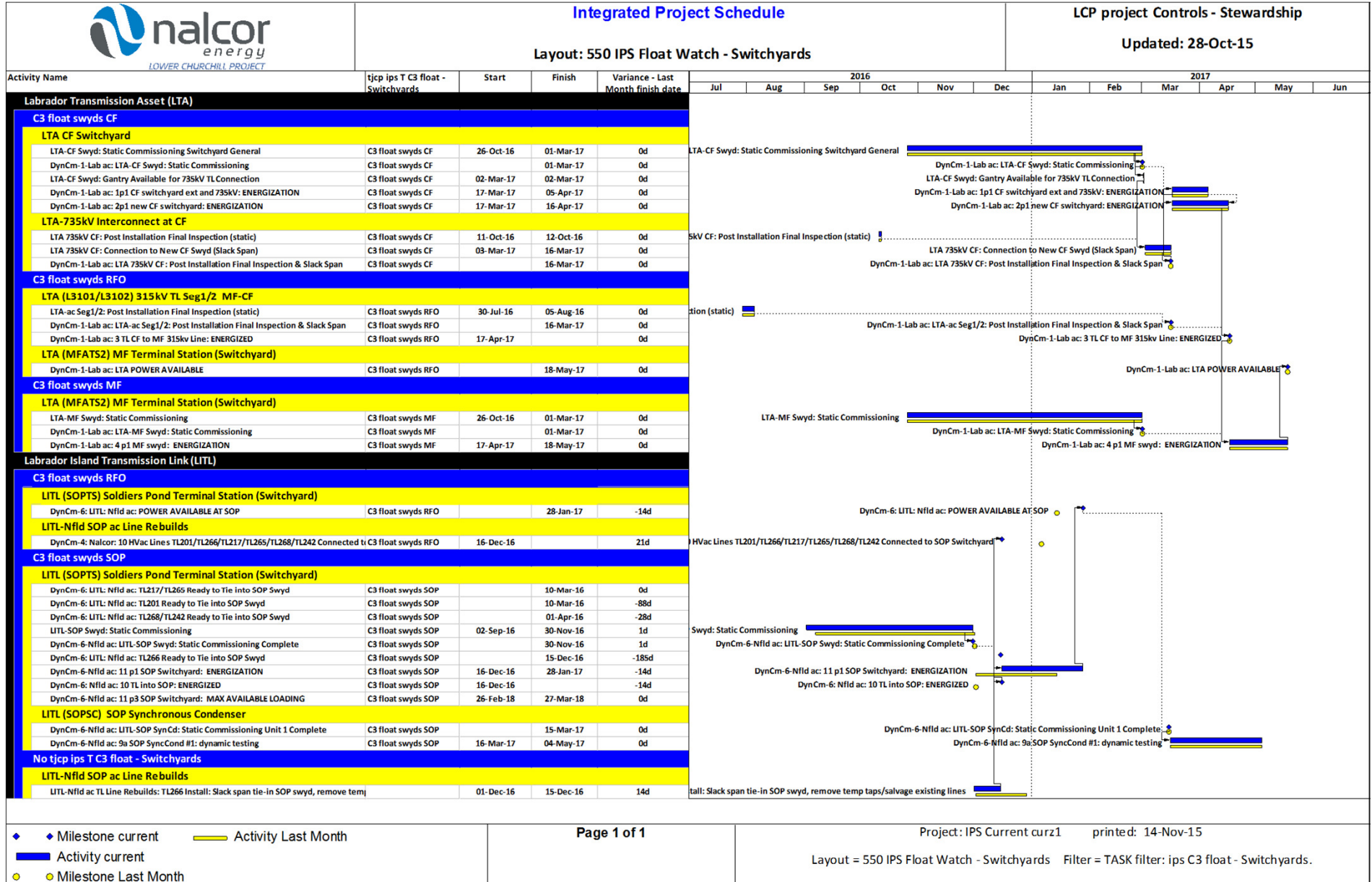


1.0 Overall Summary Float Watch: C3 Converters




◆ Milestone current — Activity Last Month
 — Activity current
 ○ Milestone Last Month

1.0 Overall Summary Float Watch: C3 – Switchyards



◆ Milestone current — Activity Last Month
 ■ Activity current
 ● Milestone Last Month

1.0 Overall Summary **Float Watch: C4 – transmission Lines**

		Integrated Project Schedule Layout: 570 IPS Float Watch - Transmission lines												LCP project Controls - Stewardship Updated: 28-Oct-15													
Activity Name	Start	Finish	Delta Last Month Finish date	2016												2017											
				Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
LTA (L3101/L3102) 315kV TL Segment 1/2																											
LTA-ac Seg1/2: Post Installation Final Inspection (static)	30-Jul-16	05-Aug-16	0d	TA-ac Seg1/2: Post Installation Final Inspection (static)																							
LTA-ac Seg1/2: Connection to MF & CF Switchyard (Slack Span)	03-Mar-17	16-Mar-17	0d	LTA-ac Seg1/2: Connection to MF & CF Switchyard (Slack Span)																							
LITL-HVdc LAB Seg1 MF																											
LITL-dcLabSeg1/Electr TL: Post Installation Final Inspection (static)	16-Sep-16	22-Sep-16	44d	dcLabSeg1/Electr TL: Post Installation Final Inspection (static)																							
LITL-dcLabSeg1/Electr TL: HVdc Seg 1 & Electrode TL Connection to MF Converter (Slack Span>)	17-Jun-17	30-Jun-17	0d	LITL-dcLabSeg1/Electr TL: HVdc Seg 1 & Electrode TL Connection to MF Converter (Slack Span>)																							
LITL-HVdc LAB Seg2 SOBI																											
LITL-dcLabSeg2/Electr TL: Post Installation Final Inspection (static)	31-Aug-16	13-Sep-16	60d	LabSeg2/Electr TL: Post Installation Final Inspection (static)																							
LITL-dcLabSeg2/Electr TL: Connection to Lab TransCmp (Slack Span>)	17-Jun-17	30-Jun-17	0d	LITL-dcLabSeg2/Electr TL: Connection to Lab TransCmp (Slack Span>)																							
LITL-HVdc NFLD Seg3 SOBI																											
LITL-dcNfSeg3: Installation Final Inspection Nfld (static)	08-Mar-17	21-Mar-17	-7d	LITL-dcNfSeg3: Installation Final Inspection Nfld (static)																							
LITL-dcNfSeg3: Connection to Nfld TransCmp (Slack Span>)	04-Jul-17	17-Jul-17	0d	LITL-dcNfSeg3: Connection to Nfld TransCmp (Slack Span>)																							
LTA-735kV ac Intercon CF																											
LTA 735kV CF: Post Installation Final Inspection (static)	11-Oct-16	12-Oct-16	0d	LTA 735kV CF: Post Installation Final Inspection (static)																							
LTA 735kV CF: Connection to Existing CF Swyd (Slack Span)	03-Mar-17	16-Mar-17	0d	LTA 735kV CF: Connection to Existing CF Swyd (Slack Span)																							
LTA 735kV CF: Connection to New CF Swyd (Slack Span)	03-Mar-17	16-Mar-17	0d	LTA 735kV CF: Connection to New CF Swyd (Slack Span)																							
LITL-Electrode TL Lab																											
LITL Lab Electr. TL: Post installation Final Inspection (static) (from HVdc TL to E Site)	10-Sep-16	23-Sep-16	0d	Post installation Final Inspection (static) (from HVdc TL to E Site)																							
LITL Lab Electr. TL: Connection to MF Conveter/Grounding Site (slack span>)	17-Jun-17	23-Jun-17	0d	LITL Lab Electr. TL: Connection to MF Conveter/Grounding Site (slack span>)																							
LITL-Electrode TL Nfld																											
LITL Nfld Electr. TL: Post installation Final Inspection (static)	20-Jun-16	24-Jun-16	0d	Electr. TL: Post installation Final Inspection (static)																							
LITL Nfld Electr. TL: Connection to Grounding Site (slack span>)	17-Jun-17	23-Jun-17	0d	LITL Nfld Electr. TL: Connection to Grounding Site (slack span>)																							
LITL-HVdc NFLD Seg4																											
LITL-dcNfSeg4: Installation Final Inspection Nfld (static)	01-Jun-17	14-Jun-17	-77d	LITL-dcNfSeg4: Installation Final Inspection Nfld (static)																							
LITL-HVdc NFLD Seg5 SP																											
LITL-dcNfSeg5: Installation Final Inspection Nfld (static)	20-Jun-17	03-Jul-17	0d	LITL-dcNfSeg5: Installation Final Inspection Nfld (static)																							
LITL-dcNfSeg5: Connection to SP Converter (Slack Span>)	04-Jul-17	17-Jul-17	0d	LITL-dcNfSeg5: Connection to SP Converter (Slack Span>)																							
MF HVac TL PH-> MF Swyd																											
MFGGen-315 PH-SY TL: Post Installation Final Inspection (static)	11-Oct-16	12-Oct-16	0d	MFGGen-315 PH-SY TL: Post Installation Final Inspection (static)																							
MFGGen-315 PH-SY TL: Connection to PH (Slack Span)	03-Mar-17	16-Mar-17	0d	MFGGen-315 PH-SY TL: Connection to PH (Slack Span)																							
MFGGen-315 PH-SY TL: Connection to MF Swyd (Slack Span)	03-Mar-17	16-Mar-17	0d	MFGGen-315 PH-SY TL: Connection to MF Swyd (Slack Span)																							

