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Nalcor Energy – Lower Churchill Project



Integrated Project Schedule (IPS)

LCP-PT-MD-0000-PC-SH-0001-01

Comments: Incorporating PCN-0137 & PCN-0109 Pages changed: 22,41,42,43,46,47,50,51 & 52	Total # of Pages (Including Cover): 80
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Status/ Revision	Date	Reason For Issue	Prepared By	Functional Manager Approval	Project Manager (Marine Crossings) Approval	Project Manager (Generation + Island Link) Approval	Project Director Approval
B2	03-Apr-2013	Issued for Use	T. Chudy	S. Guerette	G. Fleming	R. Power	P. Harrington
B1	25-Feb-2013	Issued for Use	T. Chudy	J. Kean	G. Fleming	R. Power	P. Harrington
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**\* Primary Changes from Rev B1 to Rev B2**

- Delay to award of CH0007 package
- Diversion moves from 2015 to 2016
- Increased likelihood of starting cofferdam at beginning of season and thus completing within available window
- De-risking of schedule for Spillway & North Spur
- North Dam construction moves from 2016/17 to 2017
  - PCN0109 for removal of Down Stream CVC face
- Impoundment moves later in 2017
- First Power moves from mid to late 2017

**\* Detail Changes from Rev B1 to Rev B2**

**CH0009 (North & South Dams)**

- Directly impacted through diversion & river closure shifting one season
  - North Dam shift one season
  - South Dam unchanged (assuming no strategic change to contract packaging or timing)
- North Dam includes stepped downstream face
  - PCN0109 accepted
- Becomes prime focus point for overall schedule risk

**CH0030 (Turbine & Generators)**

- Impact to installation schedule
- Fabricated items will require storage and preservation
- Provides additional schedule float for fabrication

**CH0032 (Hydro-Mechanical)**

- Change provides more float for required delivery – de-risk schedule for 2016 diversion
- Provides more flexibility in manufacturing schedule for potential quality issues

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## TABLE of CONTENTS

- 1.0 Purpose
- 2.0 Scope
- 3.0 Definitions
- 4.0 Abbreviations and Acronyms
- 5.0 Resonsibilities
- 6.0 LCP Stewardship
  - 6.1 Stewardship Process
  - 6.2 IPS in the Stewardship Process
- 7.0 LCP Schedule Hierarchy
  
- 8.0 IPS Structure
  - 8.1 IPS Structure - Sections
  - 8.2 IPS Structure - What are the IPS Sites
  - 8.3 IPS Structure - Level of detail of the IPS
  - 8.4 IPS Structure - Typical site schedule for Switchyards, Transition Compounds, Converters
  - 8.5 IPS Structure - Typical site schedule for Hvac or HVdc Transmission Lines
  - 8.6 IPS Structure - Typical site schedule for Dams
  - 8.7 IPS Structure - Site schedule for SOBI Crossing
  
- 9.0 Schedule Assumptions/RFO Start-up Sequences
  - 9.1 Schedule Assumptions
  - 9.2 Ready for Operations (RFO) Start up Sequences
    - 9.2.1 LTA
    - 9.2.2 LITL - Labrador)
    - 9.2.3 LITL - Island (Newfoundland)
    - 9.2.4 LITL - SOBI Crossing
    - 9.2.5 Telecom Overall
    - 9.2.6 LTA & LITL Overall

- 10.0 IPS Progress/Updating/Reporting & Critical Path Determination
  - 10.1 IPS Planned Progress Determination
  - 10.2 IPS Progress Weight Factors
  - 10.3 IPS Updating
  - 10.4 How is IPS updated info presented/distributed
  - 10.5 Logic Structure between Projects for Float Determination

### IPS Graphics: Summary Schedules / Progress Curves

- A) LCP-IPS Summary Schedules
  - A.1 LCP-IPS Overall Summary
  - A.2 LCP-IPS Target Milestone Schedule
  - A.3 LCP-IPS LTA Summary
  - A.4 LCP-IPS LITL Summary
  - A.5 LCP-IPS MFG Summary
  
- B) Planned Progress Curves
  - B.1 – LCP-IPS Overall
  - B.2 – LCP-IPS LTA
  - B.3 – LCP-IPS LITL
  - B.4 – LCP-IPS MFGen
  
- C) LCP-IPS Critical Paths
  - C.1 IPS LTA Critical/Sub Critical Paths
  - C.1 IPS LITL Critical/Sub Critical Paths
  - C.1 IPS MFG Critical/Sub Critical Paths to Unit 1
  
- D) Entire IPS Schedule

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## 1.0 Purpose

The Integrated Project Schedule (IPS) is a Critical Path Method network derived from the various project participant schedules sources tied together with the Ready for Operation start-up sequences. The Integrated Project Schedule format will be structured to serve as an overall project control network modeling the major project interfaces and scope of work.

### **What the Integrated Project Schedule (Primavera) provides:**

- Source for Schedule information for the LCP Stewardship process
- Source for Schedule information for the LCP Management Summary Schedule (MSS)
- Provide monitoring of the LCP Target Milestones and Key Dates throughout the Project
- Identify and monitor critical paths for LCP projects: Labrador Transmission Asset (LTA), Labrador Island Transmission Link (LITL), Muskrat Falls Generation (MFGen)
- Identify and monitor float between projects, sites and sections of work
- Identify main interfaces between the main Project participants schedules
- Provide a communication tool for the Project Management Team to forecast, identify, and analyze schedule outcomes, conflicts, opportunities, and vulnerabilities

### **What the Integrated Project Schedule (Primavera) does not provide:**

- Updated progress information (provided by LCP Stewardship process)
- Updated resource curves / progress curves (provided by Stewardship process)
- % complete on activity bars (current versus baseline comparison will be utilized)

## 2.0 Scope

The Integrated Project Schedule includes the following scope of work:

- Labrador Transmission Asset - LTA
- Labrador Island Transmission Link – LITL
- Muskrat Falls Generation – MFGen
- Nalcor System Upgrades & Outages
- Maritime Link (Executed by Emera: reference only)

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### 3.0 Definitions

Converter Stations	Converter stations house the specialized equipment necessary to convert power from ac to dc and back again.
Critical Path	The longest path or sequence of activities that drive the completion of a specific Target Milestone or Key date.
Dynamic Commissioning	Commissioning activities which simulate operation of a complete system or part system. These tests shall, as near as possible, be at full operating conditions in order to carry out operational performance tests to verify that the system/equipment performed in accordance with the design criteria, together with the recording of such tests. Such dynamic commissioning/systems commissioning shall be sufficient to allow systems, part system and/or equipment to be certified, turned over to Operations by the Ready For Operations team and rapidly brought into operational service by Operations, if not already operational.
Electrodes	Electrodes are necessary to permit a HVdc transmission to operate. The electrodes are connected to Converter Stations by dc transmission lines.
First Power	The point in time when the first turbine/generator unit is installed, commissioned, and producing power.

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### 3.0 Definitions cont.

Float	The period of time that an activity or sequence of activities can be delayed and not cause a delay to a Milestone or Key date. This is calculated by the scheduling software.
Full Power	The point in time when all turbine/generator units are installed, commissioned and operating to generate commercial power.
Impoundment	The process of allowing the reservoir to fill to operational levels by means of restraining the natural flows of the river. In the case of the Muskrat Falls generating station, this is done by using two dams, the powerhouse structure and the spillway structure to retain the water. Closure of the spillway gates will reduce the downstream flow, allowing the reservoir to fill.
Key Dates	An activity that signifies the completion of a major goal, event or a decision point in the schedule, but not considered a Target Milestone as defined in the Target Milestone Schedule.
Management Summary Schedule (MSS)	A single page summary schedule derived from the Integrated Project Schedule used for reports and management discussions.
Physical Component	A breakdown of major physical components identified/associated with the NE-LCP.

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### 3.0 Definitions cont.

RFO	Ready for Operations: A team, led by Company, consisting of qualified personnel from Company, Consultant, Contractors and Suppliers, who shall provide commissioning services of systems and part systems under technical supervision and direction of Consultant. Project Completions Philosophy Doc. #: LCP-PT-ED-0000-EN-PH-0043-01
Static Commissioning	All live/energized tests that are carried out after a section of work has reached mechanical completion. These shall be completed in compliance with the specifications at Contractors/Suppliers facilities, factory tests and during installation and/or construction as soon as it is safe for commissioning static checks to commence, initially on a single discipline basis.
Target Milestone	In the IPS a Target Milestone is a flag that signifies the completion or start of a major goal, a decision point, or a high-level snapshot for senior stakeholders.
LCP Sites	The physical locations of the work. These are defined in the Work Breakdown Structure (WBS) - Physical Components.
Transition Compound	The point at which overhead HVdc transmission transitions to subsea cabling requires specialized connections. These connections, and the physical facilities in which they are installed, are Transition Compounds.

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## 4.0 Abbreviations and Acronyms

ac	Alternating Current	LCPMT	Lower Churchill Project Management Team
CF	Churchill Falls	LITL	Labrador Island Transmission Link
dc	Direct Current	LTA	Labrador Transmission Asset
EIS	Environmental Impact Statement	MF	Muskrat Falls
EOI	Expression of Interest	MFGen	Muskrat Falls Generation
EPCM	Engineering, Procurement and Construction Management	ML	Maritime Link
Gen	Generation	MSS	Management Summary Schedule
GI	Gull Island	NE-LCP	Nalcor Energy – Lower Churchill Project
HDD	Horizontal Directional Drilling	Ph	Phase
HVac	High Voltage ac Transmission	PH	Powerhouse
HVdc	High Voltage dc Transmission	RFO	Ready for Operations
HVGB	Happy Valley – Goose Bay	RFP	Request for Proposals
IPR	Independent Project Review	SLI	EPCM Contractor (SNC Lavalin)
IPS	Integrated Project Schedule	SOBI	Strait of Belle Isle
		SP (SOP)	Soldier’s Pond
		T&Gs	Turbines & Generators (also T/G)
		TL	Transmission Line
		Tx	Transmission
		WBS	Work Breakdown Structure

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## 5.0 Responsibilities

### Project Controls

Responsible for development, periodic updating, analysis and communication of the analysis to monitor overall schedule performance of the Project

### Project Managers

Responsible to provide accurate and timely:

- progress reporting
- updated contractor schedules
- changes to execution strategies

### Project Director

Responsible for the approval and the execution of the project within the timelines of this Integrated Project Schedule.

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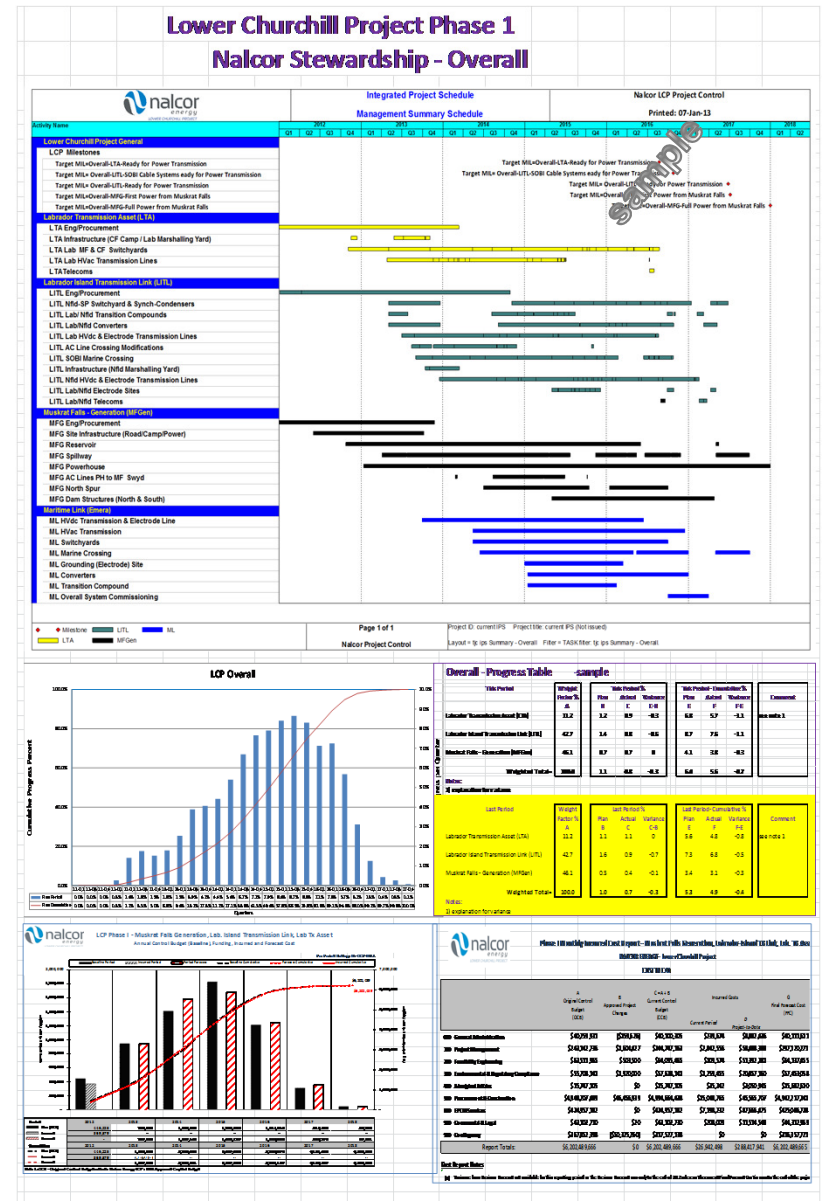
## 6.0 LCP Stewardship

### 6.1 Stewardship Process

#### Elements of the Stewardship Process

(from Project Controls Management Plan)

- Setting challenging cost and schedule targets based on competitive benchmarking data and Project and sub-Project optimization opportunities.
- A formal monthly Cost, Schedule and Change Management Stewardship Meeting.
- Senior Project Management interacting directly with Cost and Schedule stewards.
- One Page Summaries (see right) will be produced monthly for Overall, LTA, LITL, MFG and SOBI



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## 6.0 LCP Stewardship

### 6.2 IPS in the Stewardship Process

This *Integrated Project Schedule* establishes the overall control schedule used in the Nalcor LCP Project Team Stewardship Process for monitoring schedule and performance on Phase 1 of the Nalcor Energy – Lower Churchill Project.

#### Source for Schedule and Progress information for:

- Stewardship process
- Management Summary Schedule (MSS)
- LCP Monthly Progress Report

#### Identify and monitor :

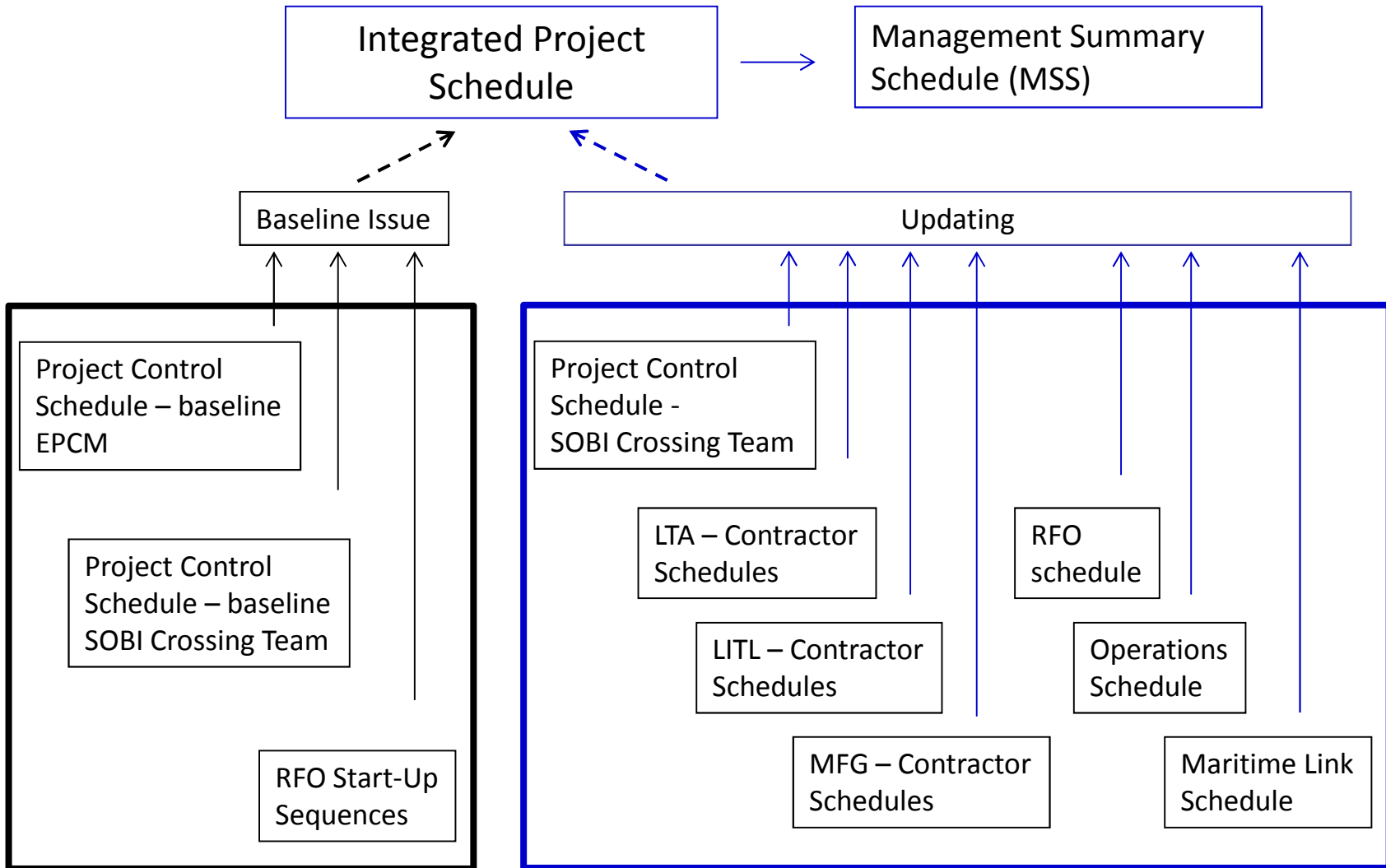
- Target Milestones and Key Dates throughout the Project
- Critical paths for LCP projects: Labrador Transmission Asset (LTA), Labrador Island Transmission Link (LITL), Muskrat Falls Generation (MFGen)
- Float between projects, sites and sections of work
- Main interfaces between the main Project participants schedules and Nalcor Operations

#### Provides:

- Planned progress per month for LCP Overall, Projects (LTA, LITL MFGen) and LCP Sites (as defined by the WBS Physical Components)
- Communication tool for the Project Management Team to forecast, identify, and analyze schedule outcomes, conflicts, opportunities, and vulnerabilities

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## 7.0 LCP Schedule Hierarchy



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## 8.0 IPS Structure

8.1 IPS Structure - Sections

8.2 IPS Structure - What are the IPS Sites

8.3 IPS Structure - Level of detail of the IPS

8.4 IPS Structure - Typical site schedule for Switchyards, Transition Compounds and Converters

8.5 IPS Structure - Typical site schedule for Transmission Lines Hvac or HVdc

8.6 IPS Structure - Typical site schedule for Dams

8.7 IPS Structure - Site schedule for SOBI Crossing

## 8.1 IPS Structure - Sections

IPS Structure = What are the sections of the IPS.