1.0 Overall Summary Float Watch: C4 – Line Rebuilds Soldiers Pond Area

Integrated Project Schedule

LCP project Controls - Stewardship

Layout: 580 IPS Float Watch - TL Re-builds SOP t Remaining work only

Updated: 28-Oct-15



Activity Name	Start	Delta Last Month Start	Finish	Delta Last Month Finish date	2016												2017			
					Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
TL201																				
g Installation																				
LITL-Nfid ac TL Line Rebuilds: TL201 Install: Slack span tie-in SOP swyd, remove temp taps/salvage existing lines	01-Dec-16	1d	15-Dec-16	14d																
j Completions																				
LITL-Nfid ac TL Line Rebuilds Completions: Line Final Inspections-TL201 (static)	09-Dec-16	-366d	15-Dec-16	-368d																
TL266																				
g Installation																				
LITL-Nfid ac TL Line Rebuilds: TL266 Install: Towers, Anchors, framing, stringing & salvaging existing lines	01-Apr-16*	-45d	05-Aug-16	-58d																
LITL-Nfid ac TL Line Rebuilds: TL266 Install: Slack span tie-in SOP swyd, remove temp taps/salvage existing lines	01-Dec-16	1d	15-Dec-16	14d																
j Completions																				
LITL-Nfid ac TL Line Rebuilds Completions: Line Final Inspections-TL266 (static)	11-Dec-16	-185d	15-Dec-16	-185d																
TL217/TL265																				
g Installation																				
LITL-Nfid ac TL Line Rebuilds: TL217/TL265 Install: Tower foundations/assembly/erection/stringing	20-Oct-15 A	-20d	05-Mar-16	0d																
LITL-Nfid ac TL Line Rebuilds: Install: TL217/TL265 Interim Connection	11-Mar-16	0d	20-Mar-16	0d																
LITL-Nfid ac TL Line Rebuilds: TL217/TL265 Install: Slack span tie-in SOP swyd, remove temp taps/salvage existing lines	01-Dec-16	1d	14-Dec-16	1d																
j Completions																				
LITL-Nfid ac TL Line Rebuilds Completions: Interim Inspections- TL217/TL265 (static)	06-Mar-16	0d	10-Mar-16	0d																
LITL-Nfid ac TL Line Rebuilds Completions: Final Inspections- TL217/TL265 (static)	01-Dec-16		14-Dec-16																	
TL268/TL242																				
g Installation																				
LITL-Nfid ac TL Line Rebuilds: TL268/TL242 Install: Tower foundations/assembly/erection/stringing	25-Oct-15 A	-25d	15-Mar-16	-16d																
LITL-Nfid ac TL Line Rebuilds: TL268/TL242 Install: Interim Connection	18-Mar-16	-13d	01-Apr-16	-18d																
LITL-Nfid ac TL Line Rebuilds: TL268/TL242 Install: Slack span tie-in SOP swyd, remove temp taps/salvage existing lines	01-Dec-16	1d	15-Dec-16	21d																
j Completions																				
LITL-Nfid ac TL Line Rebuilds Completions: Line Interim Inspections- TL268/TL242 (static)	16-Mar-16		17-Mar-16																	
LITL-Nfid ac TL Line Rebuilds Completions: Line Final Inspections- TL268/TL242 (static)	01-Dec-16	-276d	05-Dec-16	-276d																
TL204 (Grand Falls Windsor)																				
g Installation																				
LITL-Nfid ac TL Line Rebuilds: TL204 (Grand Falls/W) Install: Tower foundations/assembly/erection/stringing	05-Apr-16*	0d	06-Sep-16	0d																
LITL-Nfid ac TL Line Rebuilds: TL204 (Grand Falls/W) Install: Tie-in	12-Sep-16	0d	25-Sep-16	0d																
j Completions																				
LITL-Nfid ac TL Line Rebuilds Completions: Line Final Inspections- TL204 (Grand Falls/Windsor) (static)	07-Sep-16	0d	11-Sep-16	0d																

- ◆ Milestone current
- Activity Last Month
- Activity current
- Milestone Last Month



2.0 Labrador Transmission Asset (LTA) LTA Analysis – Observations

1) Target Milestone

Target Milestone Overall = LTA Ready for Power Transmission (Power Available) = 04 July 2017

Tracking Milestone = 18 May 2017 forecast date (no change from last month)

NOTE: A tracking milestone simply indicates this month forecast completion date.

2) Overall Engineering/Construction/Commissioning Progress

Period Planned Progress:	3.3%	Cumulative Planned Progress:	57.6%
Period Forecast Progress:	3.3%		
Period Earned Progress:	5.2%	Cumulative Earned Progress:	60.3%

3) Critical Path:

- CF Switchyard continues to be on critical path to LTA Power Available forecast for May 2017.
- Nalcor Pets projects now are in the LTA subcritical paths (see attached LTA Critical/Subcritical paths PDF)

4) Switchyards: no change from last month

- No change to completion date of static commissioning for either switchyard (CF, MF).

5) 315kV HVac Lines CF-MF: no change from last month

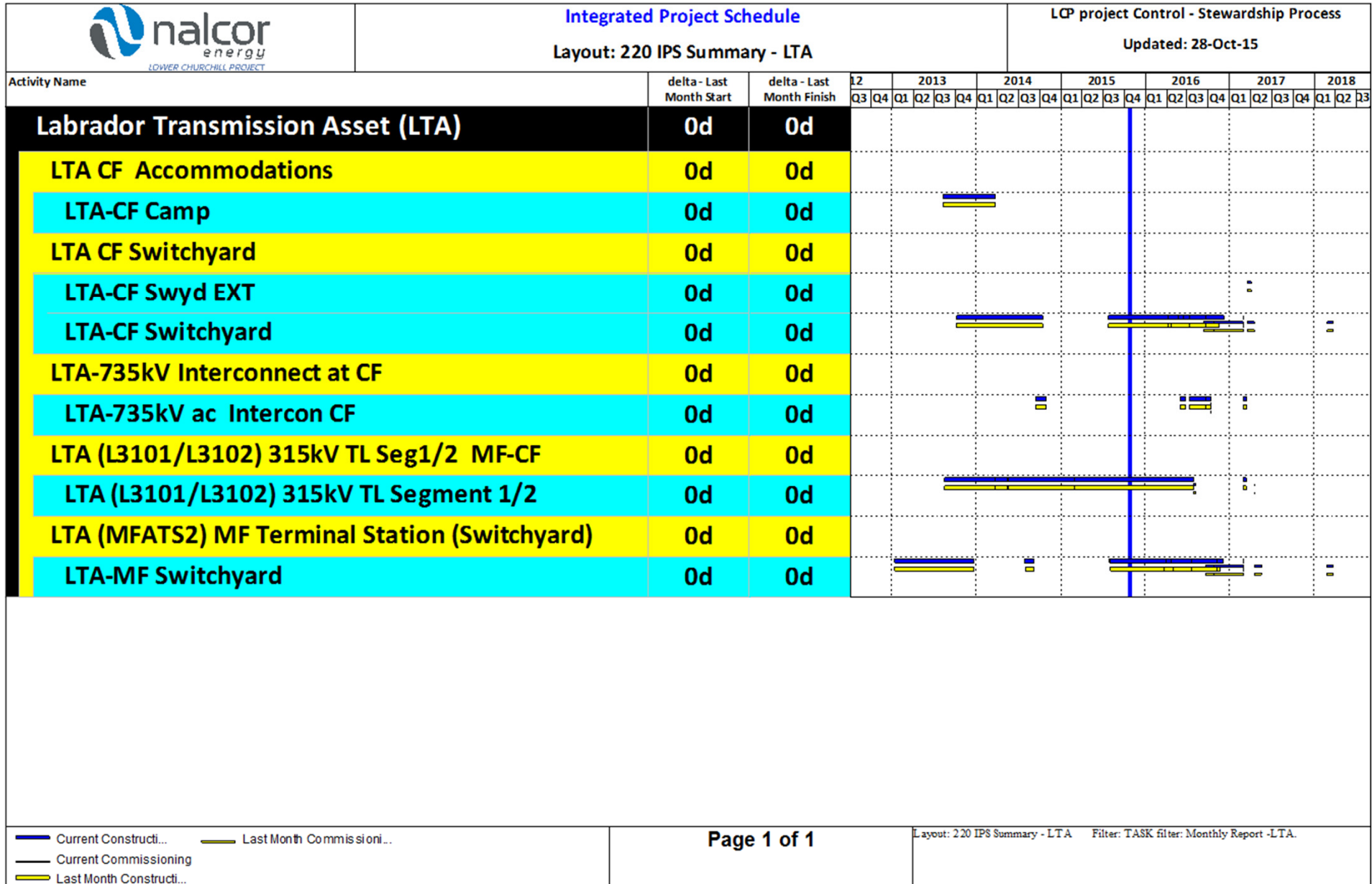
- HVac Seg 1/2 - line construction/stringing progressing with no change this month to HVac Seg 1/2 final inspection date which is end of line construction.

6) 735kV HVac CF Interconnection (Bus Extension): no change from last month

- CF 735kV -bus extension - TL construction start (foundations) not planned until June 2016.

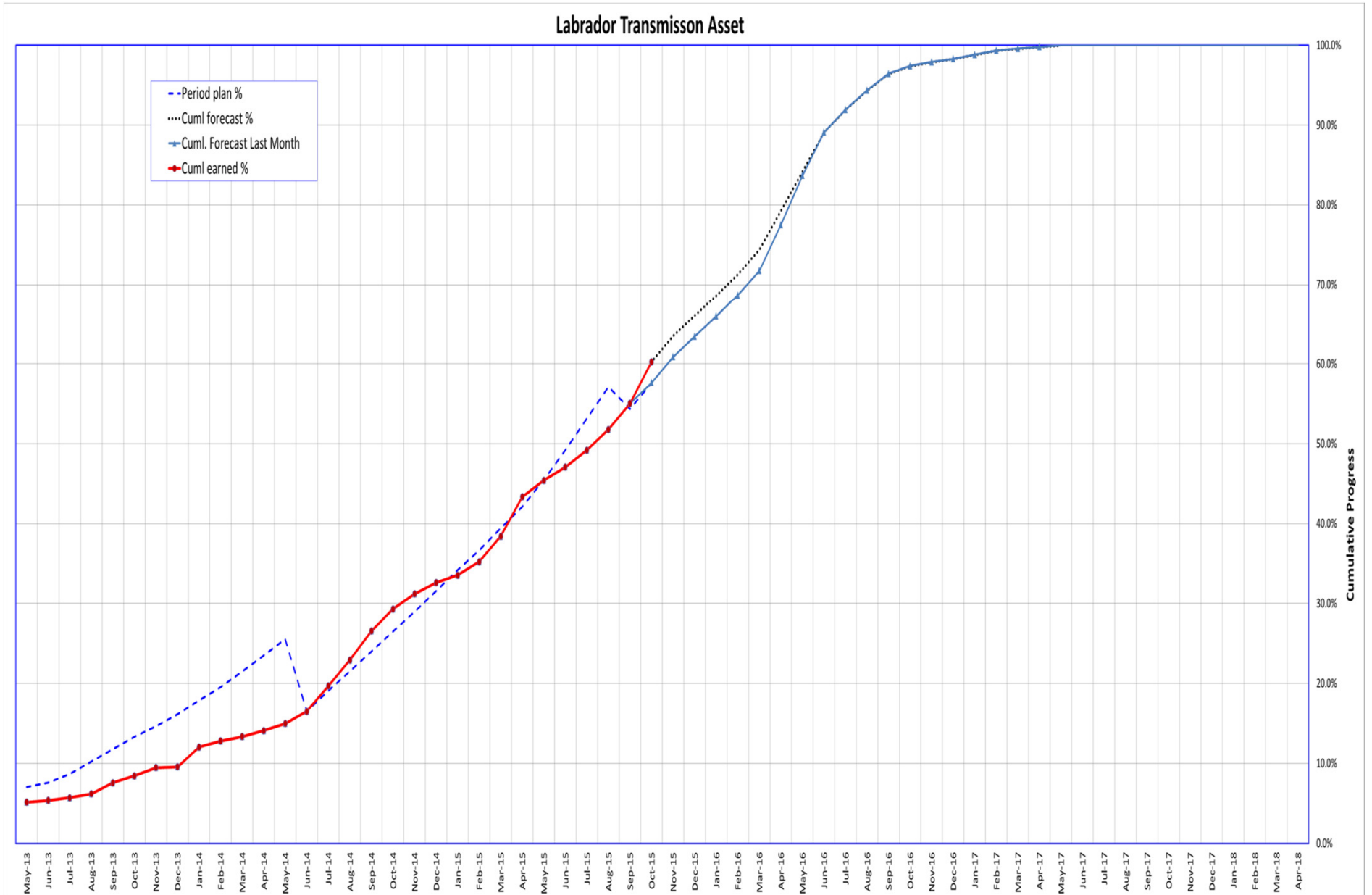
2.0 Labrador Transmission Asset (LTA)

LTA Summary Schedule



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2.0 Labrador Transmission Asset (LTA) - LTA Engineering/Construction/Commissioning Progress Curve



2.0 Labrador Transmission Asset (LTA) - Engineering/Construction/Commissioning Progress Table

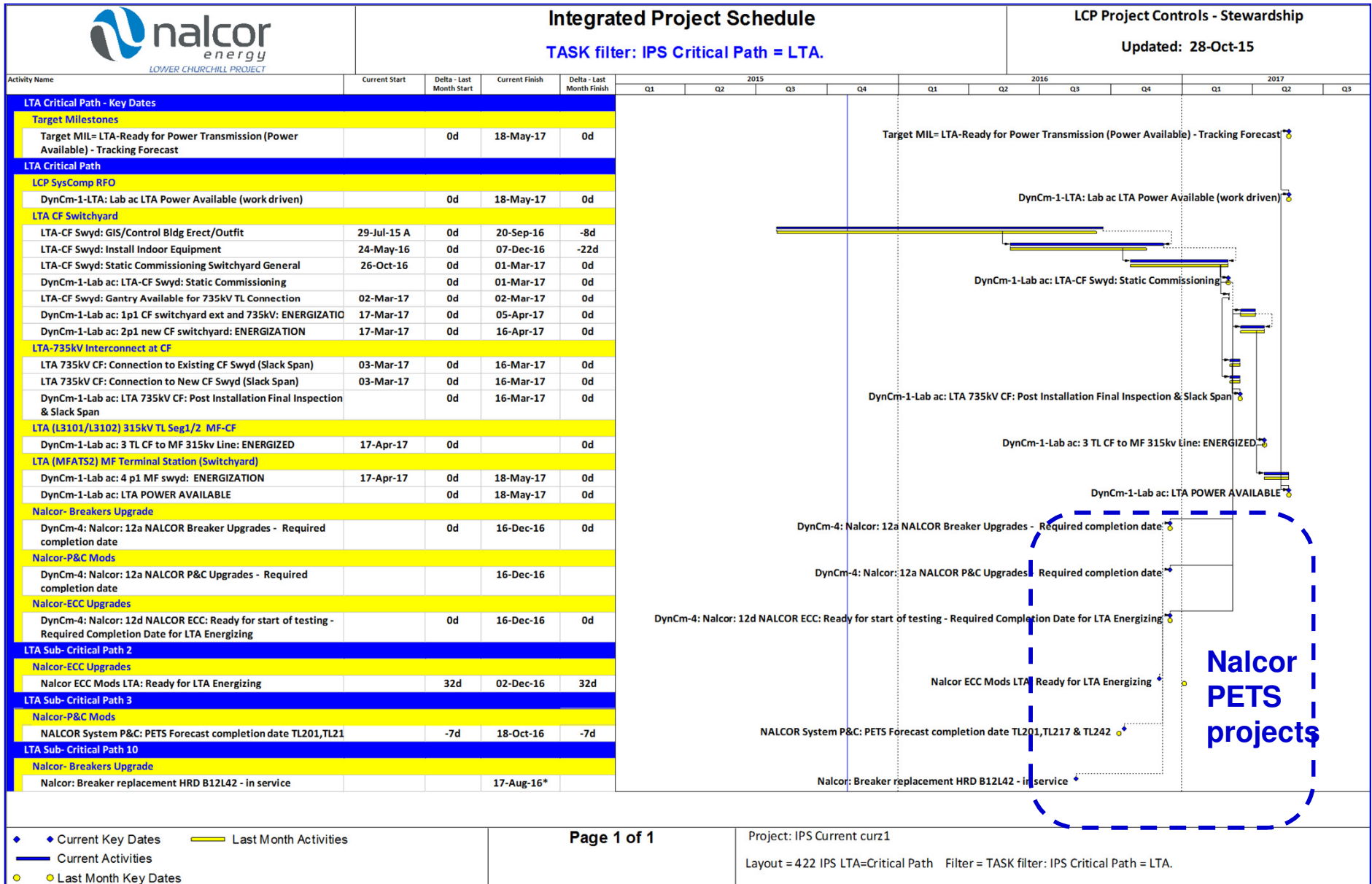
LTA Progress Table 2015 Oct								
This Reporting Period								
	Weight	Period %				Cumulative %		
	Factor %	Plan	Earned	Variance	Plan	Earned	Variance	
	A	B	C	C-B	E	F	F-E	
LTA CF Accommodations	1.1%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	
LTA HVac Transmission Line Seg1/2 - MF to CF	56.0%	3.1%	6.2%	3.1%	73.1%	75.9%	2.8%	
LTA Churchill Falls Switchyard	20.9%	4.4%	7.2%	2.8%	31.5%	35.2%	3.7%	
LTA Muskrat Falls Switchyard	14.0%	4.5%	1.7%	-2.8%	13.8%	15.7%	1.9%	
LTA Misc	8.0%	0.0%	0.0%	0.0%	89.2%	89.2%	0.0%	
LTA TOTAL	100.0%	3.3%	5.2%	1.9%	57.7%	60.3%	2.6%	
Last Reporting Period								
	Weight	Period %				Cumulative %		
	Factor %	Plan	Earned	Variance	Plan	Earned	Variance	
	A	B	C	C-B	E	F	F-E	
LTA CF Accommodations	1.1%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	
LTA HVac Transmission Line Seg1/2 - MF to CF	56.0%	3.0%	2.8%	-0.2%	69.9%	69.7%	-0.2%	
LTA Churchill Falls Switchyard	20.9%	2.0%	2.9%	0.9%	27.1%	28.0%	0.9%	
LTA Muskrat Falls Switchyard	14.0%	3.0%	7.7%	4.7%	9.3%	14.0%	4.7%	
LTA Misc	8.0%	0.0%	0.0%	0.0%	89.2%	89.2%	0.0%	
LTA TOTAL	100.0%	2.5%	3.3%	0.7%	54.3%	55.1%	0.7%	

2.0 Labrador Transmission Asset (LTA)

LTA Critical Path

NOTE: For complete Critical / Subcritical path schedule see attachment

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◆ Current Key Dates — Last Month Activities
 — Current Activities
 ● Last Month Key Dates

3.0 Labrador Island Transmission Link (LITL) LITL Analysis – Observations

1) Target Milestone

- Target Milestone Overall=LITL-1st Power Transfer Lab to Nfld = 18 July 2017 (Tracking Milestone) - **No change from last month**
- Target Milestone Overall=LITL-Ready for Sustainable Power Transfer Labrador to Newfoundland= 11 Nov 2017
Tracking Milestone = 22 Sept 2017 forecast date - **No change from last month**

NOTE: A tracking milestone simply indicates this month forecast completion date.