The IPS has six major sections:

1) Lower Churchill Project General:

This section includes the Target Milestones found in the “Target Milestone Schedule”

2) LCP Overall System Completions

This section includes the Nalcor Ready for Operations (RFO) overall commissioning scope (including telecoms)

3) Labrador Transmission Asset (LTA)

HVac Line MF to CF and CF/MF Switchyards (Terminal Stations)

4) Labrador Island Transmission Link – (LITL)

Converters, MF to SP (SOP) HVdc TL, SOBI Crossing, Transition Compounds, SP (SOP) Switchyard (Terminal Station), Electrode TL and Electrode Stations

5) Muskrat Falls Generation – (MFGen)

Access Road, Camps, Construction Power, North Spur, North Dam, Spillway, Powerhouse, South Dam, Collector Lines (PH to MF Swyrd) & Reservoir

6) Maritime Link – (ML)

Only summary level activities for alignment purposes with no logic

Coming soon : Nalcor Upgrades and Outages

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## 8.2 IPS Structure - What are the IPS Sites

- An IPS Site is a designation from WBS – physical component. It generally refers to a geographical location.

### Labrador

LCP Telecoms-CF  
 LCP Telecoms-Lab  
 LTA CF Camp  
 LTA CF Switchyard  
 LTA-735kV Interconnect at CF  
 LTA-ac Line Marshalling Yard  
 LTA (L3101/L3102) 315kV TL Seg1/2 MF-CF  
 LTA (MFATS2) MF Terminal Station (Switchyard)  
 LITL (MFACS) MF Converter Station  
 LITL-Lab Electrode Line (L'Anse-au-Diable)  
 LITL Lab Electrode Site (L'Anse-au-Diable)  
 LITL-Lab dc Seg1/2  
 MFGen Access Road  
 MFGen Constr Pwr  
 MFGen Reservoir  
 MFGen Camp Accom  
 MFGen North Spur  
 MFGen North Dam  
 MFGen Spillway/Diversion  
 MFGen Power House  
 MFGen-315kV Collector Line (PH->MF Swyd)  
 MFGen South Dam  
 MFGen Site Restore

### Island (Newfoundland)

LCP Telecoms-Nfld  
 LITL Nfld Trans Comp  
 LITL-Nfld dc line Marshalling Yard  
 LITL-Nfld dc TL Seg 3/4/5  
 LITL (SOPCS) SP Converter Station  
 LITL-Nfld Electrode Line (Dowden's Point)  
 LITL Nfld Electrode Site (Dowden's Point)  
 LITL (SOPTS) Soldiers Pond Terminal Station (Swyd)  
 LITL-Nfld Line Crossing Mods  
 LITL (SOPSC) SP Synch Cond

### SOBI Crossing

LITL SOBI Crossing



### 8.3 IPS Structure - Level of detail of the IPS

- The IPS was designed to include the total scope and provide the critical path(s) for Construction/Completions.
- Engineering activities included for planned progress only.

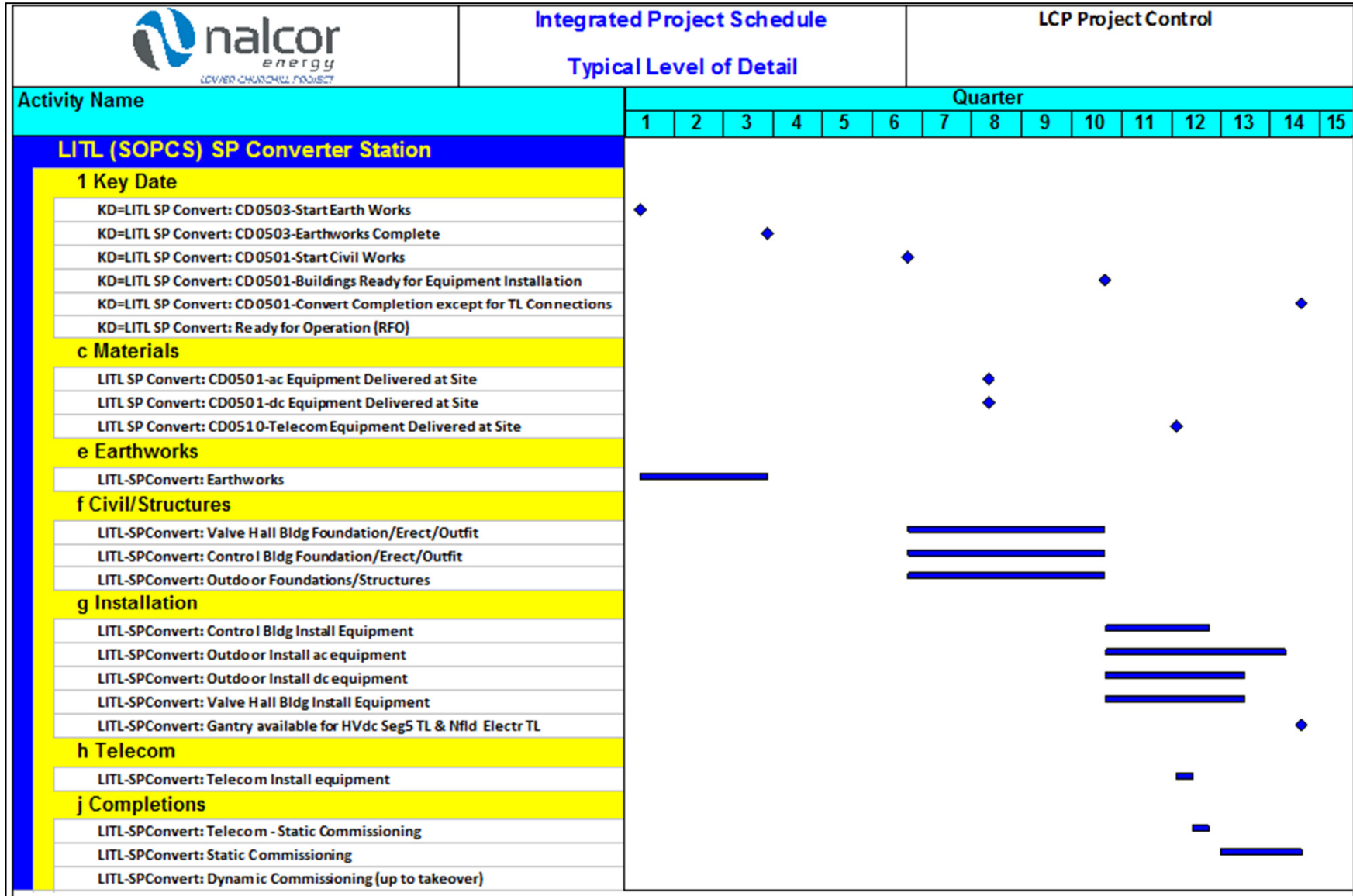
#### IPS Activity Distribution by:

IPS Section	
LCP General Lower Churchill Project General	45
LCP Overall System Completions	25
LTA Labrador Transmission Asset (LTA)	91
LITL Labrador Island Transmission Link (LITL)	308
MF Gen Muskrat Falls - Generation (MFGen)	235
ML Maritime Link (Emera)	22
	<b>726</b>

IPS Activity Type	
Target Milestones	45
Key Date	169
Eng/Procure	6
RFO LTA	2
RFO LITL	11
Materials	46
Earthworks	50
Civil/Structures	79
SOBI Crossing	15
Installation	110
Telecom	17
Completions	108
Impoundment	4
Maritime Link	22
Misc	42
	<b>726</b>

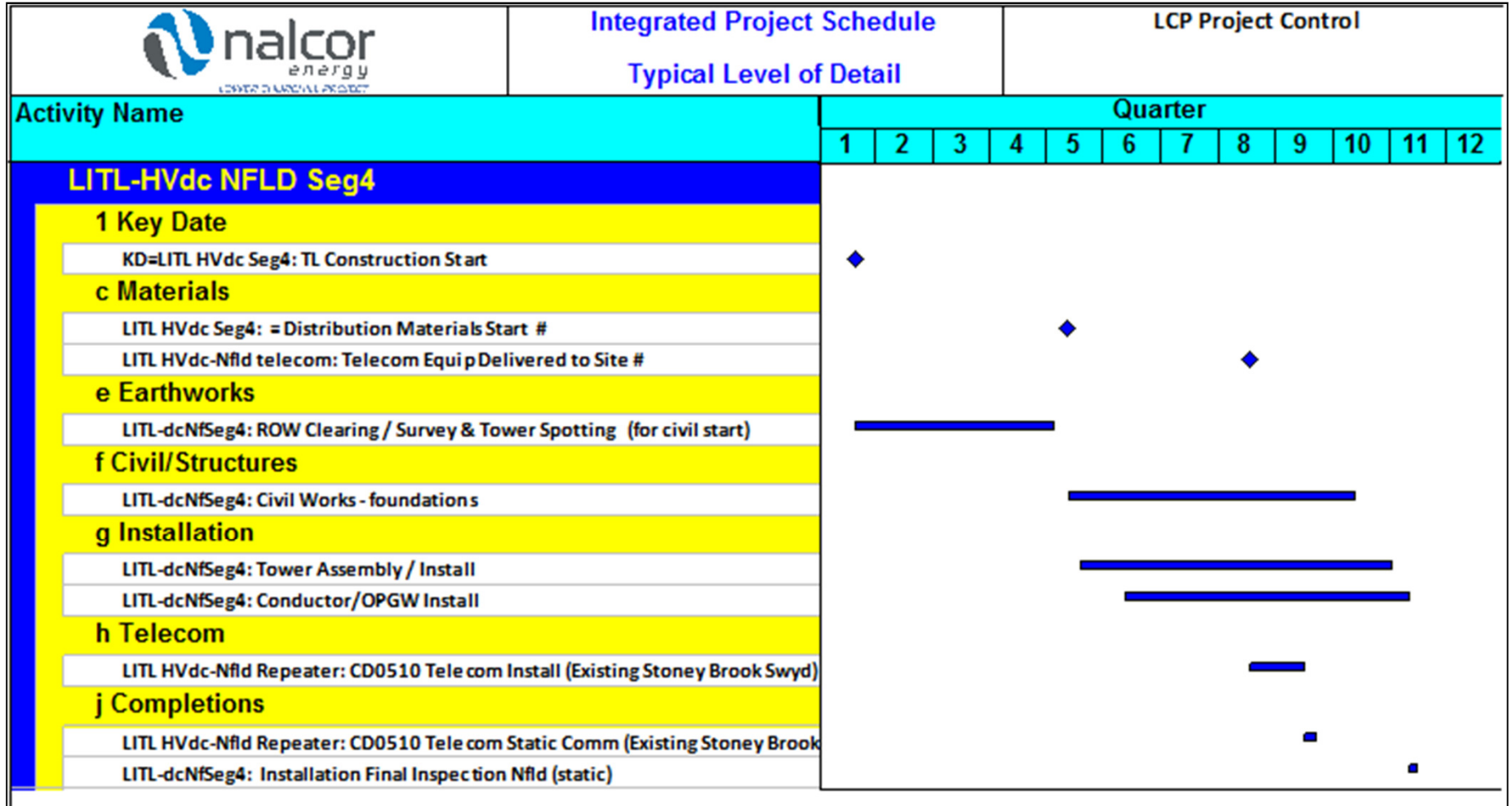
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### 8.4 IPS Structure – Typical site schedule for Switchyards, Transition Compounds and Converters



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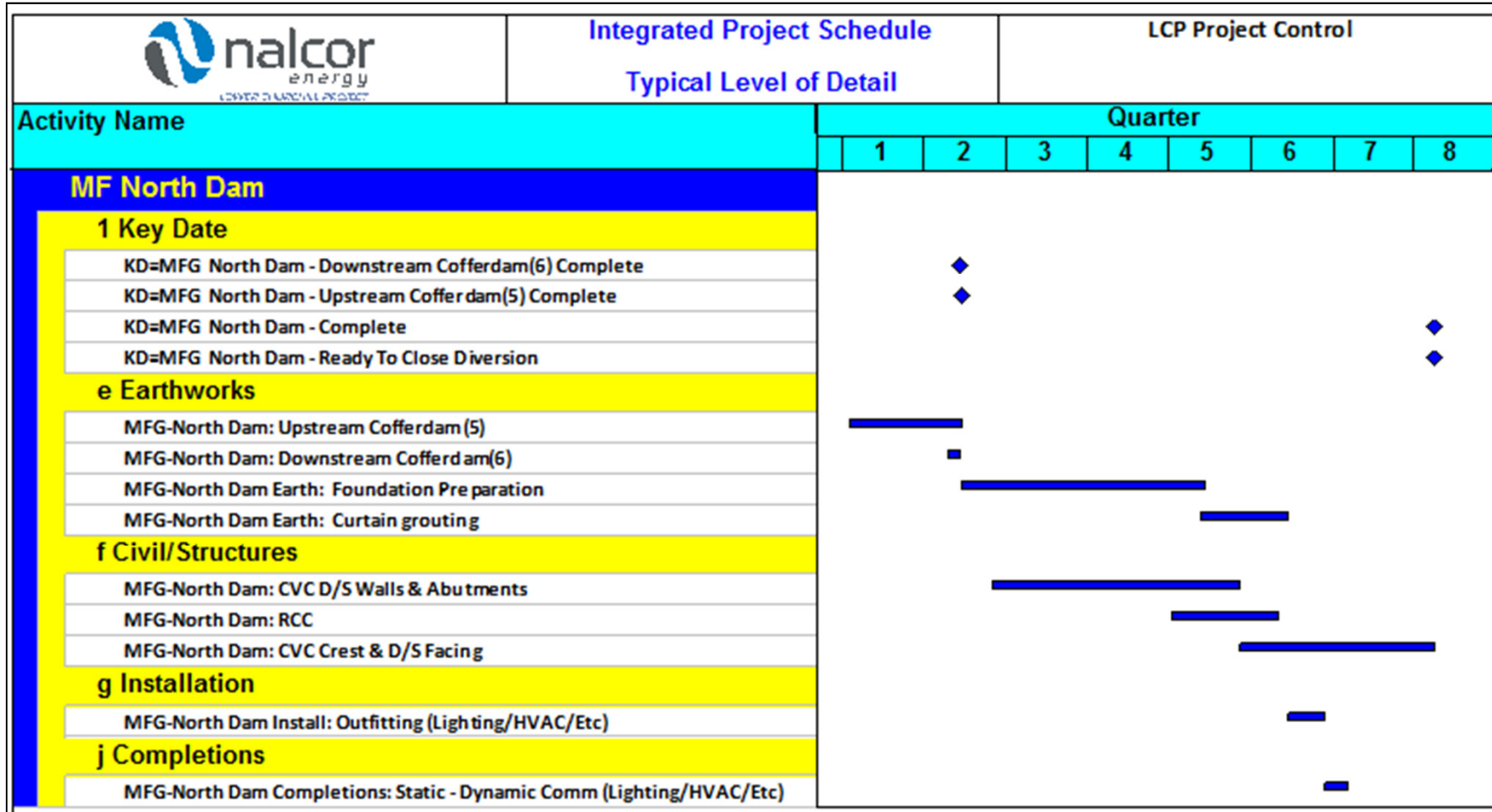
8.5 IPS Structure – Typical site schedule for Transmission Lines Hvac or HVdc



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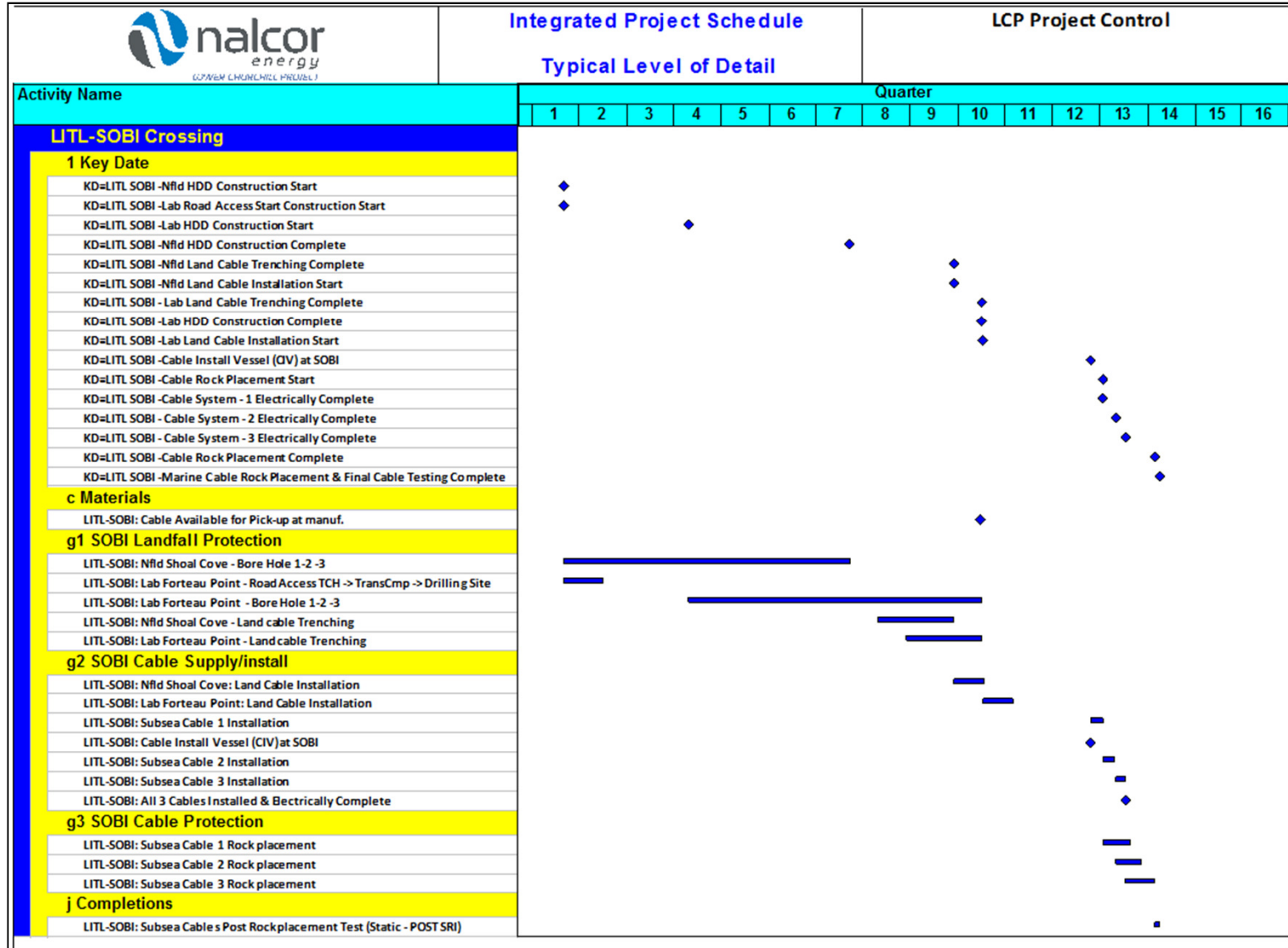
### 8.6 IPS Structure – Typical site schedule for Dams



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### 8.7 IPS Structure – site schedule for SOBI Crossing



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## 9.0 Schedule Assumptions/RFO Start-UP Sequences

### 9.1 Schedule Assumptions

Since most of the activity durations are derived from the following schedules, the basic assumptions are found in those individual schedule issues. The exception is the Ready For Operations (RFO) start-up sequences. These start-up sequences are simplified block diagrams which represent the logic connecting the various sites in the IPS.