2) Overall Engineering/Construction/Commissioning Progress

Period Planned Progress:	2.8%	Cumulative Planned Progress:	31.9%
Period Forecast Progress	2.8%		
Period Earned Progress:	2.0%	Cumulative Earned Progress:	30.8%

3) Critical Path: No change from last month

- HVdc segment Seg 5 is driving the LITL critical path .
- HVdc segment Seg 4 lost 77 days float this month with 19 days float remaining to critical path .
- Schedule pressures increased this month on Seg 4 & Seg 5 after foundations & towers start delayed 3 months

4) SOBI Crossing

- Completion of the rock loading marine terminal
- Completion of placement /termination 1/3 land cables at Shoal Cove

5) HVdc Line

- HVdc Lab Seg 1 = final inspection date is Sep 2016 which is 44 days earlier than last month (see page 19)
- HVdc Lab Seg 2 = final inspection date is Sep 2016 which is 60 days earlier than last month (see page 19)
- HVdc Nfld Seg 3 = final inspection date is March 2017 which is 7 days later than last month (see page 19)
- HVdc Nfld Seg 4 = final inspection date is June 2017 which is 77 days later than last month (see page 19)
- HVdc Nfld Seg 5 = final inspection date is July 2017 - no change from last month

6) Converters / Switchyards / Sych Cond

- Converters/switchyards: Work progressing with no delay on completion date of static commissioning.
- Sych Cond: Work progressing with 4 day delay to completion date of static commissioning.

7) SOP Transmission Line Rebuilds

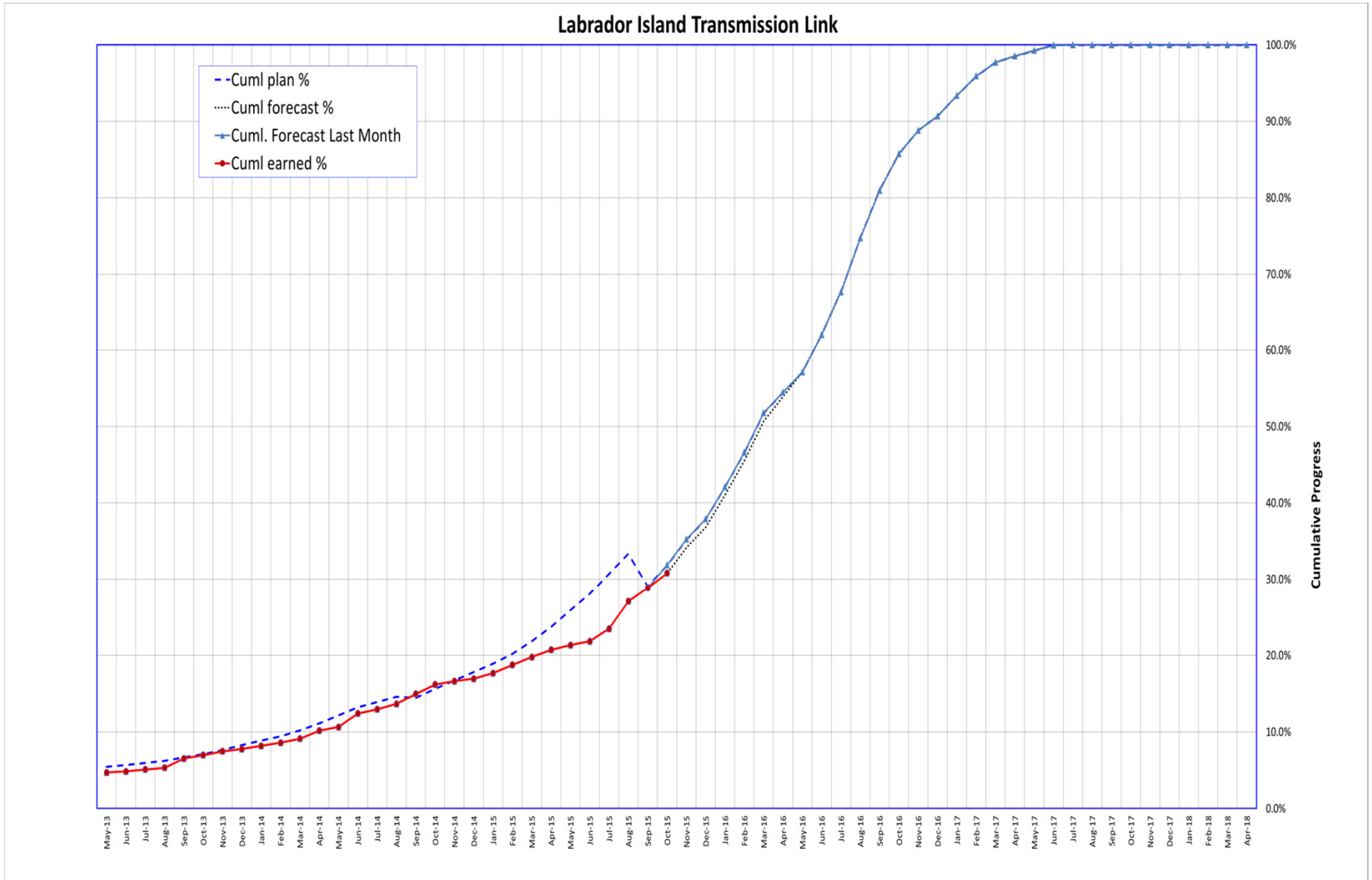
- Work continues with reliance on outages. (see pages 21 and 41)

8) Transition Compounds / Grounding (Electrode) Stations

- Grounding stations work progressing with no delay on completion date of static commissioning.
- Transition compound civil/structures work to begin Apr 2016.

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3.0 Labrador Island Transmission Link (LITL) - LITL Engineering/Construction/Commissioning Progress Curve



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3.0 Labrador Island Transmission Link (LITL) - Engineering/Construction/Commissioning Progress Table

LITL Progress Table 2015 Oct								
This Reporting Period								
	Weight	Period %			Cumulative %			
	Factor %	Plan	Earned	Variance	Plan	Earned	Variance	
	A	B	C	C-B	E	F	F-E	
LITL Muskrat Falls Converter	5.7%	3.0%	0.9%	-2.1%	9.6%	7.1%	-2.5%	
LITL Soldiers Pond Converter	5.8%	4.8%	2.1%	-2.7%	20.4%	15.6%	-4.8%	
LITL HVdc Transmission Line Seg 1/2	19.3%	5.3%	5.4%	0.1%	36.7%	36.2%	-0.5%	
LITL HVdc Transmission Line Seg 3/4/5	35.3%	1.7%	0.7%	-1.0%	8.0%	6.7%	-1.3%	
LITL Grounding (Electrode) Sites	1.7%	5.9%	7.0%	1.1%	65.2%	70.4%	5.2%	
LITL Transition Compounds	1.8%	0.0%	0.0%	0.0%	32.9%	32.9%	0.0%	
LITL SOBI Cable Crossing	18.0%	1.3%	1.8%	0.5%	69.1%	69.3%	0.2%	
LITL Soldiers Pond Switchyard	3.2%	5.1%	5.0%	-0.1%	31.3%	28.1%	-3.2%	
LITL Soldiers Pond Synchronous Condensers	4.9%	4.9%	1.1%	-3.8%	31.4%	28.1%	-3.3%	
LITL Misc	4.3%	0.0%	0.6%	0.6%	79.0%	80.0%	1.0%	
LITL TOTAL	100.0%	2.8%	2.0%	-0.8%	31.9%	30.8%	-1.1%	
Last Reporting Period								
	Weight	Period %			Cumulative %			
	Factor %	Plan	Earned	Variance	Plan	Earned	Variance	
	A	B	C	C-B	E	F	F-E	
LITL Muskrat Falls Converter	5.7%	1.5%	1.2%	-0.3%	6.5%	6.2%	-0.3%	
LITL Soldiers Pond Converter	5.8%	3.7%	1.6%	-2.1%	15.6%	13.5%	-2.1%	
LITL HVdc Transmission Line Seg 1/2	19.3%	3.5%	2.9%	-0.6%	31.4%	30.8%	-0.6%	
LITL HVdc Transmission Line Seg 3/4/5	35.3%	0.6%	0.3%	-0.3%	6.3%	6.0%	-0.3%	
LITL Grounding (Electrode) Sites	1.7%	6.4%	10.6%	4.2%	59.2%	63.4%	4.2%	
LITL Transition Compounds	1.8%	0.0%	0.0%	0.0%	32.9%	32.9%	0.0%	
LITL SOBI Cable Crossing	18.0%	1.4%	1.0%	-0.4%	67.9%	67.5%	-0.4%	
LITL Soldiers Pond Switchyard	3.2%	6.3%	9.0%	2.7%	26.2%	23.1%	2.7%	
LITL Soldiers Pond Synchronous Condensers	4.9%	5.0%	5.5%	0.5%	26.5%	27.0%	0.5%	
LITL Misc	4.3%	0.0%	0.4%	0.4%	79.0%	79.4%	0.4%	
LITL TOTAL	100.0%	2.0%	1.8%	-0.2%	29.1%	28.8%	-0.3%	