#### **Labrador Transmission Asset (LTA)**

LCP-Project Control Schedule (SLI-PCS): LCP-PT-ED-0000-EP-SH-0002-01 Baseline Issue May 2012  
RFO Start-up Sequence: (see section 9.2)

#### **Labrador Island Transmission Link (LITL)**

LCP-Project Control Schedule (SLI-PCS): LCP-PT-ED-0000-EP-SH-0002-01 Baseline Issue May 2012  
LCP-SOBI Crossing Team Schedule (SOBI-PCS): pre-rebaseline schedule as of fall 2012  
RFO Start-up Sequence: (see section 9.2)

#### **Muskrat Falls Generation (MFGen)**

LCP-Project Control Schedule: (SLI-PCS) as of Sep 2012 including approved changes to date  
Project Change Notices PCN-0109 & PCN-0137  
RFO Start-up Sequence (see section 9.2)

#### **Maritime Link**

Emera Maritime link Schedule: Decision Gate 2 "DG2 Cost and Schedule Estimate Sep 6 – 2012  
Rev B1 Doc No 1005.xlsm"

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## 9.0 Schedule Basis/Assumptions

### 9.2 Ready for Operations (RFO) Start up Sequences

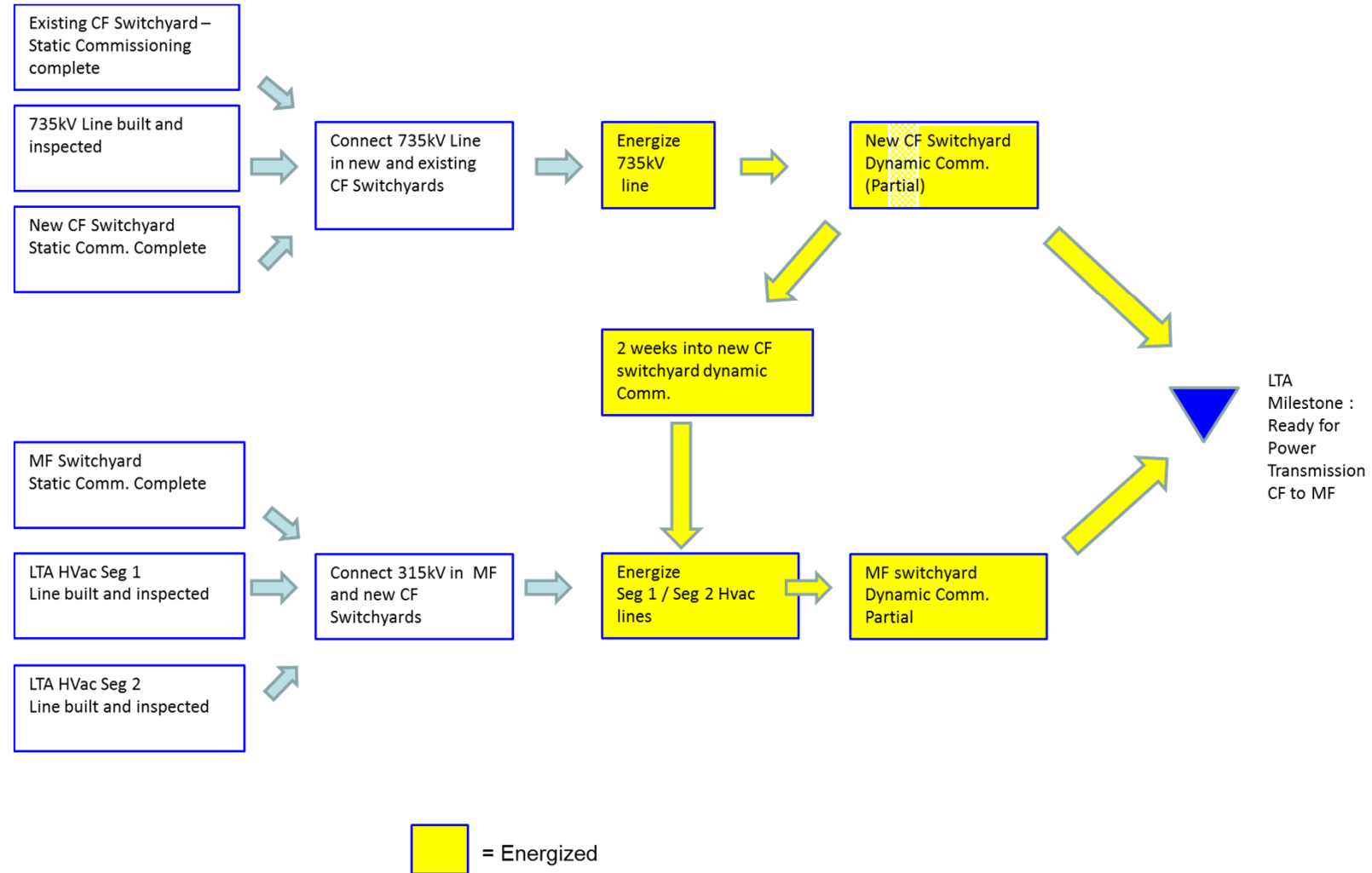
- 9.2.1 LTA
- 9.2.2 LITL - Labrador
- 9.2.3 LITL - Island (Newfoundland)
- 9.2.4 LITL - SOBI Crossing
- 9.2.5 Telecom Overall
- 9.2.6 LTA & LITL Overall

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## 9.2 Ready for Operations (RFO) Start up Sequences

### 9.2.1 LTA

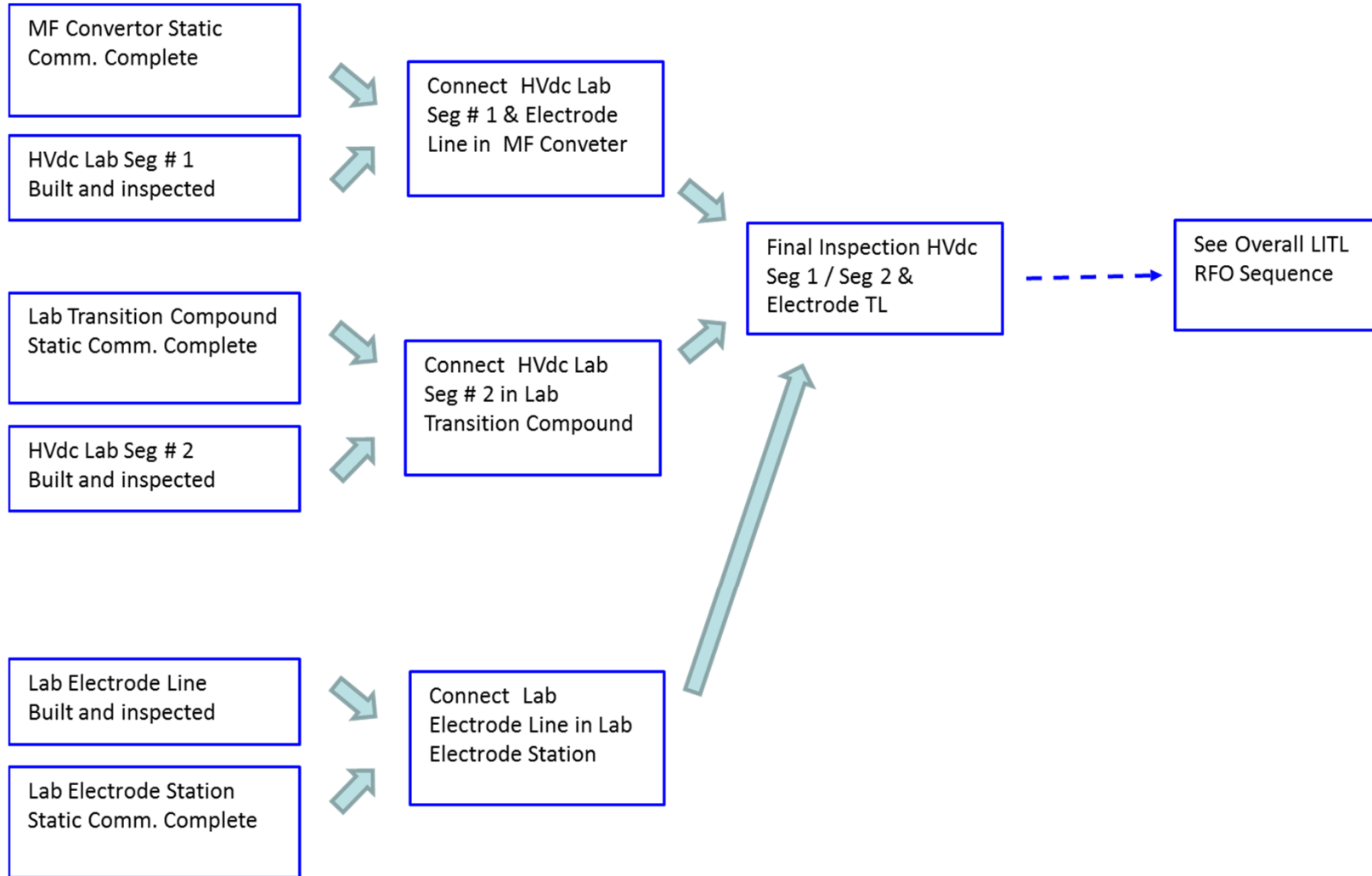




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## 9.2 Ready for Operations (RFO) Start up Sequences

### 9.2.2 LITL - Labrador

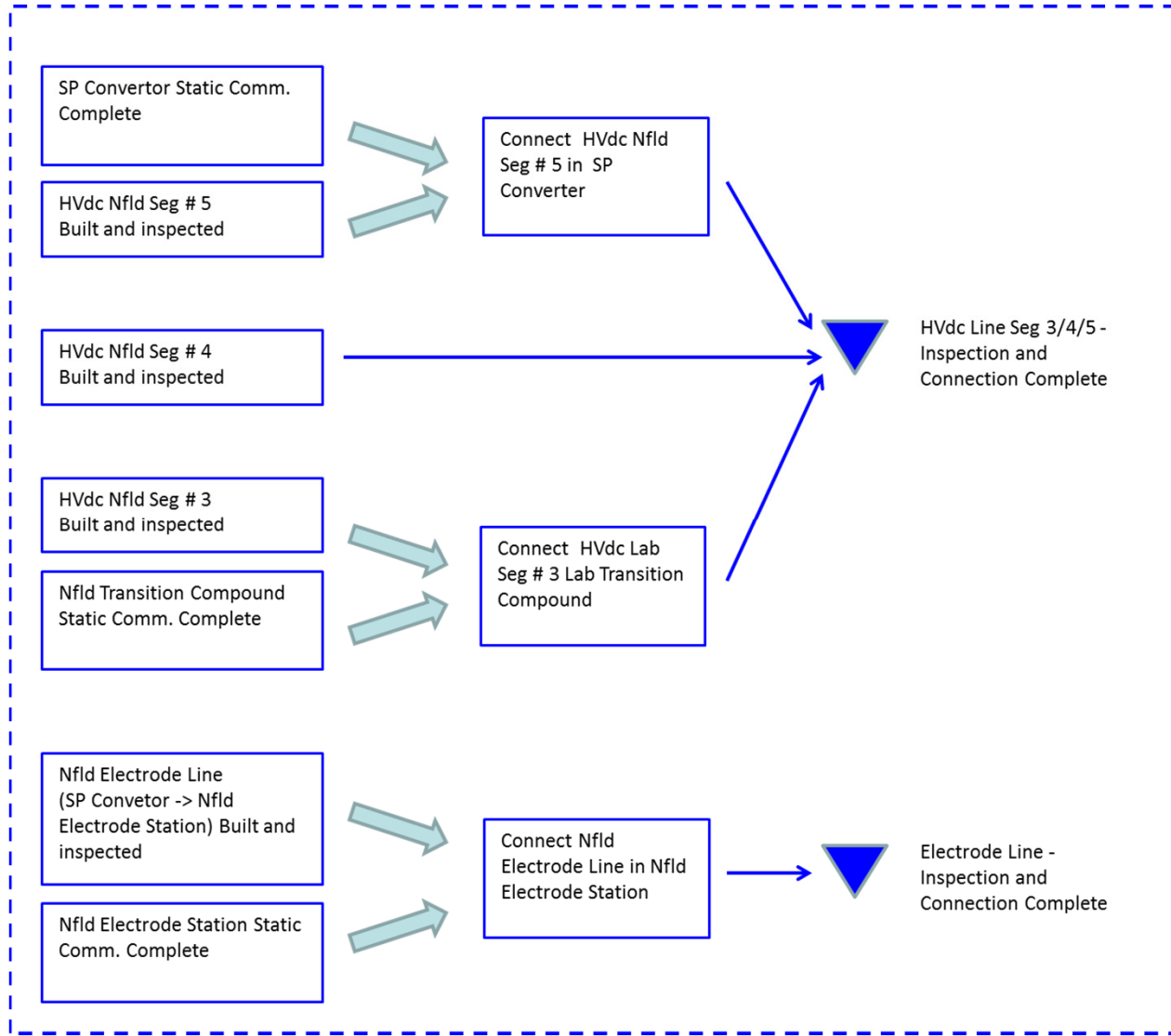


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## 9.2 Ready for Operations (RFO) Start up Sequences

### 9.2.3 LITL - Island (Newfoundland)

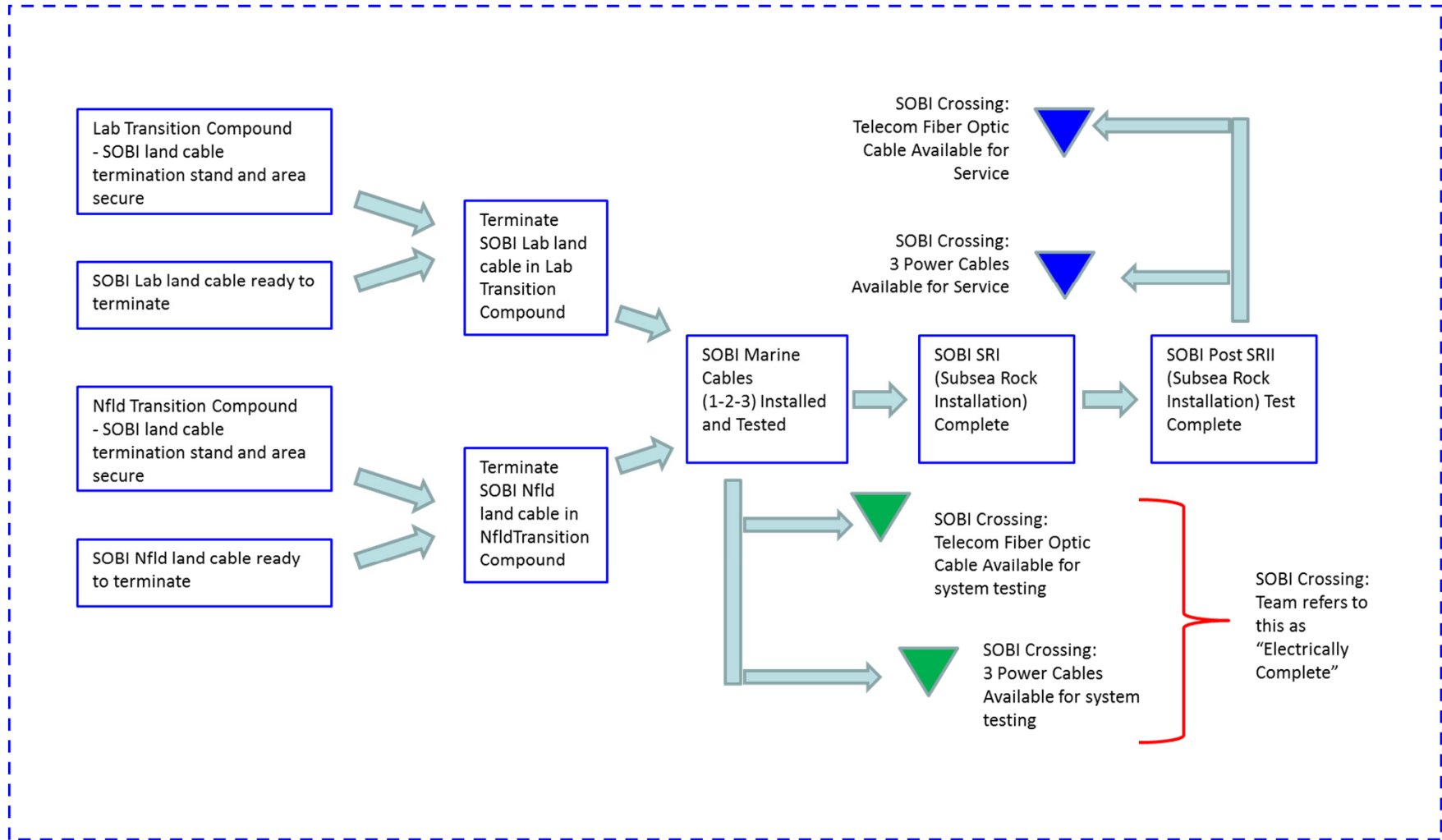


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## 9.2 Ready for Operations (RFO) Start up Sequences

### 9.2.4 LITL - SOBI Crossing

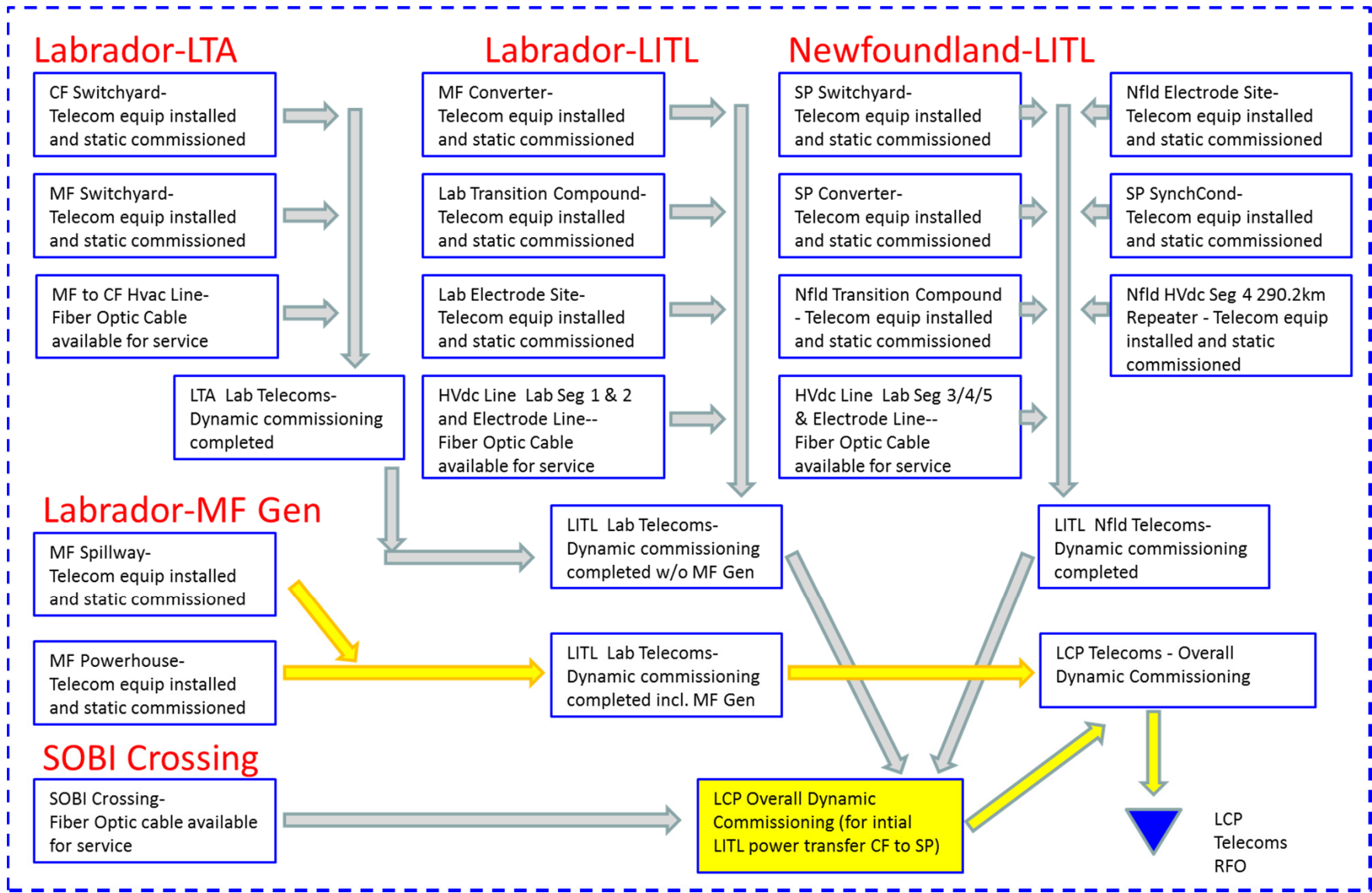


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# 9.2 Ready for Operations (RFO) Start up Sequences

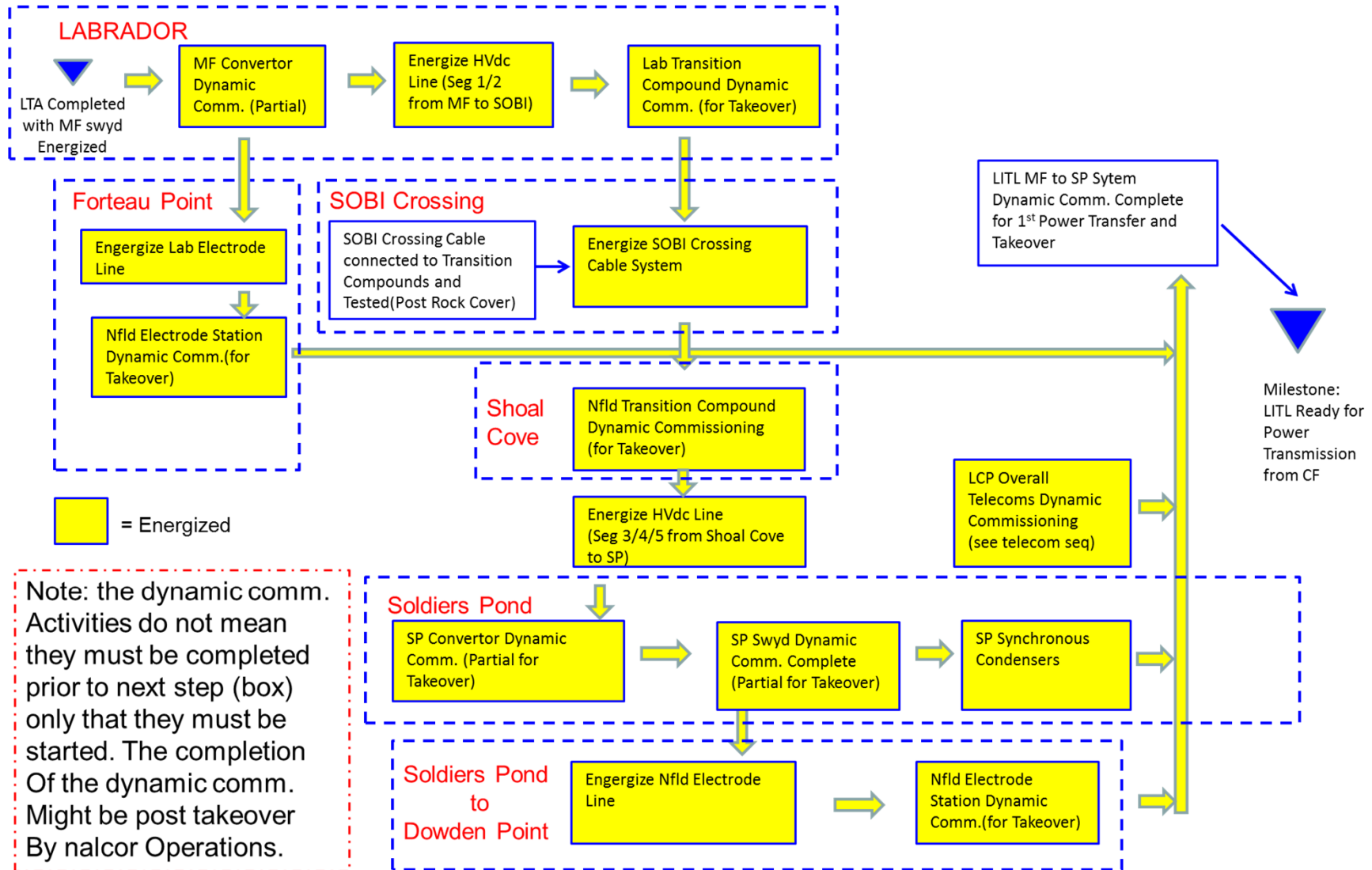
## 9.2.5 Telecom Overall



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## 9.2 Ready for Operations (RFO) Start up Sequences

### 9.2.6 LTA & LITL Overall



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## 10.0 IPS Progress/Updating/Reporting & Critical Path Determination

- 10.1 IPS Planned Progress Determination
- 10.2 IPS Progress Weight Factors
- 10.3 IPS Updating
- 10.4 How is IPS updated info presented/distributed
- 10.5 Logic Structure between Projects for Float Determination
- 10.6 Management Summary Schedule

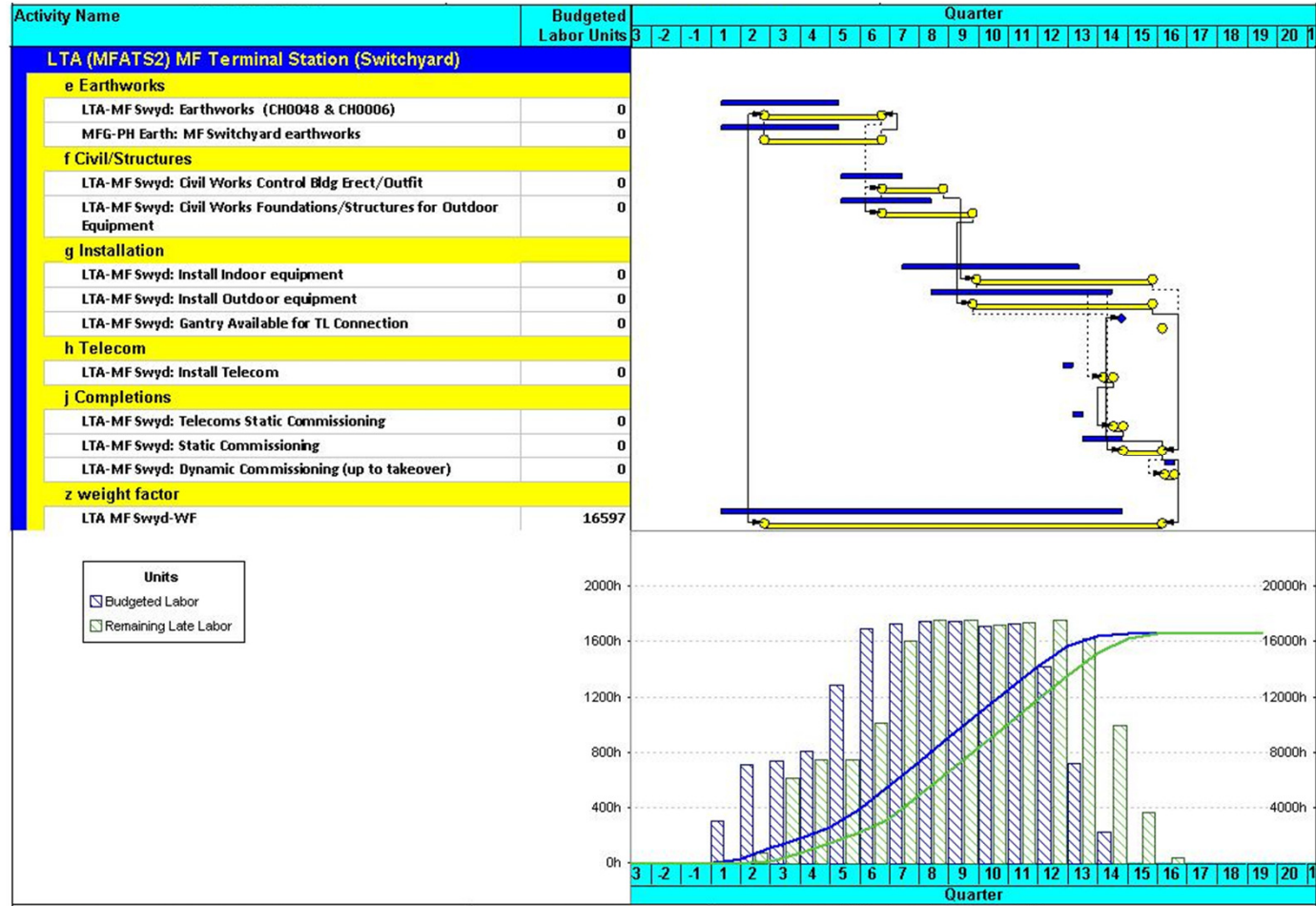
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## 10.0 IPS Progress/Updating/Reporting & Critical Path Determination

### 10.1 IPS Planned Progress Determination

- The DG3 Capital Cost Estimate breakdown was applied to IPS sites using a “hammock” with a distribution profile which is site specific. This provides weight factors between all sites.
- The final single progress curve for each site is between the early and late curves.



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## 10.0 IPS Progress/Updating/Reporting & Critical Path Determination

### 10.2 IPS Progress Weight factors

What are the progress weight factors between Projects and between Sites

	LTA	Project
Labrador Transmission Asset (LTA)	WF	WF
LCP Telecoms - LTA	1.5%	0.2%
LTA Eng/Procure	6.8%	0.8%
LTA CF Camp	1.4%	0.2%
LTA CF Switchyard	22.1%	2.5%
LTA-735kV Interconnect at CF	0.4%	0.0%
LTA-ac Line Marshalling Yard	0.9%	0.1%
LTA (L3101/L3102) 315kV TL Seg1/2 MF-CF	52.0%	5.8%
LTA (MFATS2) MF Terminal Station (Switchyard)	14.9%	1.7%
subtotal=		
	100.0%	11.2%

	WF	WF
Labrador Island Transmission Link (LITL)	WF	WF
LCP Telecoms - LITL	1.3%	0.5%
LITL Eng/Procure	3.2%	1.4%
LITL (MFACS) MF Converter Station	9.1%	3.9%
LITL-Lab Electrode Line (L'Anse-au-Diable)	0.3%	0.1%
LITL Lab Electrode Site (L'Anse-au-Diable)	0.7%	0.3%
LITL-Lab dc Seg1/2	19.0%	8.1%
LITL Lab TransComp	1.2%	0.5%
LITL SOBI Crossing	16.6%	7.1%
LITL Nfld TransComp	1.1%	0.5%
LITL-Nfld dc line Marshalling Yard	0.3%	0.1%
LITL-Nfld dc TL Seg 3/4/5	25.9%	11.0%
LITL (SOPCS) SP Converter Station	9.7%	4.1%
LITL-Nfld Electrode Line (Dowden's Point)	0.2%	0.1%
LITL Nfld Electrode Site (Dowden's Point)	0.6%	0.3%
LITL (SOPTS) Soldiers Pond Swyd)	5.2%	2.2%
LITL-Nfld Line Crossing Mods	0.3%	0.1%
LITL (SOPSC) SP SynchCond	5.4%	2.3%
subtotal=		
	100.0%	42.7%

	MGen	Project
Muskat Falls - Generation (MGen)	WF	WF
LCP Telecoms - MF	0.9%	0.4%
MGen Access Road	2.8%	1.3%
MGen Eng/Procure	4.9%	2.2%
MGen Constr Pwr	1.0%	0.5%
MGen Reservoir	8.4%	3.9%
MGen Camp Accom	4.8%	2.2%
MGen North Spur	3.0%	1.4%
MGen North Dam	5.7%	2.6%
MGen Spillway/Diverson	8.5%	3.9%
MGen Power House	57.9%	26.7%
MGen Offsite Logistics	0.5%	0.3%
MGen-315kV Collector Line (PH->MF Swyd)	0.2%	0.1%
MGen South Dam	1.4%	0.6%
MGen Site Restore	0.0%	0.0%
subtotal=		
	100.0%	46.1%



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## 10.0 IPS Progress/Updating/Reporting & Critical Path Determination

### 10.3 IPS Updating

- 1) The IPS is a date and duration driven schedule updated from contractor and other schedules
- 2) Planned % is derived from the IPS but earned % by site comes from PM+ and is used in the Stewardship process.

PM+ Summary Report by Site

IPS Site Contractors Progress

Construction Contract Progress																							
PROJECT: S05S73 : LOWER CHURCHILL PROJECT																							
CLIENT: Nalcor Energy																							
SNC-LAWALIN																							
Grouped by: IPS Site Code																							
Period 037 From: 2013-01-20 To: 2013-01-20																							
C.P.	Contract	Item No	Item Description	O/C Amend.	Prog. Type	Facility	CRC	UoM	CPI	SPI	Quantities				% To Date		Man-hours						
											Commit. To Date	Forecast Final	This Period	To Date	This Per.	To Date	Commit. To Date	Forecast Final	Spent Period	Spent To Date	Earned Period	Earned To Date	
MF03-1600 - MF03-1600: Accommodation Complex/Temp Bldgs																							
CH0004	CH0004	0006	ACCOMMODATION COMPLEX SITE AREA	O		311120	18000		0.00	0.66					5.00	80.00	25,100	25,100	0	0	1,255	15,080	
		0005.0001	ACCOMMODATION COMPLEX SITE ARE		C	311120	16000	LOT	0.00	0.55	1.00	1.00	0.05	0.60	5.00	60.00	25,100	25,100	0	0	1,255	15,060	
CH0048	CH0048	0006	Clearing Accommodation Complex Site Au	O		311120	12100	HA	0.00	1.00	38.80	38.80	0.00	38.80	0.00	100.00	2,432	2,432	0	0	0	2,432	
		0005.0001	Clearing Accommodation Complex Site Are		C	311120	12100	HA	0.00	1.00	38.60	38.60	0.00	38.60	0.00	100.00	2,432	2,432	0	0	0	2,432	
PH0063	CH0066	0001	Installation of temporary used camp (Not 1	O		315000	94200		0.00	0.46					2.10	48.20	11,598	11,598	0	0	244	5,590	
		0001.0001	Installation of temporary used camp		C	315000	94200	LOT	0.00	0.46	1.00	1.00	0.021	0.482	2.10	48.20	11,598	11,598	0	0	244	5,590	
		1 10.00%	Dorm Block 1										0.00	0.70	0.00	70.00	1,160	1,160			0	612	
		2 10.00%	Dorm Block 2										0.00	0.66	0.00	66.00	1,160	1,160			0	764	
		3 10.00%	Dorm Block 3										0.06	0.70	6.00	70.00	1,160	1,160			66	612	
		4 10.00%	Dorm Block 4										0.00	0.66	0.00	66.00	1,160	1,160			0	673	
		6 10.00%	Dorm Block 6										0.00	0.66	0.00	66.00	1,160	1,160			0	764	
		6 10.00%	Dorm Block 6										0.00	0.60	0.00	60.00	1,160	1,160			0	696	
		7 40.00%	Kitchen and others										0.04	0.236	4.00	23.60	4,630	4,630			166	1,090	
Sub Total for : MF03-1600										0.00	0.66					3.83	68.88	38,130	38,130	0	0	1,498	23,082
Grand Total:										0.12	0.66					3.83	68.88	38,130	38,130	4,817	193,366	1,498	23,082

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## 10.0 IPS Progress/Updating/Reporting & Critical Path Determination

### 10.3 IPS Updating cont.

3) Earned % complete is not entered in the IPS

WHY: actual/forecast start and actual/forecast finish dates and remaining durations derived from contractor schedules not calculated by machine

NOTE: What happens if contractor does not supply updated schedule/progress information on time for monthly stewardship update? **The scope lead will be required to deliver the updated schedule/progress information.** If this does not happen on a timely basis, the IPS and progress info will be entered by planning (best guess) but the **scope leader will be responsible for all impacts.**

4) Activity info from contractor schedules:

Actual Start and/or Forecast Start - Actual Finish and/or Forecast Finish and logic applied to a higher level summary than contractors level of detail

5) Contractor schedules are coded with the IPS level of detail for roll-up clarifications. (This process is in the co-ord procedures and is why we have Contractor Schedule Expectations Meetings as soon as possible after Kick-off meetings)

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## 10.0 IPS Progress/Updating/Reporting & Critical Path Determination

### 10.4 How is IPS updated info presented/distributed

1. **IPS Monthly Schedule Analysis Report**
2. **Stewardship Process**
  - One page Summaries for Overall, LTA, LITL, MFG & SOBI
3. **LCP Monthly Report**
  - Schedule Summary per LTA LITL MFG
  - Progress per LTA LITL MFG
  - Critical Path LTA, LITL, MFG (not yet provided)
4. **Information Provided in Office (on Walls): Overall, LTA, LITL, MFG**
  - Summary Schedule
  - Milestones & Key Dates
  - Critical/Sub-Critical Paths
  - Progress Curves
4. **Meeting Updates (to be organized)**

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## 10.0 IPS Progress/Updating/Reporting & Critical Path Determination

### 10.5 Logic Structure between Projects for Float Determination

The IPS has three projects and three critical paths. The projects are LTA, LITL and MFGen. The three critical paths are:

- LTA = Ready for Operations
- LITL = Ready for Operations
- Muskrat Falls Generation = Turbine/Generator Unit 1 - Ready for Operations

The interproject logic in the IPS has two main components as detailed below:

LTA           \* Technical requirement: ac power for the generator excitation system  
              \* LCP requirement: start HVac line construction prior to HVdc lines to relieve resourcing problems for line construction

LITL  
              \* Technical requirement: power transmission when Muskrat Falls powerhouse turbine/generators come online  
              \* LCP requirement: provide the ability to supply power to the island of Newfoundland prior to Muskrat Falls powerhouse turbine/generators come online.