3.0 Labrador Island Transmission Link (LITL)

LITL Critical Path 1st Power transfer Lab-> Nfld

NOTE: For complete Critical / Subcritical path schedule see attachment

		Integrated Project Schedule 1st Power transfer Lab -> Nfld				LCP Project Controls - Stewardship Updated: 28-Oct-15							
Activity Name	Current Start	Delta - Last Month Start	Current Finish	Delta - Last Month Finish	2016								
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
1st Power Transfer-CP-KD													
Target Milestones													
Target MIL=Overall-LITL-1st Power Transfer Labrador to Newfoundland - Tracking Forecast	18-Jul-17	0d		0d	Power Transfer Labrador to Newfoundland - Tracking Forecast								
1st Power Transfer-CP													
LCP SysComp RFO													
DynCm-3: LITL: All HVdc TL COMPLETED AND CONNECTED		0d	17-Jul-17	0d	DynCm-3: LITL: All HVdc TL COMPLETED AND CONNECTED								
DynCm-3: LITL: SOP & MF CONVERTER STANDALONE TESTING & HVdc LINK COMPLETED	18-Jul-17	0d		0d	CONVERTER STANDALONE TESTING & HVdc LINK COMPLETED								
LITL (MFACS) MF Converter Station													
DynCm-3: LITL: 7a p2- MF Converter: HVdc LINK ENERGIZATION	18-Jul-17	0d	24-Jul-17	0d									
LITL-Lab HVdc Seg1/2													
DynCm-3: LITL: 6a HVdc TL and Electrode Line Lab: Energized	18-Jul-17	0d		0d	DynCm-3: LITL: 6a HVdc TL and Electrode Line Lab: Energized								
LITL-Nfld HVdc TL Seg 3/4/5													
LITL-dcNfSeg5: ROW Clearing / Survey & Tower Spotting	07-Jan-16*	-69d	21-Sep-16	-55d									
LITL-dcNfSeg5: Civil Works - foundations	30-Jun-16	-181d	21-Jan-17	-83d									
LITL-dcNfSeg5: Tower Assembly / Install	21-Jul-16	-171d	07-Mar-17	-97d									
LITL-dcNfSeg5: Conductor/OPGW Install	15-Feb-17	0d	19-Jun-17	0d									
LITL-dcNfSeg5: Installation Final Inspection Nfld (static)	20-Jun-17	0d	03-Jul-17	0d									
LITL-dcNfSeg3: Connection to Nfld TransCmp (Slack Span>)	04-Jul-17	0d	17-Jul-17	0d									
LITL-dcNfSeg5: Connection to SP Converter (Slack Span>)	04-Jul-17	0d	17-Jul-17	0d									
DynCm-3: LITL: LITL-dcNfSeg3: Post Installation Final Inspection & Slack Span Connection		0d	17-Jul-17	0d	g3: Post Installation Final Inspection & Slack Span Connection								
DynCm-3: LITL: LITL-dcNfSeg5: Post Installation Final Inspection & Slack Span Connection		0d	17-Jul-17	0d	5: Post Installation Final Inspection & Slack Span Connection								
DynCm-3: LITL: 6c HVdc TL and Electrode Line Nfld: Energized	18-Jul-17	0d		0d	DynCm-3: LITL: 6c HVdc TL and Electrode Line Nfld: Energized								
LITL (SOPCS) SOP Converter Station													
DynCm-3: LITL: 8a p2 SOP Converter: HVdc LINK ENERGIZATION	18-Jul-17	0d	24-Jul-17	0d									

◆ Current Key Dates — Last Month Activities
 — Current Activities
 ● Last Month Key Dates

4.0 Muskrat Falls Generation (MFGGen) MFGGen Analysis – Observations

1) Target Milestone

Target Milestone: MFGGen 1st power from Muskrat Falls = (**On hold**, see below for details)

2) Overall Engineering/Construction/Commissioning Progress

Period Planned Progress:	2.0%	Cumulative Planned Progress:	52.7%
Period Forecast Progress:	2.0%		
Period Earned Progress:	1.8%	Cumulative Earned Progress:	38.5%

3) Critical Path(s):

- [Diversion - River Closure \(priority 1a\) - see page 14](#)
- On schedule for start on 6 July 2016
- [Diversion - Winter Headpond El. 25m \(priority 1b\) - see page 15](#)
- On schedule for start on 26 Oct 2016
- [Diversion - Impoundment Full Supply Level El. 39m \(priority 1c\) - see page 16](#)
- (**On hold**, see below for details)

4) Reservoir Clearing:

- Labour transferred to ROW clearing in LITL, forecast for restart in July 2016 with completion in Dec 2016.

5) North Spur:

- Work progressing with all milestones forecast to be achievable.

6) Spillway

- Spillway: work is progressing on schedule for priority p1a: River Closure.

7) Transition Dams/North & South Dams

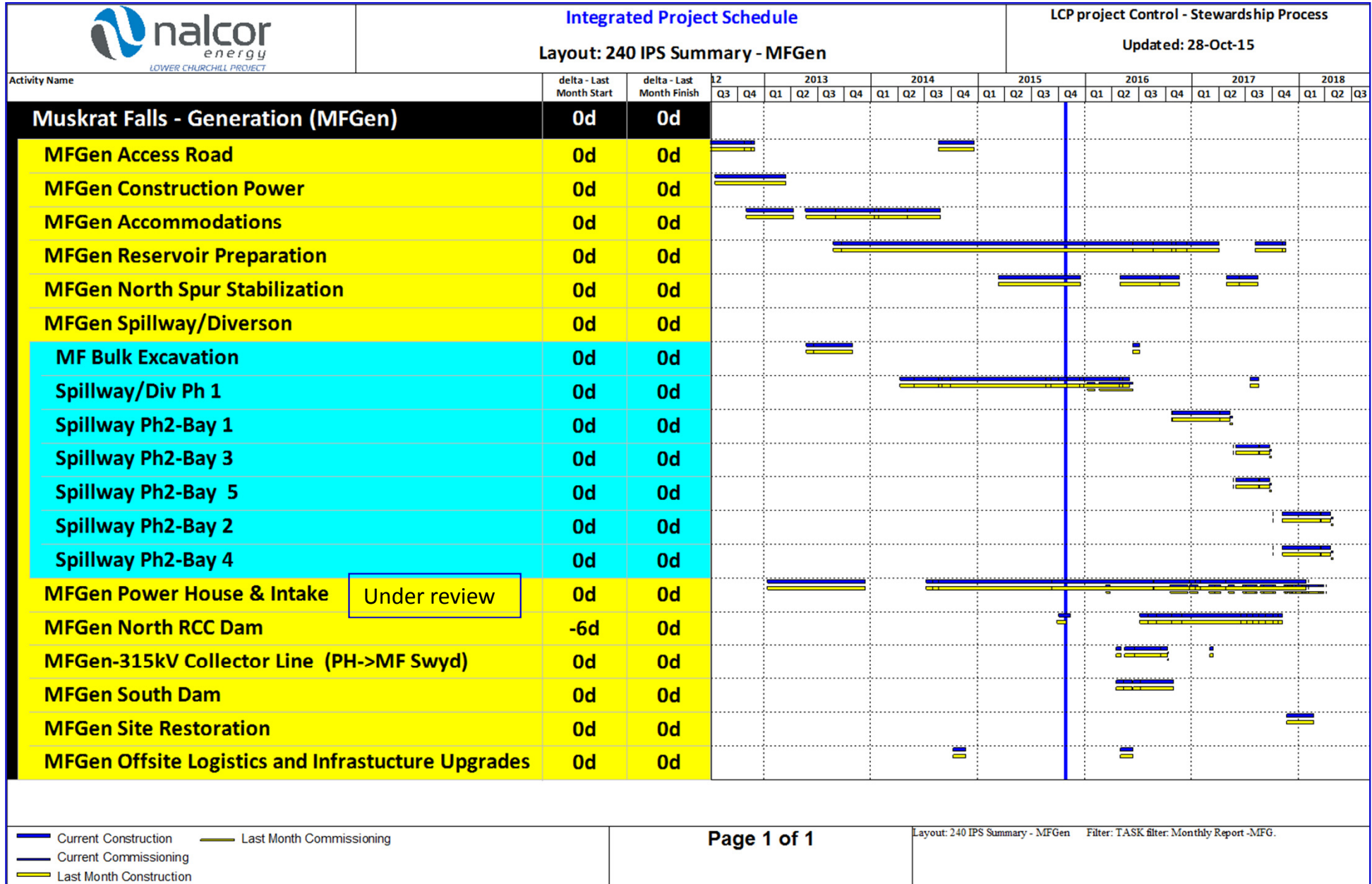
- Work began on Upstream Cofferdam (5) Groins 1&2 to EL 17m (2015 scope) CH0009

8) Powerhouse:

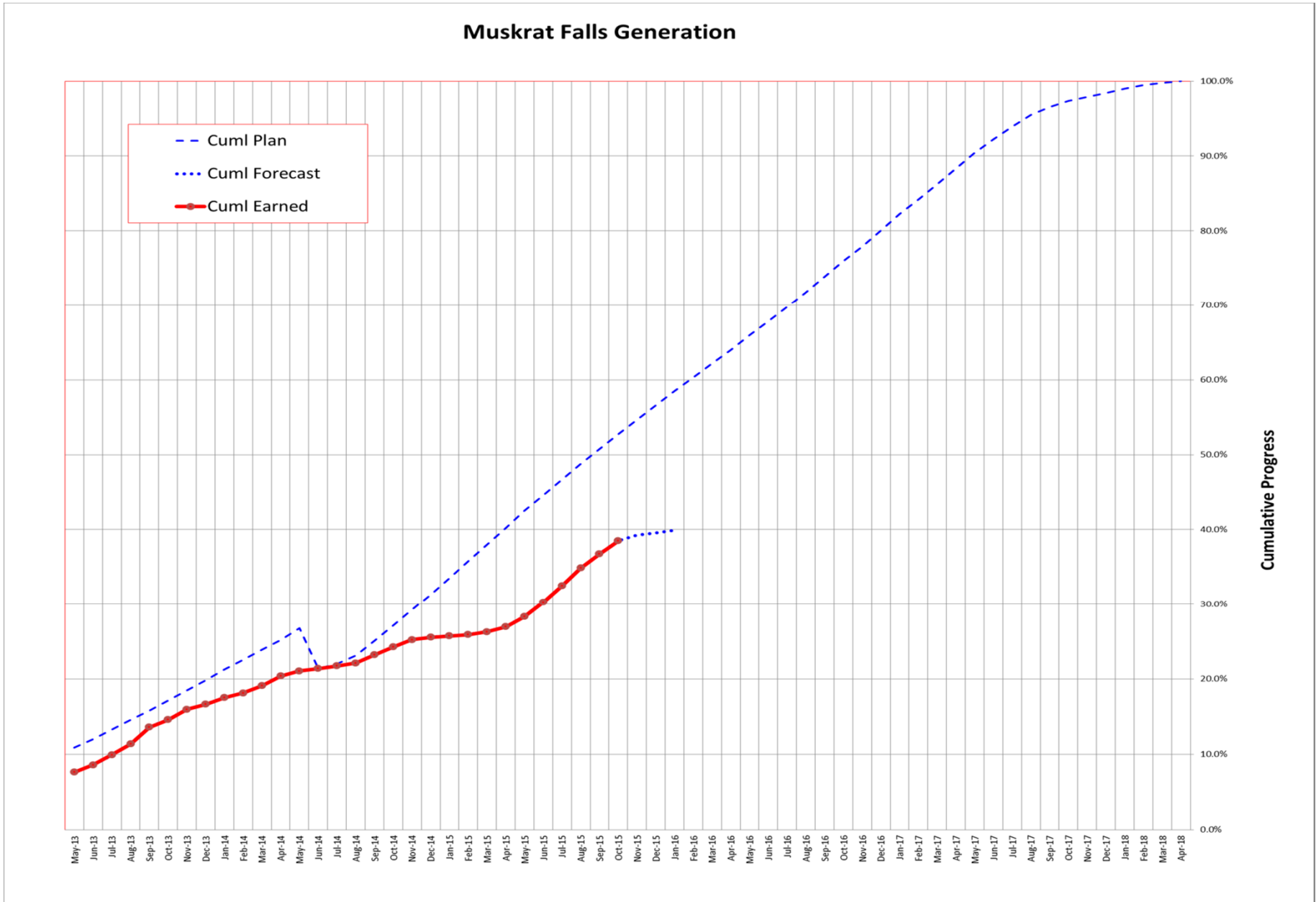
- A review of the C1 (Muskrat Falls Generation) work plan is underway, and implementation of an updated C1 schedule will remain on hold pending acceptance of agreed actions and mitigations plan.
- Work progressing on all areas and removal of ICS (Integrated Cover System) has started.