The IPS utilizes one activity for each critical path to assist in calculating the float to be consistent with the LCP requirements. There are other benefits to this method including logic checking for late date analysis and longest path visibility.

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## 10.0 IPS Progress/Updating/Reporting & Critical Path Determination

### 10.6 Management Summary Schedule (MSS) Updating

The Management Summary Schedule (MSS) is updated monthly after completion of :

- Updating the Integrated Project Schedule
- Updating the Stewardship Progress

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## 11.0 IPS Further IPS Development

### What needs to be added into the IPS

- Activities related to Nalcor Existing Asset Upgrades
- Outages / Shutdowns / Tie-ins
- Modify site start / finish / durations / etc when construction/completions contract schedules are **approved**.
  
- Note: **Approval** also means that the IPS roll up which is imbedded in the contractors' schedules are clear, precise and agreed. A contractor schedule approval matrix based on coordination procedure requirements (with traffic lights) will be prepared soon.

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## 12.0 When does the IPS get re-baselined

- Only when the accumulated changes / delays have had a significant impact on the Target Milestones
- Decision on IPS re-baseline lies with the Project Director (ref page 4 IPS Responsibilities)

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## IPS Graphics

### A) LCP-IPS Summary Schedules

- A.1 LCP-IPS Overall Summary
- A.2 LCP-IPS Target Milestone Schedule
- A.3 LCP-IPS LTA Summary
- A.4 LCP-IPS LITL Summary
- A.5 LCP-IPS MFG Summary

### B) Planned Progress Curves

- B.1 LCP-IPS Overall
- B.2 LCP-IPS LTA
- B.3 LCP-IPS LITL
- B.4 LCP-IPS MFGen

### C) LCP-IPS Critical Paths

- C.1 IPS LTA Critical/Sub Critical Paths
- C.2 IPS LITL Critical/Sub Critical Paths
- C.3 IPS MFG Critical/Sub Critical Paths to Unit 1 Ready for Operations

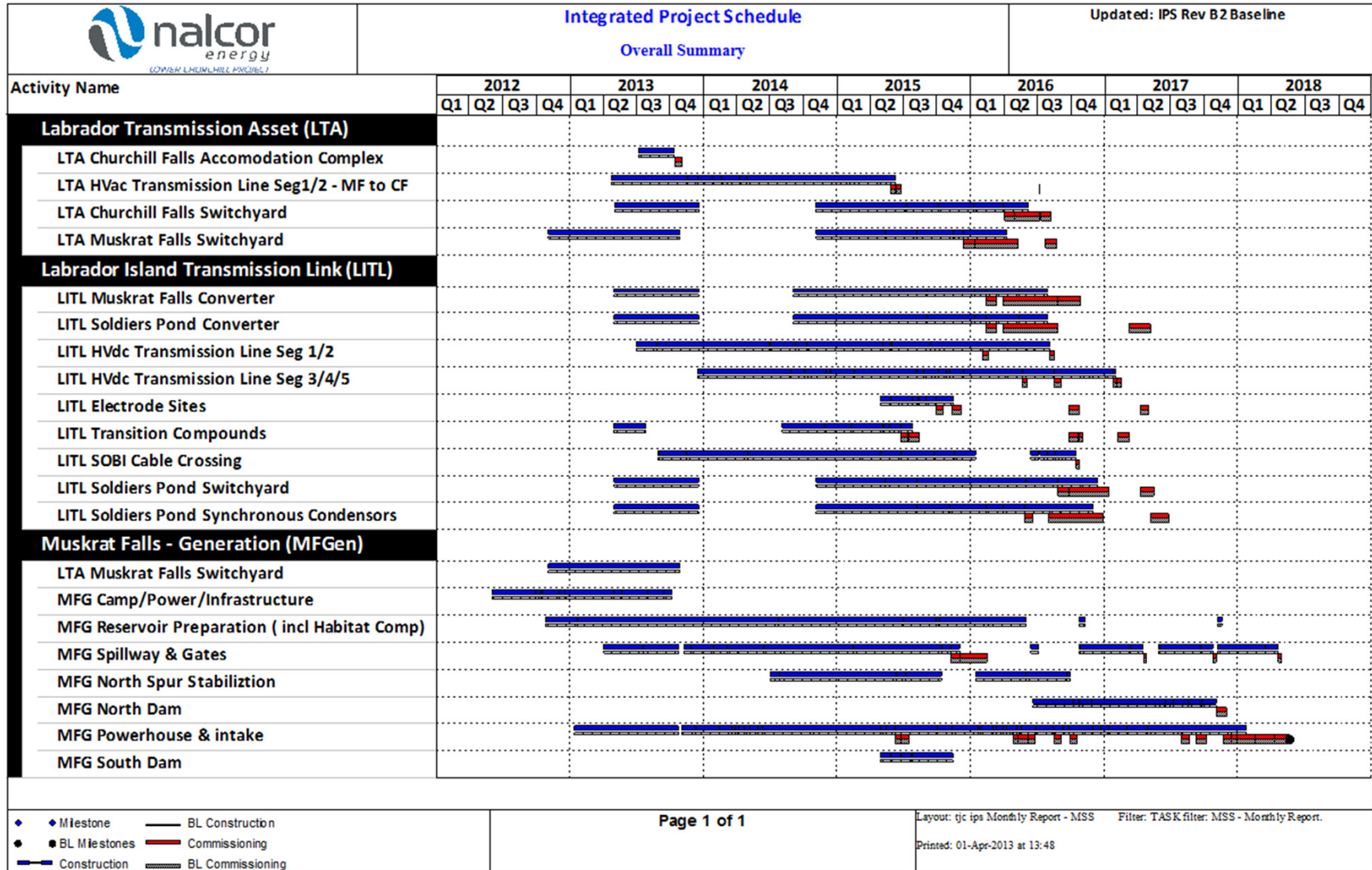
### D) Entire IPS Schedule



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IPS Graphics: Summary Schedules / Progress Curves

A) LCP-IPS Summary Schedules = A.1 LCP-IPS Overall Summary



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IPS Graphics: Summary Schedules / Progress Curves

A) LCP-IPS Summary Schedules = A.2 LCP-IPS Target Milestone Schedule 1 of 2

Activity Name	2012				2013				2014				2015				2016				2017				2018				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>Lower Churchill Project General</b>																													
<b>LCP Overall</b>																													
Target MIL=Overall-LCP Project Ph 1=Project Sanction																													
Target MIL=Overall-LITL-EA=Release																													
Target MIL=Overall-LTA-Ready for Power Transmission																													
Target MIL= Overall-LITL-SOBI Cable Systems Ready																													
Target MIL=Overall-LITL-Ready for Power Transmission																													
Target MIL= Overall-LITL-Power from Labrador to Island																													
Target MIL=Overall-MFG-Start of 1st Unit Turbine/Generator Start-Up																													
Target MIL=Overall-MFG-First Power from Muskrat Falls																													
Target MIL=Overall-MFG-Full Power from Muskrat Falls																													
<b>LTA</b>																													
Target MIL= LTA-Hvac TL ROW Clearing=Start																													
Target MIL= LTA-Hvac TL Construction=Complete																													
Target MIL= LTA-CF Switchyard=RFO (Ready to Energize)																													
Target MIL= LTA-MF Switchyard=RFO (Ready to Energize)																													
Target MIL= LTA-Ready for Power Transmission																													
<b>LITL</b>																													
Target MIL= LITL-HVdc TL ROW Clearing=Start																													
Target MIL= LITL-SOBI Landfall Protection (HDD)=Start																													
Target MIL= LITL-Converter Stations Contract=Award																													
Target MIL= LITL-SOBI Landfall Protection (HDD)=Complete																													
Target MIL= LITL-SOBI Cable Systems (Land/Submarine)=Installed																													
Target MIL= LITL-SOBI Submarine Cable Protection=Completed																													
Target MIL= LITL-SOBI Cable Systems=RFO (Ready for Power Transmission)																													
Target MIL= LITL-MF Converter Stations=RFO (Ready to Use)																													
Target MIL= LITL-HVdc TL Construction=Complete																													
Target MIL= LITL-SP Switchyard & Converter Station=RFO (Ready to Use)																													
Target MIL= LITL RFO=Ready for Power Transmission																													
<b>MF Gen</b>																													

◆ Milestone

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IPS Graphics: Summary Schedules / Progress Curves

A) LCP-IPS Summary Schedules = A.2 LCP-IPS Target Milestone Schedule 2 of 2

Activity Name	2012				2013				2014				2015				2016				2017				2018	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Target MIL= MFG-MF Access Road=Ready for Use				◆																						
Target MIL= MFG-Bulk Excavation Contractor=Mob (start of work)			◆																							
Target MIL= MFG-Powerhouse=Commence Construction			◆																							
Target MIL= MFG-Powerhouse/Intake/Spillway Contract=Award						◆																				
Target MIL= MFG-North Spur Works (Stabilization)=Commence										◆																
Target MIL= MFG-South Dam=Commence Construction											◆															
Target MIL= MFG-Powerhouse=Crane Commissioned												◆														
Target MIL= MFG-North Spur Works=Ready for Diversion													◆													
Target MIL= MFG-South Dam=Completed														◆												
Target MIL= MFG-Reservoir Preparation=Completed															◆											
Target MIL= MFG-North Spur Stabilization Works=Complete																◆										
Target MIL= MFG-River=Diverted																			◆							
Target MIL= MFG-Powerhouse=T/G Unit 1= Pit Free																				◆						
Target MIL= MFG-Powerhouse=T/G Unit 4= Pit Free																					◆					
Target MIL= MFG-Powerhouse=T/G Unit 1= Ready to Turn																						◆				
Target MIL= MFG-North Dam (RCC)=Complete																							◆			
Target MIL= MFG-Reservoir Impoundment=Complete																								◆		
Target MIL= MFG-Powerhouse=T/G Unit 1=RFO (Commercial Power)																									◆	
Target MIL= MFG-First Power from Muskrat Falls																										◆
Target MIL= MFG-Powerhouse=T/G Unit 4=RFO (Commercial Power)																										◆
Target MIL= MFG-Full Power from Muskrat Falls																										◆

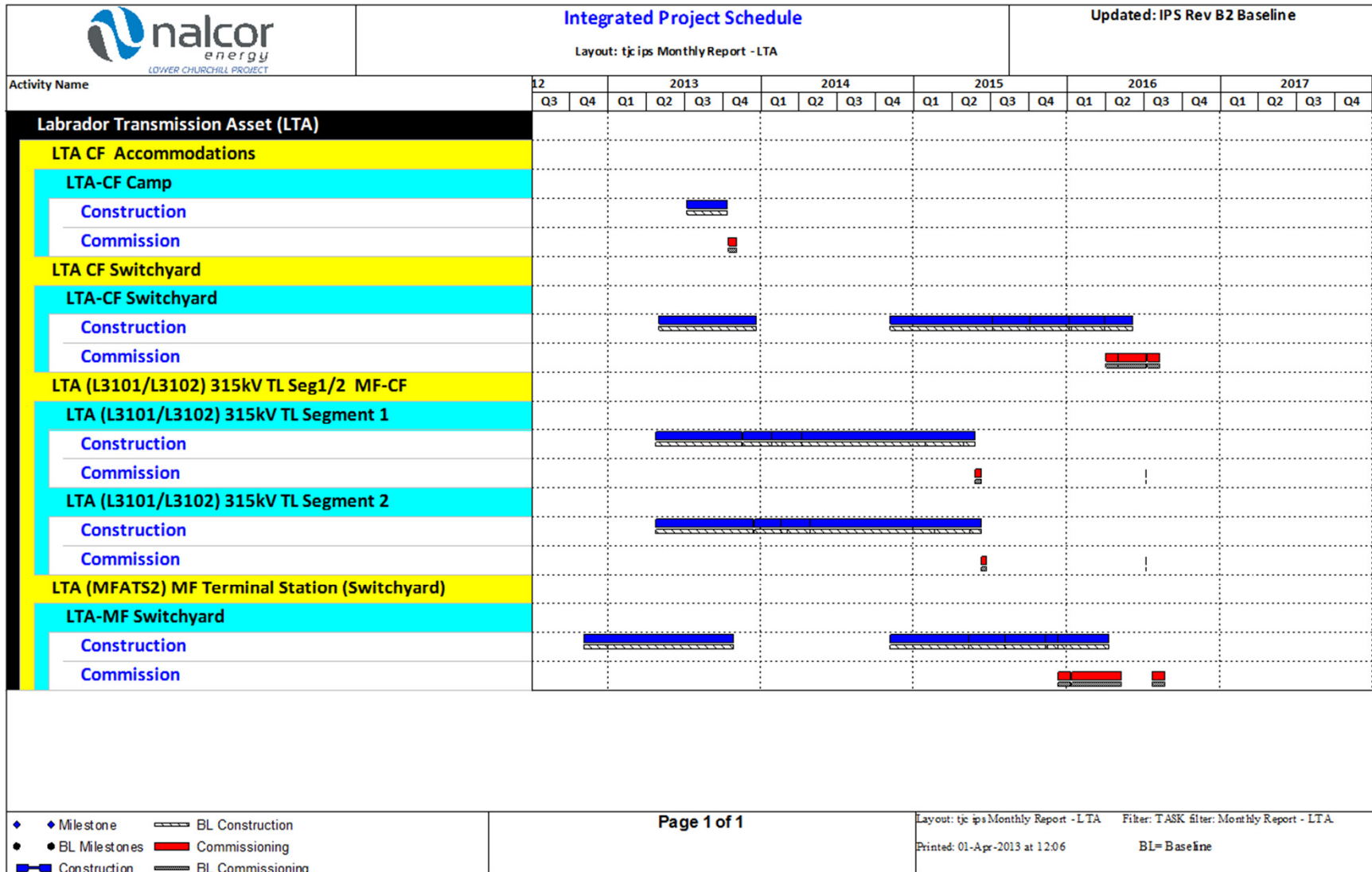
◆ Milestone

Page 2 of 2

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IPS Graphics: Summary Schedules / Progress Curves

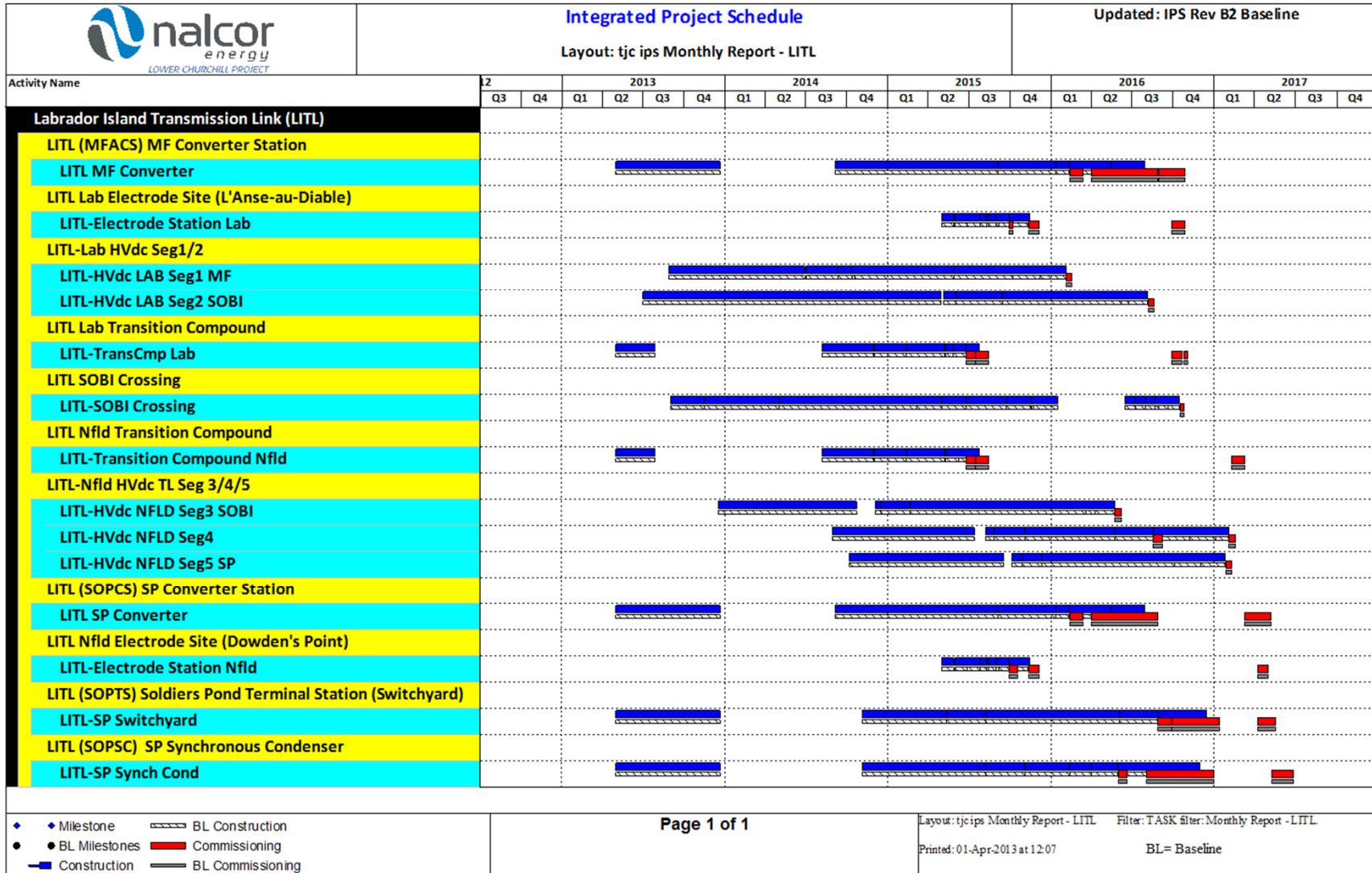
A) LCP-IPS Summary Schedules = A.3 LCP-IPS LTA Summary



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IPS Graphics: Summary Schedules / Progress Curves

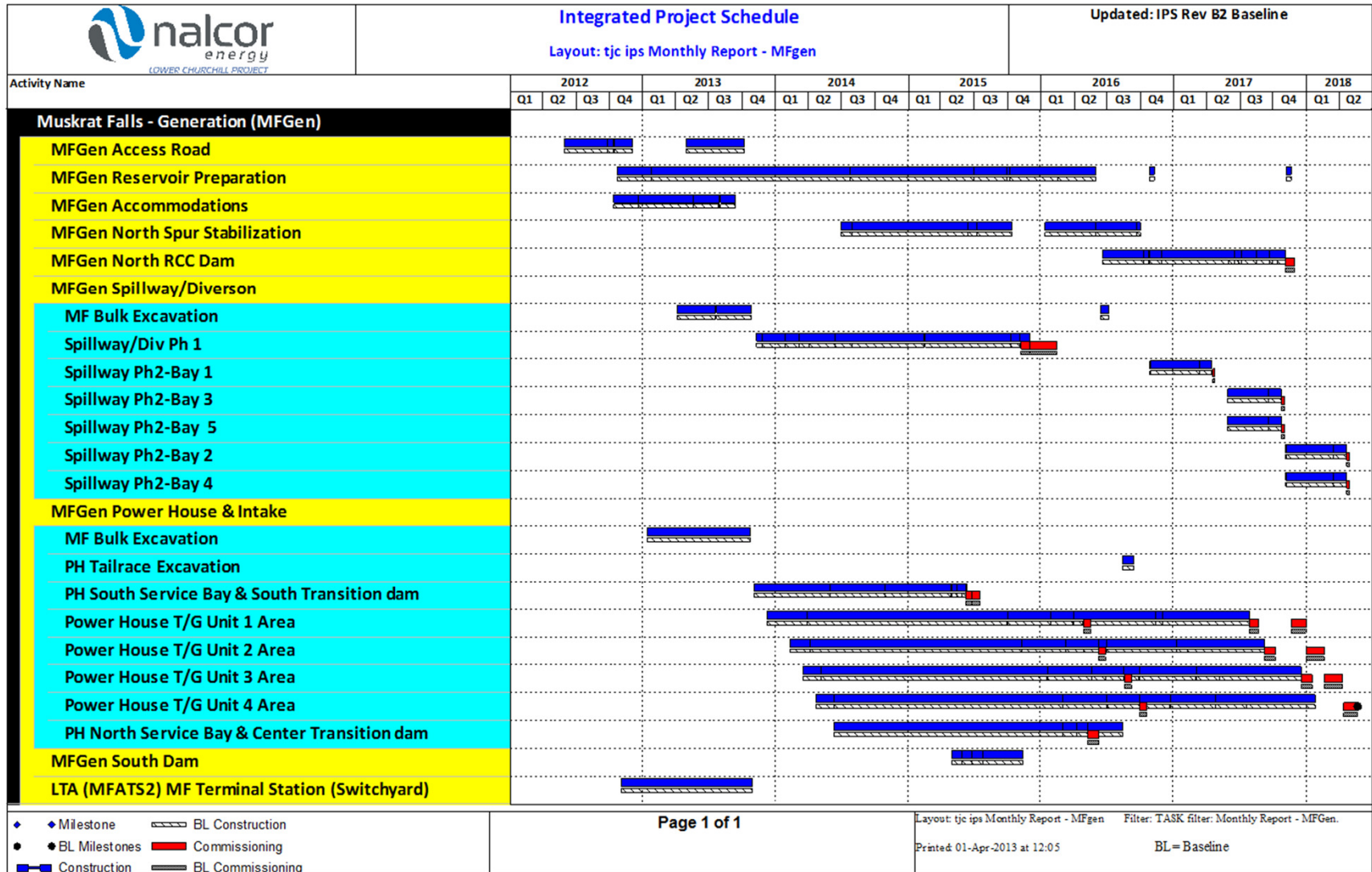
A) LCP-IPS Summary Schedules = A.4 LCP-IPS LITL Summary



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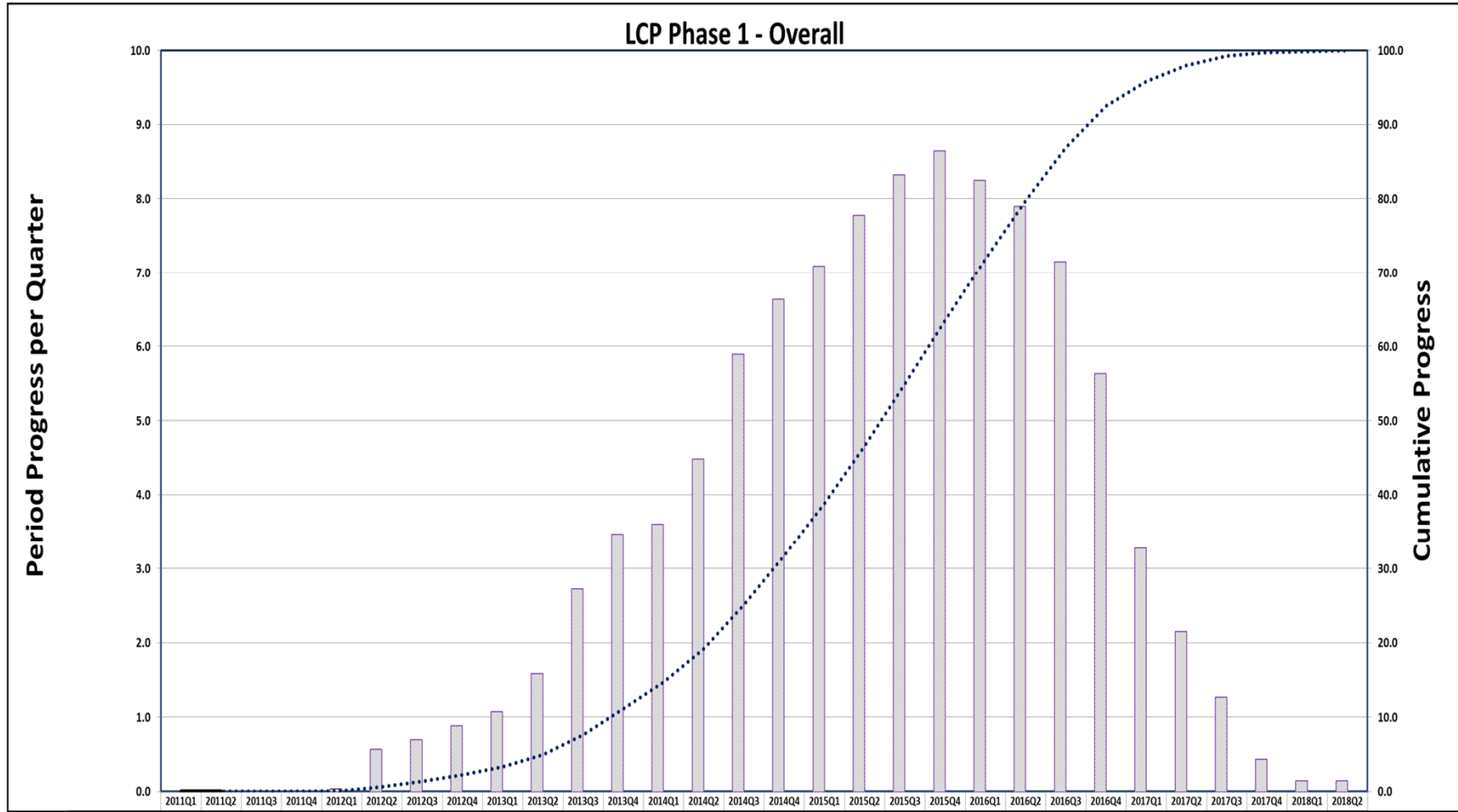
IPS Graphics: Summary Schedules / Progress Curves

A) LCP-IPS Summary Schedules = A.5 LCP-IPS MFG Summary



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IPS Graphics: Summary Schedules / Progress Curves  
 B) Planned Progress Curves = B.1 – LCP-IPS Overall



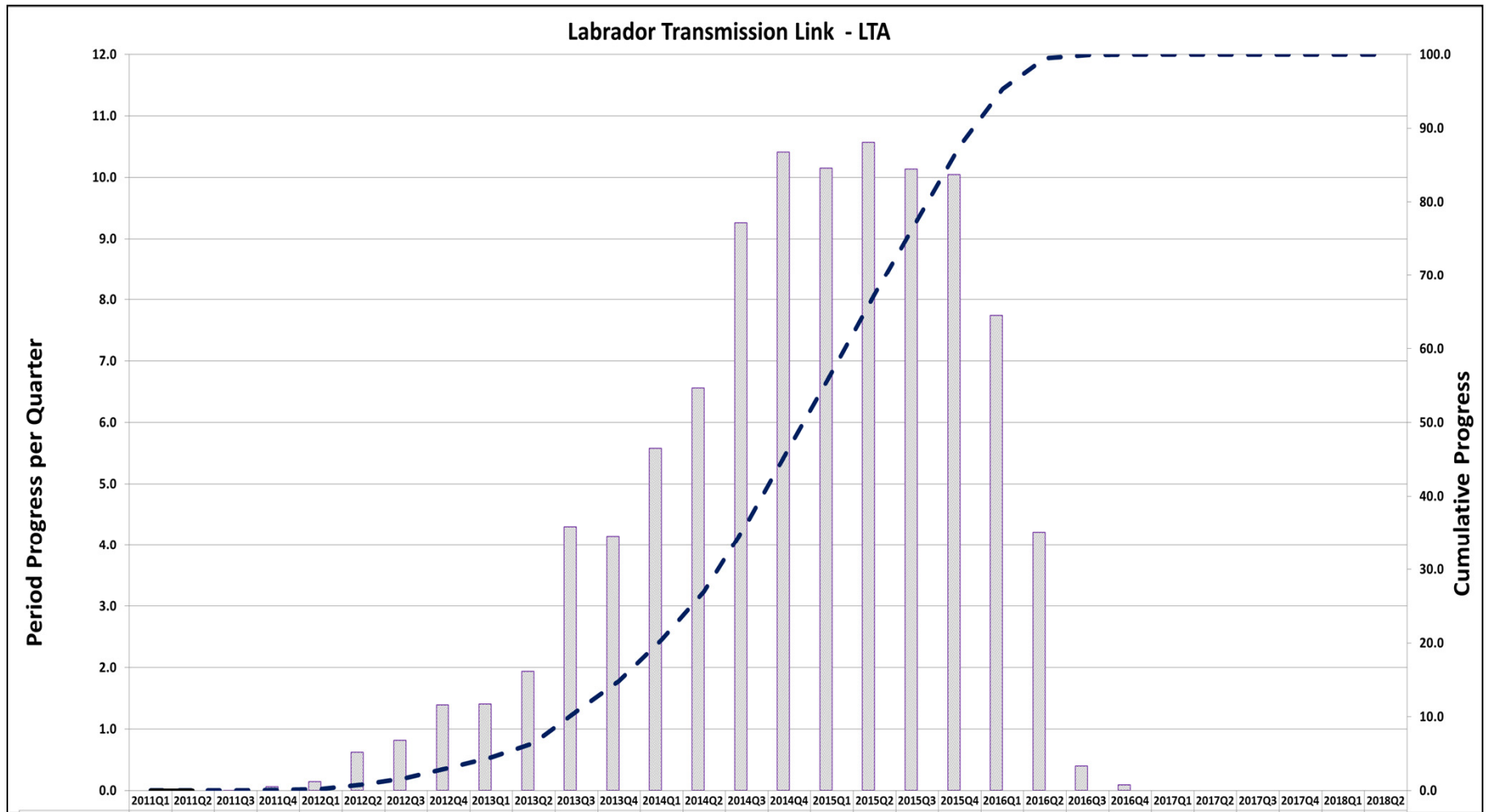
Planned Progress shown per Quarter

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IPS Graphics: Summary Schedules / Progress Curves

B) Planned Progress Curves B.2 – LCP-IPS LTA



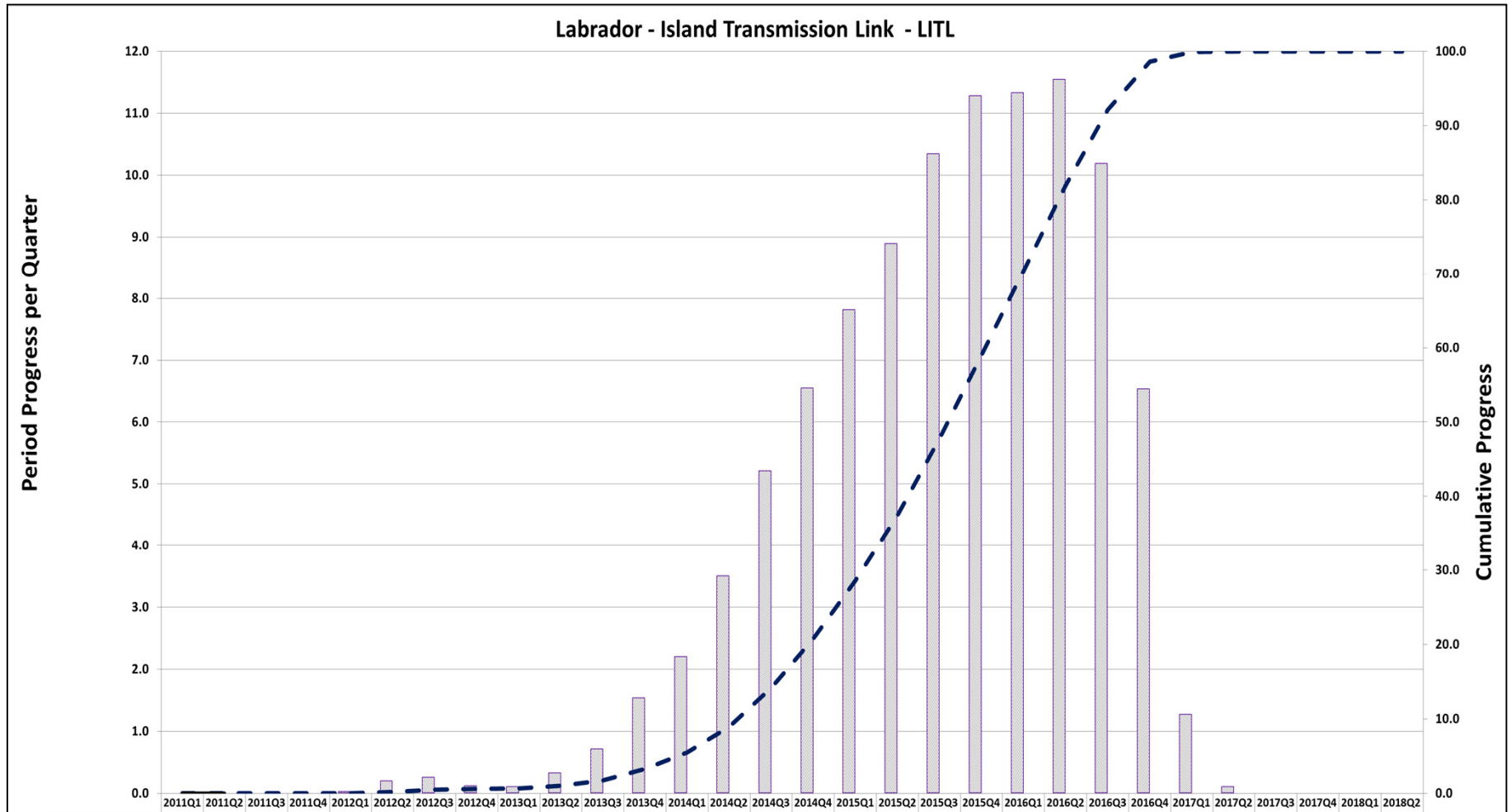
Planned Progress shown per Quarter



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IPS Graphics: Summary Schedules / Progress Curves

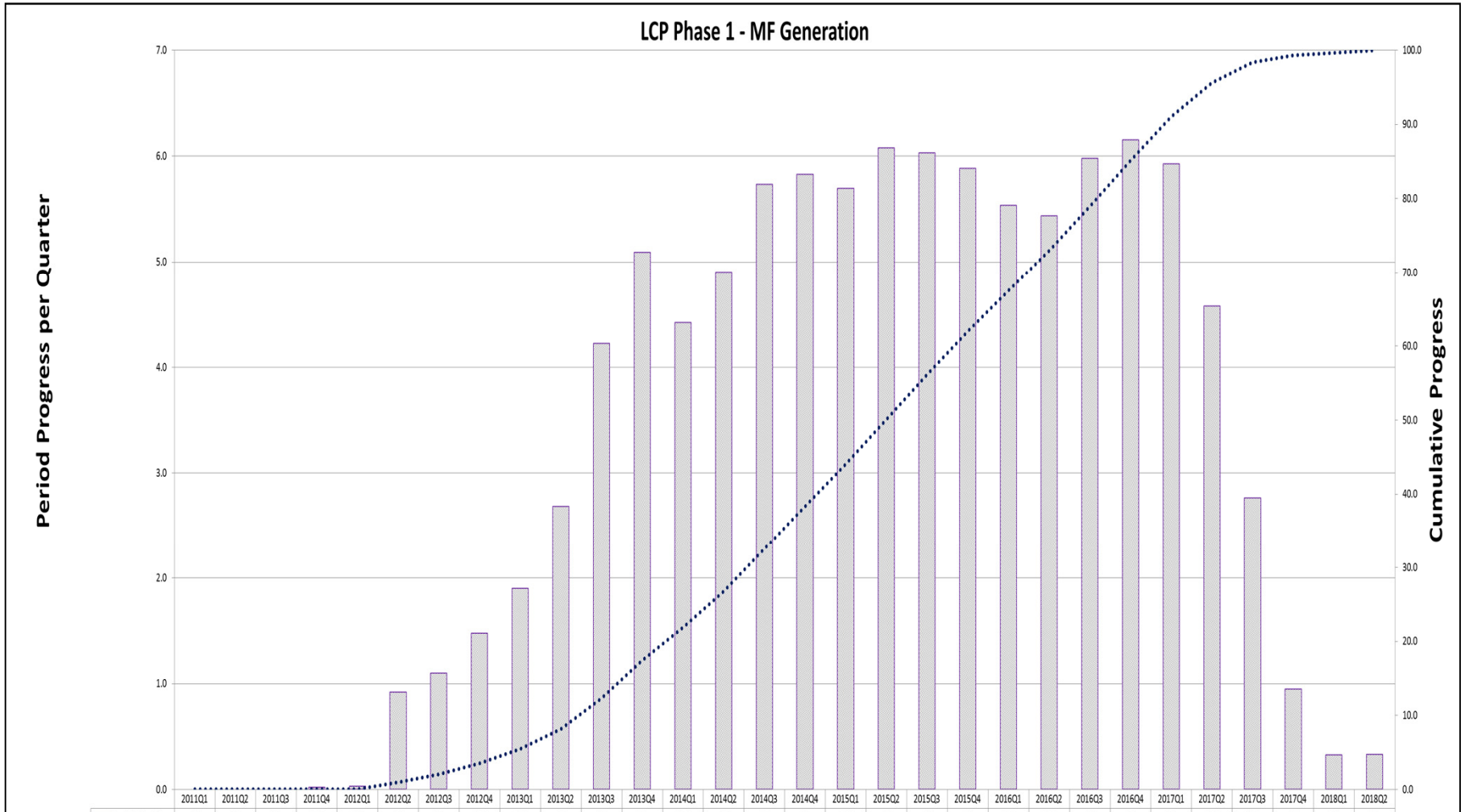
B) Planned Progress Curves = B.3 LCP-IPS LITL