4.0 Muskrat Falls Generation (MFGen)

MFGen Summary Schedule



4.0 Muskrat Falls Generation (MFGen) - MFGen Engineering/Construction/Commissioning Progress Curve



4.0 Muskrat Falls Generation (MFGGen) - MFGGen Engineering/Construction/Commissioning Progress Table

MFGGen Progress Table 2015 Oct								
This Reporting Period								
	Weight	Period %			Cumulative %			
	Factor %	Plan	Earned	Variance	Plan	Earned	Variance	
	A	B	C	C-B	E	F	F-E	
MFG Road/Camp/Constr. Power	7.9%	0.0%	0.0%	0.0%	100.0%	99.8%	-0.2%	
MFG Reservoir Preparation	6.5%	0.0%	0.0%	0.0%	60.8%	60.8%	0.0%	
MFG Spillway & Gates	11.4%	2.2%	2.7%	0.5%	58.9%	64.7%	5.8%	
MFG North Spur Stabilization	4.2%	9.4%	9.4%	0.0%	37.2%	37.2%	0.0%	
MFG North Dam (incl North Transition Dam)	7.5%	0.0%	0.7%	0.7%	0.0%	2.5%	2.5%	
MFG Powerhouse & intake	54.9%	2.7%	1.8%	-0.9%	47.2%	22.0%	-25.2%	
MFG South Dam (incl South Transition Dam)	1.1%	0.0%	1.0%	1.0%	0.0%	5.3%	5.3%	
MFG Misc:Eng/ 315kV/Site Rest./logistic	6.5%	0.0%	0.0%	0.0%	83.5%	83.5%	0.0%	
MFGGen TOTAL	100.0%	2.0%	1.8%	-0.2%	52.8%	38.5%	-14.3%	
Last Reporting Period								
	Weight	Period %			Cumulative %			
	Factor %	Plan	Earned	Variance	Plan	Earned	Variance	
	A	B	C	C-B	E	F	F-E	
MFG Road/Camp/Constr. Power	7.9%	0.0%	0.0%	0.0%	100.0%	99.8%	-0.2%	
MFG Reservoir Preparation	6.5%	0.0%	0.0%	0.0%	60.8%	60.8%	0.0%	
MFG Spillway & Gates	11.4%	2.2%	4.0%	1.8%	56.7%	62.0%	5.3%	
MFG North Spur Stabilization	4.2%	2.8%	11.2%	8.4%	27.8%	27.8%	8.4%	
MFG North Dam (incl North Transition Dam)	7.5%	0.0%	0.4%	0.4%	0.0%	1.8%	1.8%	
MFG Powerhouse & intake	54.9%	2.6%	1.7%	-0.9%	44.5%	20.2%	-24.3%	
MFG South Dam (incl South Transition Dam)	1.1%	0.0%	0.0%	0.0%	0.0%	4.3%	4.3%	
MFG Misc:Eng/ 315kV/Site Rest./logistic	6.5%	0.3%	0.0%	-0.3%	83.5%	83.5%	0.0%	
MFGGen TOTAL	100.0%	2.0%	1.9%	-0.1%	50.7%	36.7%	-14.0%	

5.0 Nalcor Operations and Maritime Link

Nalcor Operations

- Breaker Upgrades
- System Protection and Control Upgrades
- Energy Control center Upgrades
- TL 267 and associated switchyard modifications

LCP/Nalcor Operations

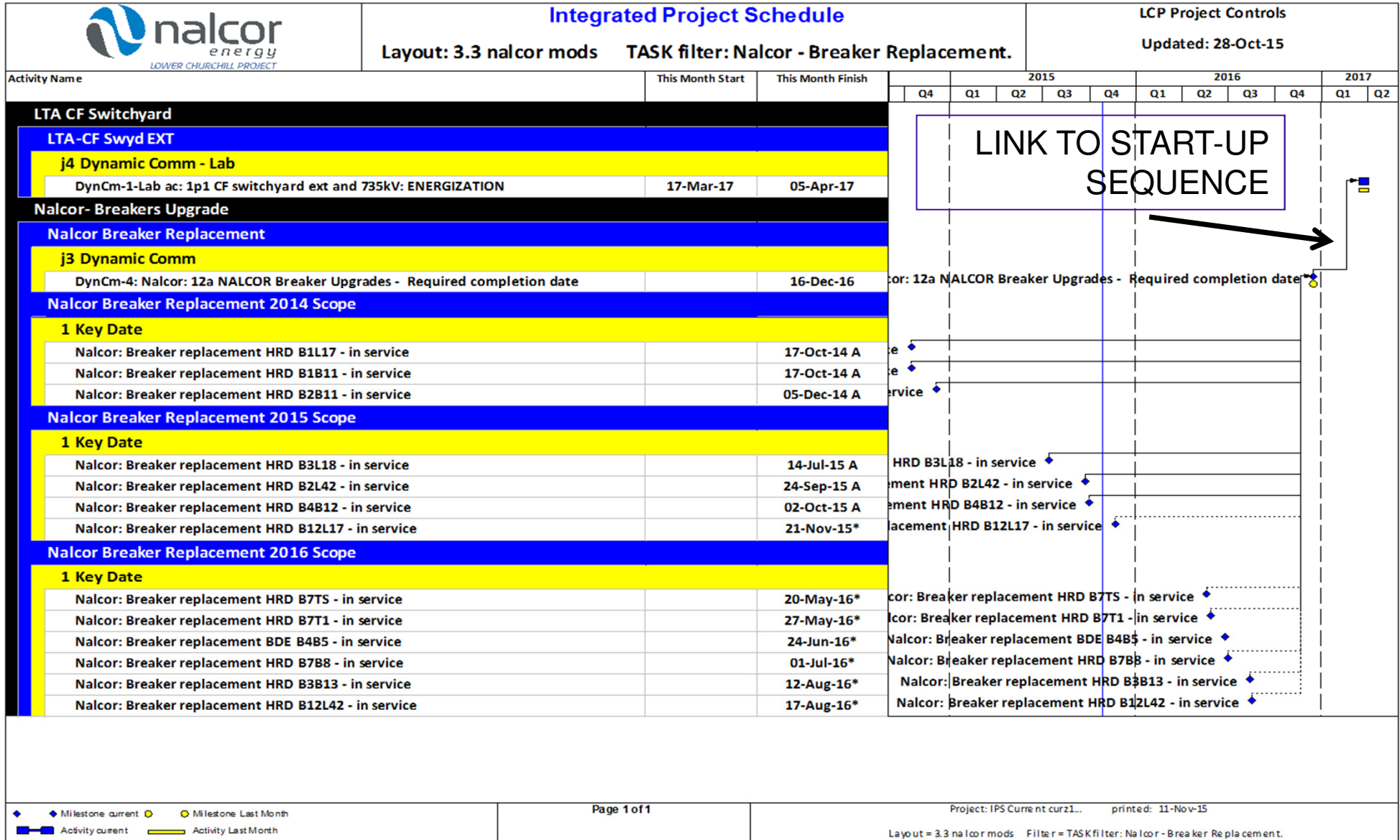
- Line Rebuilds Soldiers Pond Area

Maritime Link

- Maritime Link

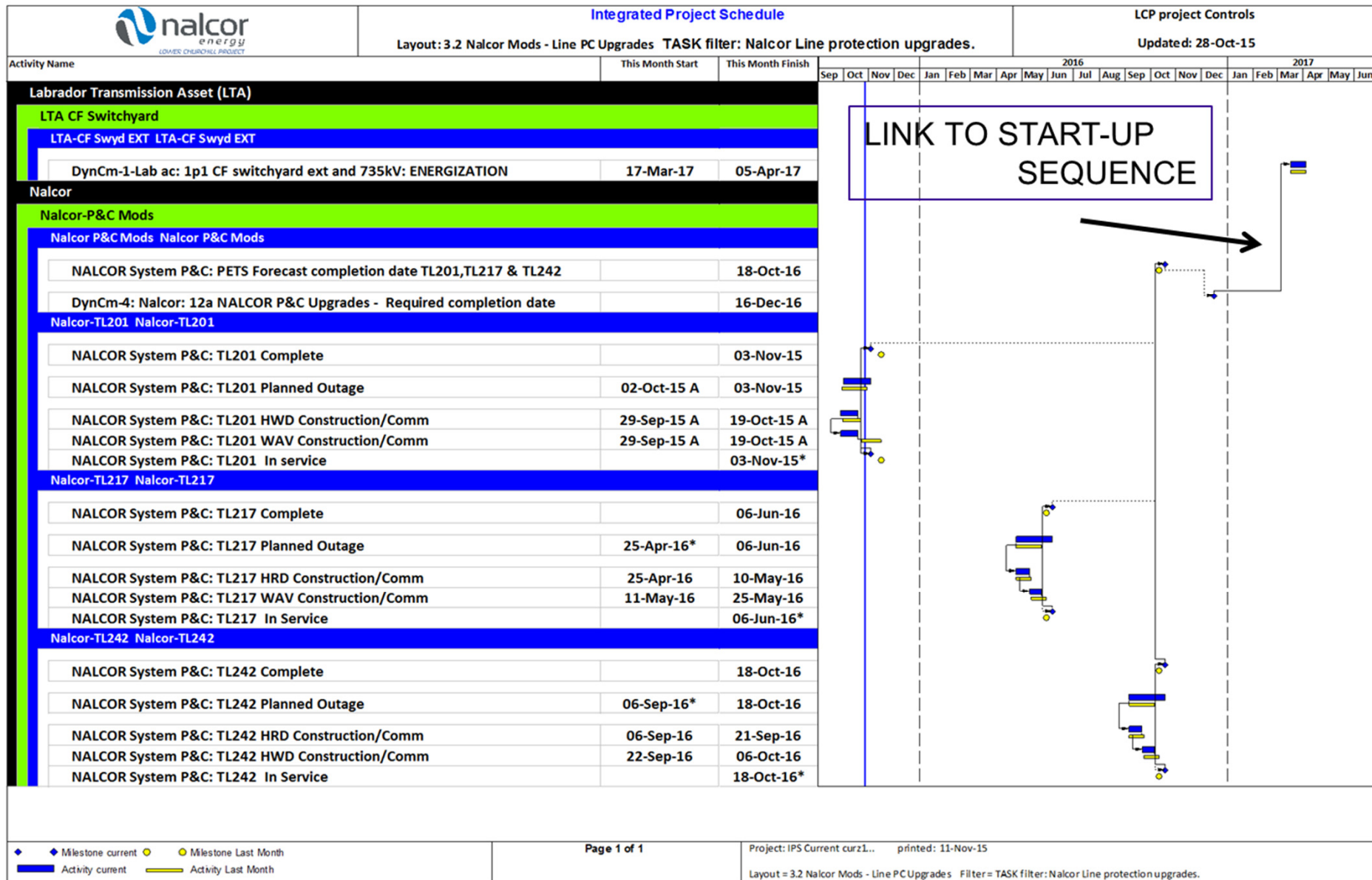
5.0 Nalcor Operations and Maritime Link Start-Up Interface

Nalcor Operations - Breaker Upgrades



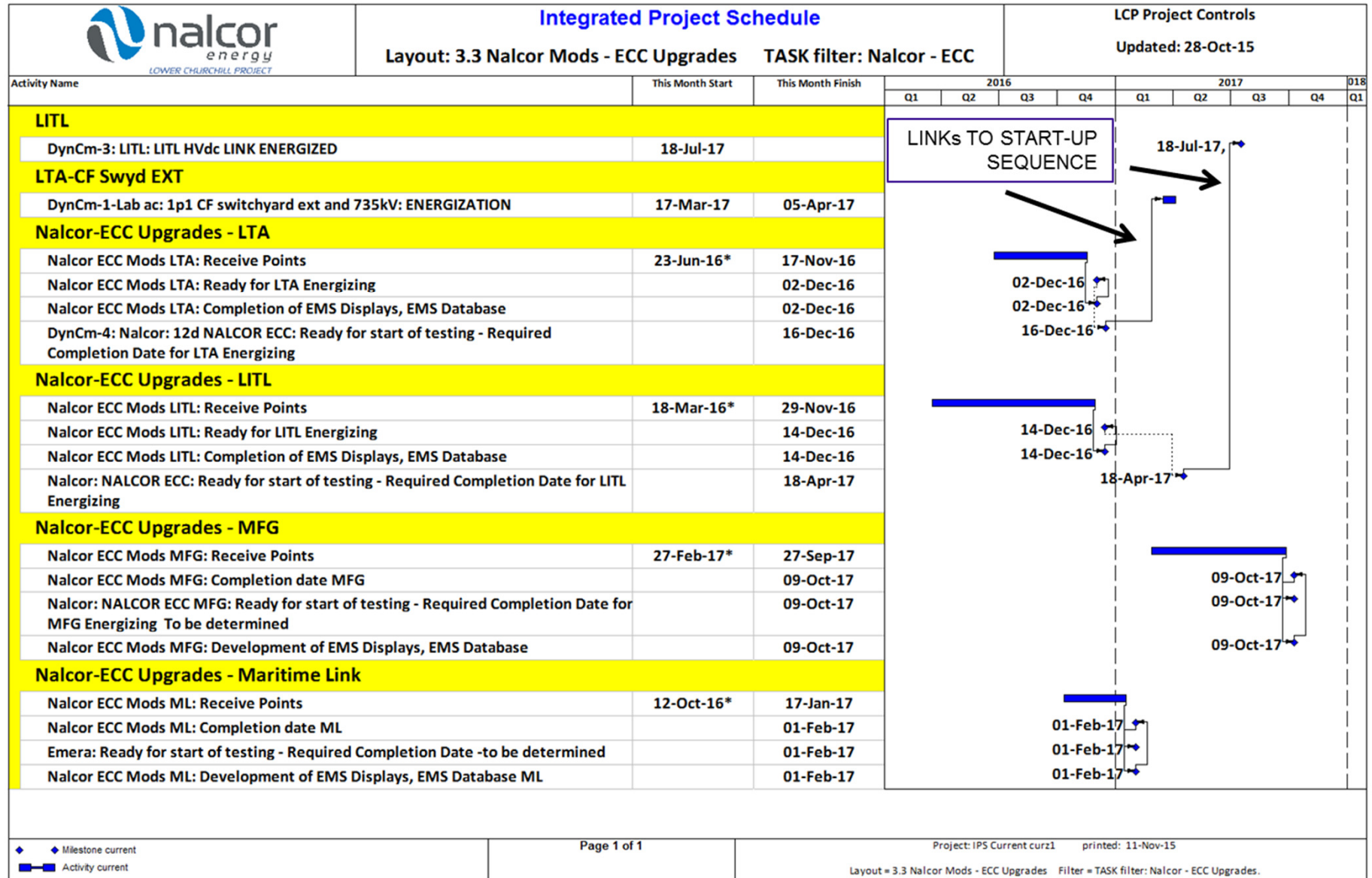
5.0 Nalcor Operations and Maritime Link Start-Up Interface

Nalcor Operations - System Protection and Control Upgrades



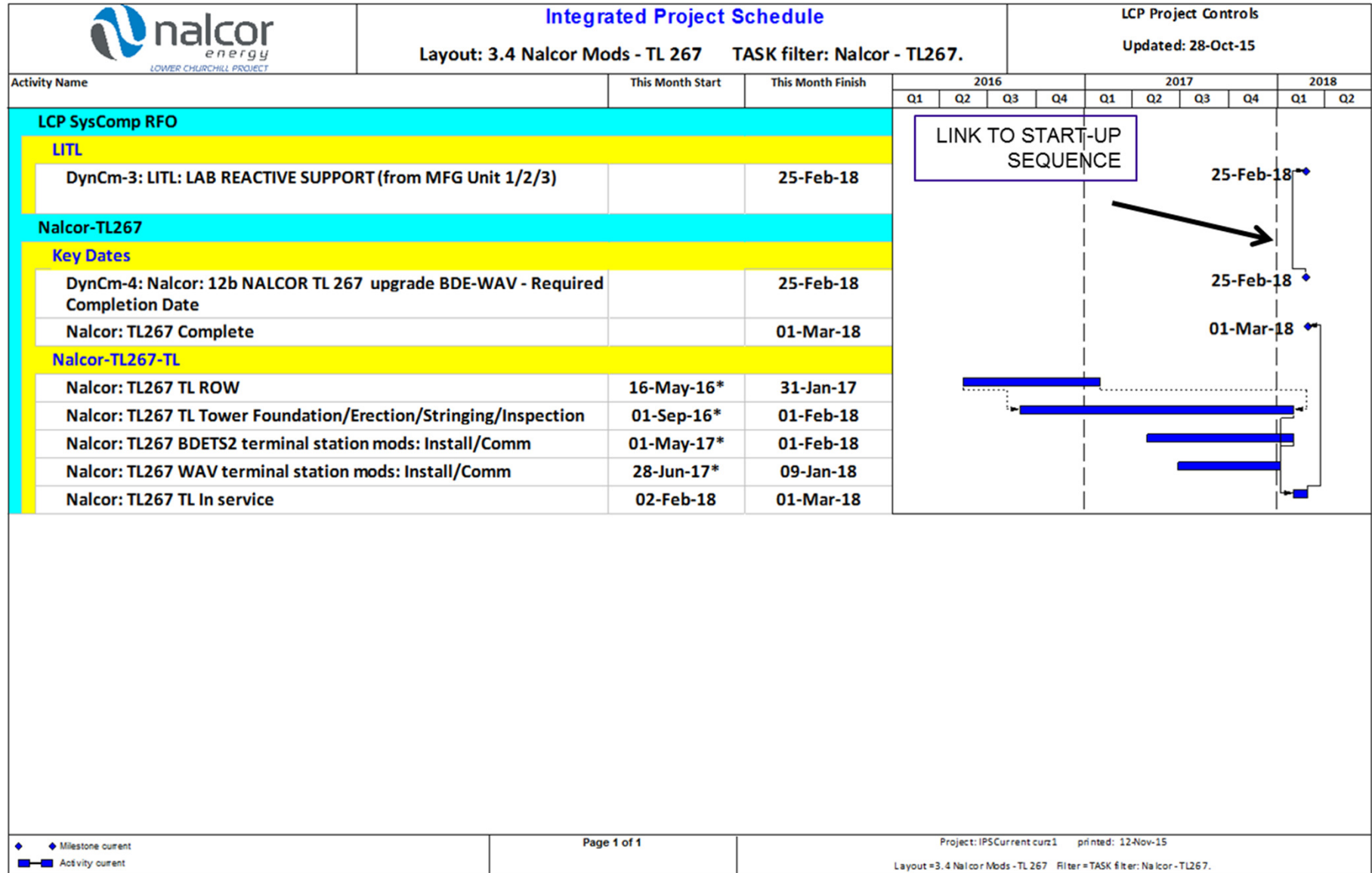
5.0 Nalcor Operations and Maritime Link Start-Up Interface