Planned Progress shown per Quarter

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IPS Graphics: Summary Schedules / Progress Curves  
 B) Planned Progress Curves = B.4 – LCP-IPS MFGen



Planned Progress shown per Quarter

## IPS Graphics

### C) LCP-IPS Critical Paths

C.1 IPS LTA Critical/Sub Critical Paths

C.2 IPS LITL Critical/Sub Critical Paths

C.3 IPS MFG Critical/Sub Critical Paths to Unit 1 Ready for Operations  
(Modified in Rev B2)

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## IPS Graphics

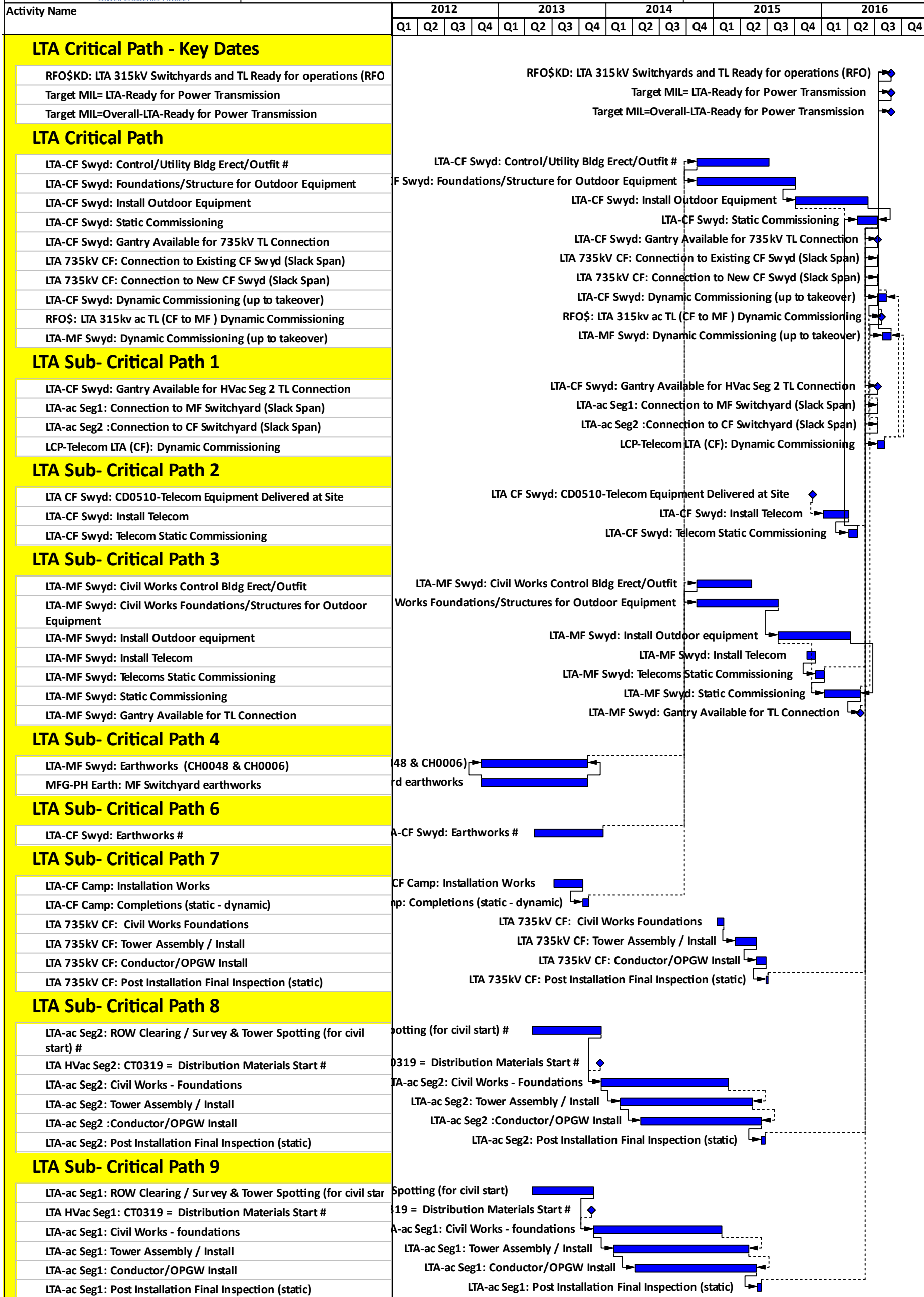
D) Entire IPS Schedule (Modified in Rev B2)

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**Integrated Project Schedule**  
 Layout: ips LTA Critical/Subcritical

Updated: Baseline

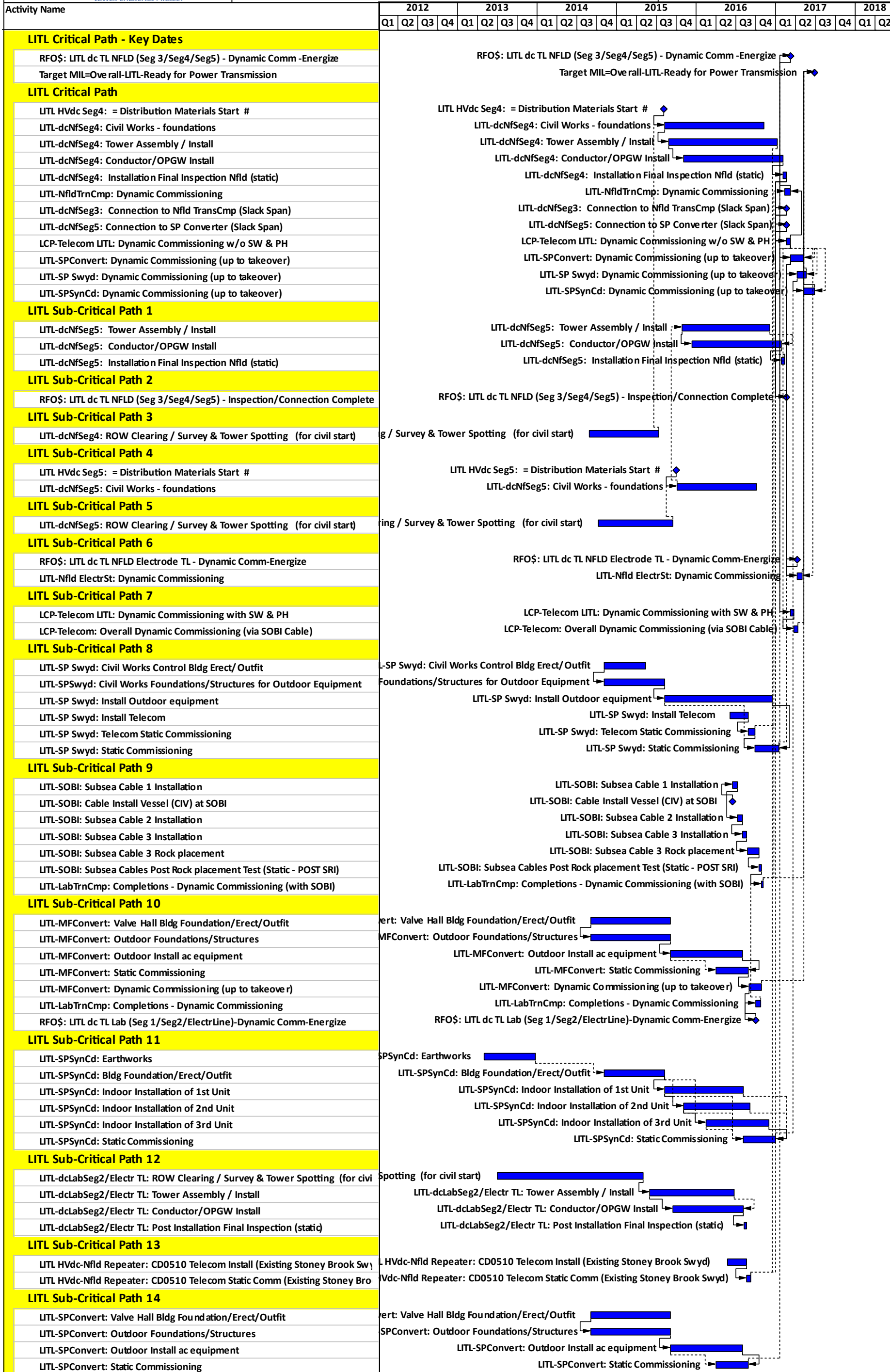


◆ Milestone  
 [Bar] Current



**Integrated Project Schedule**  
 Layout: ips LITL Critical/Subcritical

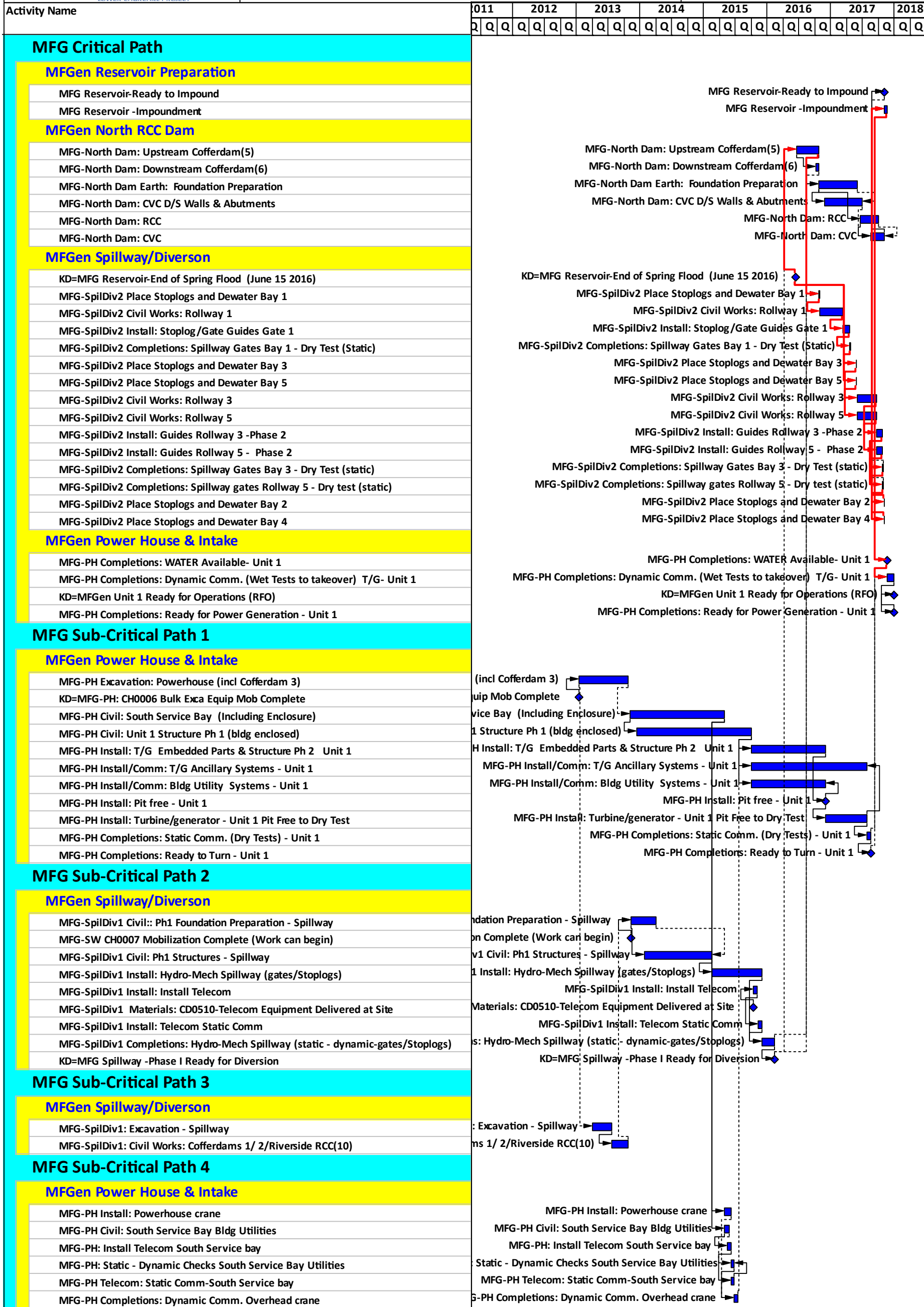
Updated: Baseline





Integrated Project Schedule  
 Layout: ips MFGen Critical/Subcritical

Updated: Baseline





Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Lower Churchill Project General</b>																															
<b>Target Milestones</b>																															
<b>LCP Overall</b>																															
<b>0 Target Milestones</b>																															
Target MIL=Overall-LCP Project Ph 1=Project Sanction		17-Dec-2012*	0																											Project Ph 1=Project Sanction	
Target MIL=Overall-LITL-EA=Release	01-Apr-2013*		0																											Target MIL=Overall-LITL-EA=Release	
Target MIL=Overall-LTA-Ready for Power Transmission		23-Aug-2016	0																											Target MIL=Overall-LTA-Ready for Power Transmission	
Target MIL= Overall-LITL-SOBI Cable Systems Ready		25-Oct-2016	0																											Target MIL= Overall-LITL-SOBI Cable Systems Ready	
Target MIL=Overall-LITL-Ready for Power Transmission		27-Jun-2017	0																											Target MIL=Overall-LITL-Ready for Power Transmission	
Target MIL= Overall-LITL-Power from Labrador to Island		27-Jun-2017	0																											Target MIL= Overall-LITL-Power from Labrador to Island	
Target MIL=Overall-MFG-Start of 1st Unit Turbine/Generator Start-Up		21-Aug-2017	0																											Target MIL=Overall-MFG-Start of 1st Unit Turbine/Generator Start-Up	
Target MIL=Overall-MFG-First Power from Muskrat Falls		30-Dec-2017	-176																											Target MIL=Overall-MFG-First Power from Muskrat Falls	
Target MIL=Overall-MFG-Full Power from Muskrat Falls		22-May-2018	-143																											Target MIL=Overall-MFG-Full Power from Muskrat Falls	
<b>LTA</b>																															
<b>0 Target Milestones</b>																															
Target MIL= LTA-Hvac TL ROW Clearing=Start	26-Apr-2013		0																											Target MIL= LTA-Hvac TL ROW Clearing=Start	
Target MIL= LTA-Hvac TL Construction=Complete		25-Jun-2015	0																											Target MIL= LTA-Hvac TL Construction=Complete	
Target MIL= LTA-CF Switchyard=RFO (Ready to Energize)		09-Aug-2016	0																											Target MIL= LTA-CF Switchyard=RFO (Ready to Energize)	
Target MIL= LTA-MF Switchyard=RFO (Ready to Energize)		23-Aug-2016	0																											Target MIL= LTA-MF Switchyard=RFO (Ready to Energize)	
Target MIL= LTA-Ready for Power Transmission		23-Aug-2016	0																											Target MIL= LTA-Ready for Power Transmission	
<b>LITL</b>																															
<b>0 Target Milestones</b>																															
Target MIL= LITL-HVdc TL ROW Clearing=Start	02-Jul-2013		0																											Target MIL= LITL-HVdc TL ROW Clearing=Start	
Target MIL= LITL-SOBI Landfall Protection (HDD)=Start	01-Sep-2013		0																											Target MIL= LITL-SOBI Landfall Protection (HDD)=Start	
Target MIL= LITL-Convertor Stations Contract=Award		04-Oct-2013*	0																											Target MIL= LITL-Convertor Stations Contract=Award	
Target MIL= LITL-SOBI Landfall Protection (HDD)=Complete		17-Nov-2015	0																											Target MIL= LITL-SOBI Landfall Protection (HDD)=Complete	
Target MIL= LITL-SOBI Cable Systems (Land/Submarine)=Installed		20-Aug-2016	0																											Target MIL= LITL-SOBI Cable Systems (Land/Submarine)=Installed	
Target MIL= LITL-SOBI Submarine Cable Protection=Completed		15-Oct-2016	0																											Target MIL= LITL-SOBI Submarine Cable Protection=Completed	
Target MIL= LITL-SOBI Cable Systems=RFO (Ready for Power Transmission)		25-Oct-2016	0																											Target MIL= LITL-SOBI Cable Systems=RFO (Ready for Power Transmission)	
Target MIL= LITL-MF Convertor Stations=RFO (Ready to Use)		27-Oct-2016	0																											Target MIL= LITL-MF Convertor Stations=RFO (Ready to Use)	
Target MIL= LITL-HVdc TL Construction=Complete		16-Feb-2017	0																											Target MIL= LITL-HVdc TL Construction=Complete	
Target MIL= LITL-SP Switchyard & Convertor Station=RFO (Ready to Use)		18-May-2017	0																											Target MIL= LITL-SP Switchyard & Convertor Station=RFO (Ready to Use)	
Target MIL= LITL RFO=Ready for Power Transmission		27-Jun-2017	0																											Target MIL= LITL RFO=Ready for Power Transmission	
<b>MF Gen</b>																															
<b>0 Target Milestones</b>																															
Target MIL= MFG-MF Access Road=Ready for Use		15-Oct-2012	0																											Target MIL= MFG-MF Access Road=Ready for Use	
Target MIL= MFG-Bulk Excavation Contractor=Mob (start of work)	16-Oct-2012		0																											Target MIL= MFG-Bulk Excavation Contractor=Mob (start of work)	
Target MIL= MFG-Powerhouse=Commence Construction	16-Oct-2012		0																											Target MIL= MFG-Powerhouse=Commence Construction	
Target MIL= MFG-Powerhouse/Intake/Spillway Contract=Award		04-Jun-2013*	0																											Target MIL= MFG-Powerhouse/Intake/Spillway Contract=Award	
Target MIL= MFG-North Spur Works (Stabilization)=Commence	01-Jul-2014		0																											Target MIL= MFG-North Spur Works (Stabilization)=Commence	
Target MIL= MFG-South Dam=Commence Construction	02-May-2015		0																											Target MIL= MFG-South Dam=Commence Construction	
Target MIL= MFG-Powerhouse=Crane Commissioned		17-Jul-2015	-63																											Target MIL= MFG-Powerhouse=Crane Commissioned	

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 ■ Baseline Rev B2 ■ DG3 Rev B1