Nalcor Operations - Energy Control center Upgrades



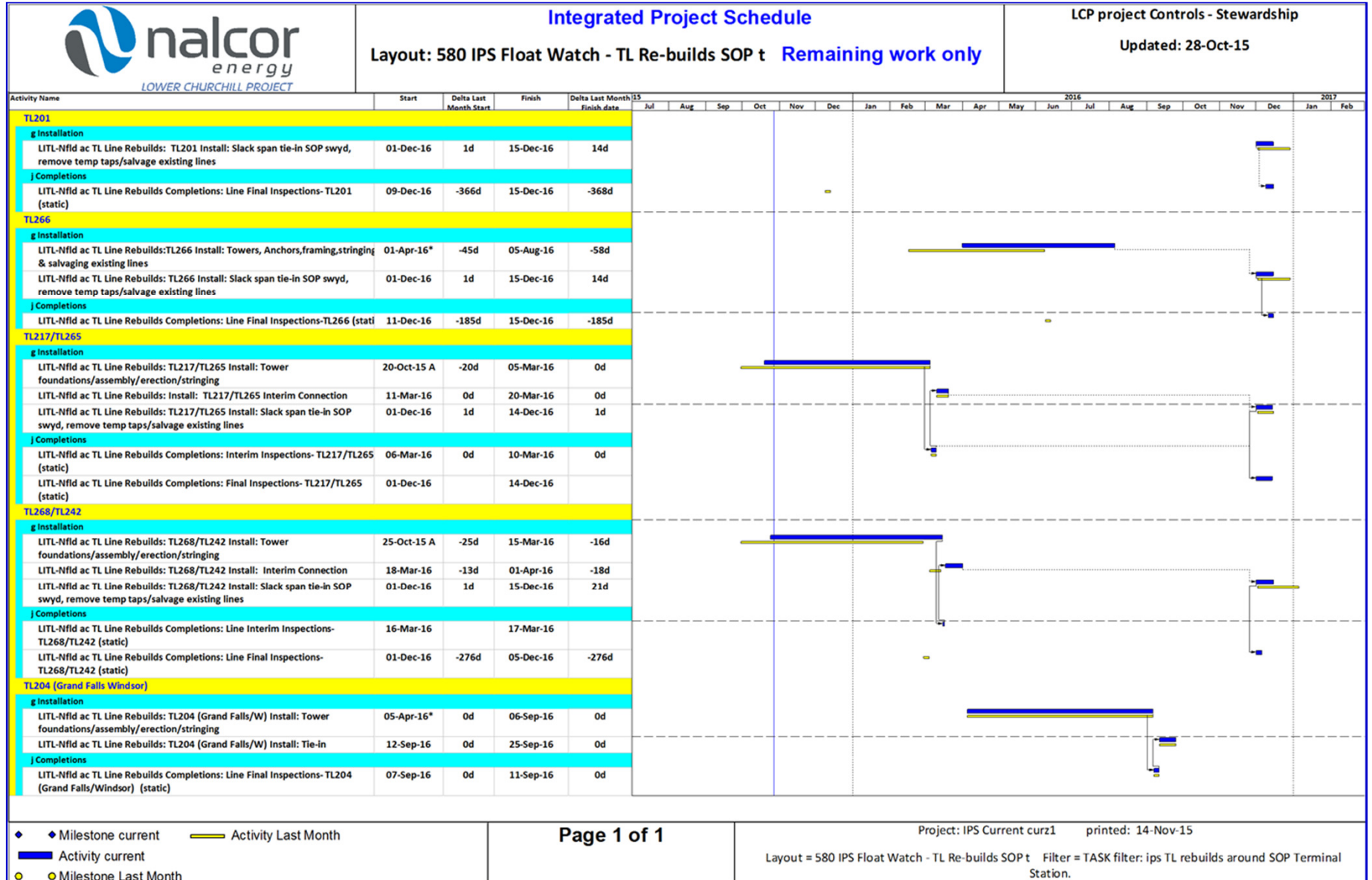
5.0 Nalcor Operations and Maritime Link Start-Up Interface

Nalcor Operations - TL 267 and associated switchyard modifications




5.0 Nalcor Operations and Maritime Link Start-Up Interface

LCP & Nalcor Operations - Line Rebuilds Soldiers Pond Area



◆ Milestone current — Activity Last Month
 ■ Activity current
 ○ Milestone Last Month

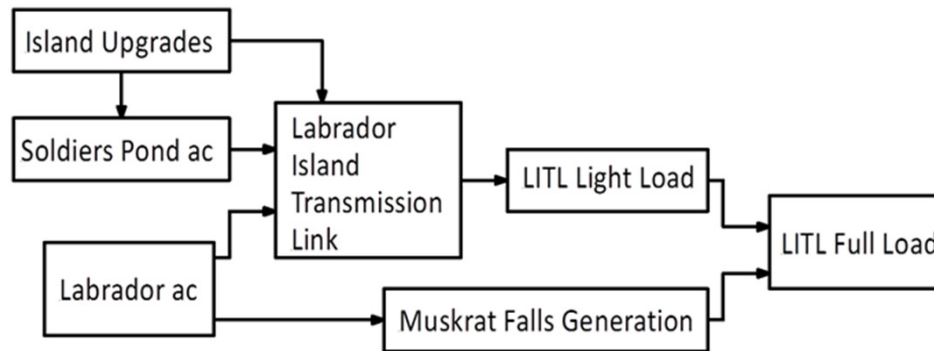
5.0 Nalcor Operations and Maritime Link Maritime Link

 <p>nalcor energy <small>LOWER CHURCHILL PROJECT</small></p>	<p>Integrated Project Schedule</p> <p>Layout: 3.9 Maritime Link TASK filter: Maritime Link.</p>	<p>LCP Project Controls</p> <p>Updated: 28-Oct-15</p>
<p>Activity Name</p> <p>ML Overall</p> <p>ML-Overall System Commissioning</p> <p>ML Marine Crossing EPC1</p> <p>ML-Crossing- Landfalls (incl. HDD)</p> <p>ML-Crossing-Cable System Install</p> <p>ML-Crossing-Cable Protect Ph 1</p> <p>ML-Crossing-Cable System Commissioning</p> <p>ML Converters -NS WB</p> <p>ML-NS-Convert: Converter Clearing and Site Prep - WB (NS)</p> <p>ML-NS-Convert: Converter Woodbine Construction</p> <p>ML-NS-Convert: Converter Woodbine Commissioning</p> <p>ML Converters -NL BB</p> <p>ML-NL-Convert: Converter Clearing and Site Prep - BB(NL)</p> <p>ML-NL-Convert: Converter Bottom Brook Construction</p> <p>ML-NL-Convert: Converter Bottom Brook Commissioning</p> <p>ML AC Transmission PC3</p> <p>ML-NL-TL: AC TL in NL - Bottom Brook to Granite Canal</p> <p>ML DC Transmission & Electrode Line PC3</p> <p>ML-NL-TL: DC TL in NL - Bottom Brook to Cape Ray</p> <p>ML-NS-TL: DC TL in NS - Point Aconi to Woodbine</p> <p>ML-NL-TL: TL Grounding (Electrode) Line Bottom Brook to IH</p> <p>ML-NS-TL: TL Grounding (Electrode) Line NS WB to BL</p> <p>ML Swyd - NL GC</p> <p>ML-NL-Swyd: Bottom Brooke</p> <p>ML-NS-Swyd: Woodbine</p> <p>ML-NL-Swyd: Granite Canal</p> <p>ML Transition Compound PC4</p> <p>ML-NL-Transition Compound - Cape Ray</p> <p>ML-NS-Transition Compound - Point Aconi</p> <p>ML Grounding (Electrode) Site NL Indian Head</p> <p>ML-NL-GS: Grounding (Electrodes) Nfld - Indian Head - Site prep</p> <p>ML-NL-GS: Grounding (Electrodes) Nfld - Indian Head- breakwater & install</p> <p>ML Grounding (Electrode) Site NS Big Lorraine</p> <p>ML-NS-GS: Grounding (Electrodes) NS - Big Lorraine -site prep</p> <p>ML-NS-GS: Grounding (Electrodes) NS - Big Lorraine- breakwater & install</p>	<p>➤ Maritime Link in IPS:</p> <ul style="list-style-type: none"> ▪ Need to agree with Emera on method of providing monthly update for the IPS summarized Maritime Link schedule activities on this page ▪ Logic between Maritime Link activities and LCP start-up sequence to be determined by Technical Integration Committee 	
	<p>Page 1 of 1</p>	<p>Project: IPS Current curz1 printed: 12-Nov-15</p> <p>Layout = 3.9 Maritime Link Filter = TASK filter: Maritime Link.</p>

6.0 RFO Start-up Sequences

IPS Start-Up Verification - Status of development

The Ready for Operations TIC (Technical Integration Committee) start-up sequence (in simplified block diagram form):



The Ready for Operations TIC (Technical Integration Committee) report concerning the start-up sequence was issued [May 2014](#).

End of Report

Lower Churchill Project Delivery Team Project Controls