Integrated Project Schedule

Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Target MIL= MFG-North Spur Works=Ready for Diversion		15-Oct-2015	0	Target MIL= MFG-North Spur Works=Ready for Diversion																											
Target MIL= MFG-South Dam=Completed		14-Nov-2015	0	Target MIL= MFG-South Dam=Completed																											
Target MIL= MFG-Reservoir Preparation=Completed		02-Jun-2016	0	Target MIL= MFG-Reservoir Preparation=Completed																											
Target MIL= MFG-North Spur StabilizationWorks=Complete		30-Sep-2016	0	Target MIL= MFG-North Spur StabilizationWorks=Complete																											
Target MIL= MFG-River=Diverted		09-Nov-2016	-348	Target MIL= MFG-River=Diverted																											
Target MIL= MFG-Powerhouse=T/G Unit 1= Pit Free		30-Nov-2016	-100	Target MIL= MFG-Powerhouse=T/G Unit 1= Pit Free																											
Target MIL= MFG-Powerhouse=T/G Unit 4= Pit Free		26-Apr-2017	-100	Target MIL= MFG-Powerhouse=T/G Unit 4= Pit Free																											
Target MIL= MFG-Powerhouse=T/G Unit 1= Ready to Turn		21-Aug-2017	-100	Target MIL= MFG-Powerhouse=T/G Unit 1= Ready to Turn																											
Target MIL= MFG-North Dam (RCC)=Complete		03-Nov-2017	-191	Target MIL= MFG-North Dam (RCC)=Complete																											
Target MIL= MFG-Reservoir Impoundment=Complete		19-Nov-2017	-186	Target MIL= MFG-Reservoir Impoundment=Complete																											
Target MIL= MFG-Powerhouse=T/G Unit 1=RFO (Commercial Power)		30-Dec-2017	-176	Target MIL= MFG-Powerhouse=T/G Unit 1=RFO (Commercial Power)																											
Target MIL= MFG-First Power from Muskrat Falls		30-Dec-2017	-176	Target MIL= MFG-First Power from Muskrat Falls																											
Target MIL= MFG-Powerhouse=T/G Unit 4=RFO (Commercial Power)		22-May-2018	-143	Target MIL= MFG-Powerhouse=T/G Unit 4=RFO (Commercial Power)																											
Target MIL= MFG-Full Power from Muskrat Falls		22-May-2018	-143	Target MIL= MFG-Full Power from Muskrat Falls																											

LCP Overall System Completions

LCP SysComp Key Date

LTA

1 Key Date

RFO\$KD: LTA 735kV ac TL Energized (existing to new CF switchyards)	11-Jul-2016		0
RFO\$KD: LTA 315kV ac TL Energized (CF to MF switchyards)	25-Jul-2016		0
RFO\$KD: LTA 735kV Switchyards and TL Ready for operations (RFO)		09-Aug-2016	0
RFO\$KD: LTA 315kV Switchyards and TL Ready for operations (RFO)		23-Aug-2016	0

RFO\$KD: LTA 735kV ac TL Energized (existing to new CF switchyards)
RFO\$KD: LTA 315kV ac TL Energized (CF to MF switchyards)
RFO\$KD: LTA 735kV Switchyards and TL Ready for operations (RFO)
RFO\$KD: LTA 315kV Switchyards and TL Ready for operations (RFO)

LITL

1 Key Date

RFO\$KD: LITL Converters - Static Comm. Complete		28-Aug-2016	0
RFO\$KD: LITL dc TL Lab (Seg 1/Seg2/Electrode Line) - Ready for Operation		28-Sep-2016	0

RFO\$KD: LITL Converters - Static Comm. Complete
RFO\$KD: LITL dc TL Lab (Seg 1/Seg2/Electrode Line) - Ready for Operation

LCP SysComp RFO

LTA

3 RFO Compl LTA-735

RFO\$: LTA 735kV ac TL (existing to new CF switchyards) Dynamic Commissioning	11-Jul-2016	15-Jul-2016	0
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RFO\$: LTA 735kV ac TL (existing to new CF switchyards) Dynamic Commissioning

3 RFO Compl LTA-315

RFO\$: LTA 315kv ac TL (CF to MF ) Dynamic Commissioning		24-Jul-2016	0
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RFO\$: LTA 315kv ac TL (CF to MF ) Dynamic Commissioning

LITL

6 RFO Compl LITL

RFO\$-LITL Transition Compounds - Static Comm. Complete		14-Aug-2015	0
RFO\$-LITL Electrode Sites - Static Comm. Complete		05-Dec-2015	0
RFO\$: LITL dc SOBI Cable Systems Post Rock placement Test (POST SRI)		25-Oct-2016	0
RFO\$-LITL Synchronous Condensator - Static Comm. Complete		30-Dec-2016	0
RFO\$-LITL Switchyard (SP) - Static Comm. Complete		13-Jan-2017	0
RFO\$: LITL dc TL NFLD (Seg 3/Seg4/Seg5) - Dynamic Comm -Energize		09-Mar-2017	0
RFO\$: LITL dc TL NFLD Electrode TL - Dynamic Comm-Energize		08-Apr-2017	0

RFO\$-LITL Transition Compounds - Static Comm. Complete
RFO\$-LITL Electrode Sites - Static Comm. Complete
RFO\$: LITL dc SOBI Cable Systems Post Rock placement Test (POST SRI)
RFO\$-LITL Synchronous Condensator - Static Comm. Complete
RFO\$-LITL Switchyard (SP) - Static Comm. Complete
RFO\$: LITL dc TL NFLD (Seg 3/Seg4/Seg5) - Dynamic Comm -Energize
RFO\$: LITL dc TL NFLD Electrode TL - Dynamic Comm-Energize

6 RFO Compl LITL-Lab

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 ■ Baseline Rev B2 ■ DG3 Rev B1



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011				2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
RFO\$: LITL dc TL Lab (Seg 1/Seg2/Electrode) - Inspection/Connection Complete	29-Aug-2016	29-Aug-2016	0	RFO\$: LITL dc TL Lab (Seg 1/Seg2/Electrode) - Inspection/Connection Complete																													
RFO\$: LITL dc TL Lab (Seg 1/Seg2/ElectrLine)-Dynamic Comm-Energize	28-Sep-2016		0	RFO\$: LITL dc TL Lab (Seg 1/Seg2/ElectrLine)-Dynamic Comm-Energize																													
<b>6 RFO Compl LITL-Nfld</b>																																	
RFO\$: LITL dc TL NFLD Electrode TL - Inspection/Connection Complete		28-Aug-2016	0	RFO\$: LITL dc TL NFLD Electrode TL - Inspection/Connection Complete																													
RFO\$: LITL dc TL NFLD (Seg 3/Seg4/Seg5) - Inspection/Connection Complete		16-Feb-2017	0	RFO\$: LITL dc TL NFLD (Seg 3/Seg4/Seg5) - Inspection/Connection Complete																													
<b>LCP Telecoms-Overall</b>																																	
<b>LCP telecoms</b>																																	
<b>j Completions</b>																																	
LCP-Telecom: Overall Dynamic Commissioning (via SOBI Cable)	24-Mar-2017	10-Apr-2017	0	LCP-Telecom: Overall Dynamic Commissioning (via SOBI Cable)																													
<b>Labrador Transmission Asset (LTA)</b>																																	
<b>LCP Telecoms-CF</b>																																	
<b>LCP telecoms</b>																																	
<b>j Completions</b>																																	
LCP-Telecom LTA (CF): Dynamic Commissioning	11-Jul-2016	31-Jul-2016	0	LCP-Telecom LTA (CF): Dynamic Commissioning																													
<b>LTA Eng/Procure</b>																																	
<b>LTA- Eng/Procure</b>																																	
<b>2 Eng/Procure</b>																																	
LTA - ENG - RFI: LTA RFI Engineering	19-Sep-2011*	30-Aug-2013	0	Engineering																													
LTA - ENG - AFC: LTA AFC Engineering	20-Oct-2011*	01-Nov-2013	0	Engineering																													
<b>LTA CF Accommodations</b>																																	
<b>LTA-CF Camp</b>																																	
<b>1 Key Date</b>																																	
KD=LTA CF Camp: CD0502-CF Start Construction	09-Jul-2013		0	CF Camp: CD0502-CF Start Construction																													
KD=LTA CF Camp: CD0502-CF Camp Available for Occupancy		04-Nov-2013	0	Camp: CD0502-CF Camp Available for Occupancy																													
<b>g Installation</b>																																	
LTA-CF Camp: Installation Works	09-Jul-2013*	14-Oct-2013	0	LTA-CF Camp: Installation Works																													
<b>j Completions</b>																																	
LTA-CF Camp: Completions (static - dynamic)	15-Oct-2013	04-Nov-2013	0	LTA-CF Camp: Completions (static - dynamic)																													
<b>LTA CF Switchyard</b>																																	
<b>LTA-CF Switchyard</b>																																	
<b>1 Key Date</b>																																	
KD=LTA CF Swyd: Start Earth Works	04-May-2013		0	KD=LTA CF Swyd: Start Earth Works																													
KD=LTA CF Swyd: Earthworks Complete		21-Dec-2013	0	KD=LTA CF Swyd: Earthworks Complete																													
KD=LTA CF Swyd: Start Civil Works	05-Nov-2014		0	KD=LTA CF Swyd: Start Civil Works																													
KD=LTA CF Swyd: Control & Utility Buildings Ready for Equipment Installation		09-Jul-2015	0	LTA CF Swyd: Control & Utility Buildings Ready for Equipment Installation																													
KD=LTA CF Swyd: Completed Static Commissioning		08-Jul-2016	0	KD=LTA CF Swyd: Completed Static Commissioning																													
KD=LTA CF Swyd: Ready for Operations (RFO)		09-Aug-2016	0	KD=LTA CF Swyd: Ready for Operations (RFO)																													
<b>c Materials</b>																																	
LTA CF Swyd: PD0505-Equipment Delivered at Site		03-Dec-2014*	0	LTA CF Swyd: PD0505-Equipment Delivered at Site																													
LTA CF Swyd: PD0537-Transformers Delivered at Site		03-Dec-2014*	0	LTA CF Swyd: PD0537-Transformers Delivered at Site																													
LTA CF Swyd: CD0510-Telecom Equipment Delivered at Site	03-Dec-2015*		0	LTA CF Swyd: CD0510-Telecom Equipment Delivered at Site																													

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 ■ Baseline Rev B2 ■ DG3 Rev B1



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>e Earthworks</b>																															
LTA-CF Swyd: Earthworks #	04-May-2013*	21-Dec-2013	0	LTA-CF Swyd: Earthworks #																											
<b>f Civil/Structures</b>																															
LTA-CF Swyd: Control/Utility Bldg Erect/Outfit #	05-Nov-2014*	09-Jul-2015	0	LTA-CF Swyd: Control/Utility Bldg Erect/Outfit #																											
LTA-CF Swyd: Foundations/Structure for Outdoor Equipment	05-Nov-2014	05-Oct-2015	0	LTA-CF Swyd: Foundations/Structure for Outdoor Equipment																											
<b>g Installation</b>																															
LTA-CF Swyd: Install Indoor Equipment	10-Jul-2015	14-Jan-2016	0	LTA-CF Swyd: Install Indoor Equipment																											
LTA-CF Swyd: Install Outdoor Equipment	06-Oct-2015	08-Jun-2016	0	LTA-CF Swyd: Install Outdoor Equipment																											
LTA-CF Swyd: Gantry Available for HVac Seg 2 TL Connection		08-Jul-2016	0	LTA-CF Swyd: Gantry Available for HVac Seg 2 TL Connection																											
LTA-CF Swyd: Gantry Available for 735kV TL Connection		08-Jul-2016	0	LTA-CF Swyd: Gantry Available for 735kV TL Connection																											
<b>h Telecom</b>																															
LTA-CF Swyd: Install Telecom	08-Jan-2016	02-Apr-2016	0	LTA-CF Swyd: Install Telecom																											
<b>j Completions</b>																															
LTA-CF Swyd: Telecom Static Commissioning	03-Apr-2016	02-May-2016	0	LTA-CF Swyd: Telecom Static Commissioning																											
LTA-CF Swyd: Static Commissioning	03-May-2016	08-Jul-2016	0	LTA-CF Swyd: Static Commissioning																											
LTA-CF Swyd: Dynamic Commissioning (up to takeover)	11-Jul-2016	09-Aug-2016	0	LTA-CF Swyd: Dynamic Commissioning (up to takeover)																											
<b>LTA-735kV Interconnect at CF</b>																															
<b>LTA-735kV ac Intercon CF</b>																															
<b>1 Key Date</b>																															
KD=LTA 735kV CF: Start Construction	07-Mar-2014		0	KD=LTA 735kV CF: Start Construction																											
KD=LTA 735kV CF: TL Inspection/Connection Complete		10-Jul-2016	0	KD=LTA 735kV CF: TL Inspection/Connection Complete																											
<b>e Earthworks</b>																															
LTA 735kV CF: ROW Clearing	07-Mar-2014*	13-Mar-2014	0	LTA 735kV CF: ROW Clearing																											
<b>f Civil/Structures</b>																															
LTA 735kV CF: Civil Works Foundations	14-Jan-2015*	05-Feb-2015	0	LTA 735kV CF: Civil Works Foundations																											
<b>g Installation</b>																															
LTA 735kV CF: Tower Assembly / Install	17-Mar-2015	27-May-2015	0	LTA 735kV CF: Tower Assembly / Install																											
LTA 735kV CF: Conductor/OPGW Install	28-May-2015	29-Jun-2015	0	LTA 735kV CF: Conductor/OPGW Install																											
<b>j Completions</b>																															
LTA 735kV CF: Post Installation Final Inspection (static)	30-Jun-2015	04-Jul-2015	0	LTA 735kV CF: Post Installation Final Inspection (static)																											
LTA 735kV CF: Connection to Existing CF Swyd (Slack Span)	09-Jul-2016	10-Jul-2016	0	LTA 735kV CF: Connection to Existing CF Swyd (Slack Span)																											
LTA 735kV CF: Connection to New CF Swyd (Slack Span)	09-Jul-2016	10-Jul-2016	0	LTA 735kV CF: Connection to New CF Swyd (Slack Span)																											
<b>LTA-HVAc Line Marshalling Yard</b>																															
<b>LTA-HVAc Line Marshalling Yard</b>																															
<b>1 Key Date</b>																															
KD=LTA Lab Marshalling Yard (ac and dc): Start Construction	19-Nov-2012		0	KD=LTA Lab Marshalling Yard (ac and dc): Start Construction																											
KD=LTA Lab Marshalling Yard (ac and dc): Available		16-Sep-2013	0	KD=LTA Lab Marshalling Yard (ac and dc): Available																											
<b>e Earthworks</b>																															
LTA Lab Marshalling Yard (ac and dc): Clear	19-Nov-2012*	14-Dec-2012	0	LTA Lab Marshalling Yard (ac and dc): Clear																											
<b>f Civil/Structures</b>																															
LTA Lab Marshalling Yard (ac and dc): Construct	28-May-2013*	16-Sep-2013	0	LTA Lab Marshalling Yard (ac and dc): Construct																											
LTA Lab Marshalling Yard (ac and dc): Available		16-Sep-2013	0	LTA Lab Marshalling Yard (ac and dc): Available																											



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011				2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>LTA (L3101/L3102) 315kV TL Seg1/2 MF-CF</b>																																	
<b>LTA (L3101/L3102) 315kV TL Segment 1</b>																																	
<b>1 Key Date</b>																																	
KD=LTA HVac Seg1: Telecom Services Available (for Line Construction)	08-Mar-2013*		0	s Available (for Line Construction) ⚡																													
KD=LTA HVac Seg1: TL Construction Start	26-Apr-2013		0	LTA HVac Seg1: TL Construction Start ⚡																													
KD=LTA HVac Seg1: TL Inspection/Connection Complete		10-Jul-2016	0	KD=LTA HVac Seg1: TL Inspection/Connection Complete ⚡																													
<b>c Materials</b>																																	
LTA HVac Seg1: CT0319 = Distribution Materials Start #	14-Nov-2013*		0	Seg1: CT0319 = Distribution Materials Start # ⚡																													
<b>e Earthworks</b>																																	
LTA-ac Seg1: ROW Clearing / Survey & Tower Spotting (for civil start)	26-Apr-2013*	18-Nov-2013	0	urvey & Tower Spotting (for civil start) ██████████																													
LTA-ac Seg1: ROW Clearing / Survey & Tower Spotting (balance)	19-Nov-2013	21-Feb-2014	0	Clearing / Survey & Tower Spotting (balance) ██████████																													
<b>f Civil/Structures</b>																																	
LTA-ac Seg1: Civil Works - foundations	19-Nov-2013	28-Jan-2015	0	LTA-ac Seg1: Civil Works - foundations ██████████																													
<b>g Installation</b>																																	
LTA-ac Seg1: Tower Assembly / Install	27-Jan-2014	01-May-2015	0	LTA-ac Seg1: Tower Assembly / Install ██████████																													
LTA-ac Seg1: Conductor/OPGW Install	10-Apr-2014	28-May-2015	0	LTA-ac Seg1: Conductor/OPGW Install ██████████																													
<b>j Completions</b>																																	
LTA-ac Seg1: Post Installation Final Inspection (static)	29-May-2015	11-Jun-2015	0	LTA-ac Seg1: Post Installation Final Inspection (static) █																													
LTA-ac Seg1: Connection to MF Switchyard (Slack Span)	09-Jul-2016	10-Jul-2016	0	LTA-ac Seg1: Connection to MF Switchyard (Slack Span) █																													
<b>LTA (L3101/L3102) 315kV TL Segment 2</b>																																	
<b>1 Key Date</b>																																	
KD=LTA HVac Seg2: Telecom Services Available (for Line Construction)	05-Apr-2013*		0	es Available (for Line Construction) ⚡																													
KD=LTA HVac Seg2: TL Construction Start	26-Apr-2013		0	LTA HVac Seg2: TL Construction Start ⚡																													
KD=LTA HVac Seg2: TL Inspection/Connection Complete		10-Jul-2016	0	KD=LTA HVac Seg2: TL Inspection/Connection Complete ⚡																													
<b>c Materials</b>																																	
LTA HVac Seg2: CT0319 = Distribution Materials Start #	13-Dec-2013*		0	Seg2: CT0319 = Distribution Materials Start # ⚡																													
<b>e Earthworks</b>																																	
LTA-ac Seg2: ROW Clearing / Survey & Tower Spotting (for civil start) #	26-Apr-2013*	15-Dec-2013	0	ey & Tower Spotting (for civil start) # ██████████																													
LTA-ac Seg2: ROW Clearing / Survey & Tower Spotting (balance)	16-Dec-2013	06-Mar-2014	0	Clearing / Survey & Tower Spotting (balance) ██████████																													
<b>f Civil/Structures</b>																																	
LTA-ac Seg2: Civil Works - Foundations	16-Dec-2013	20-Feb-2015	0	LTA-ac Seg2: Civil Works - Foundations ██████████																													
<b>g Installation</b>																																	
LTA-ac Seg2: Tower Assembly / Install	20-Feb-2014	15-May-2015	0	LTA-ac Seg2: Tower Assembly / Install ██████████																													
LTA-ac Seg2 :Conductor/OPGW Install	30-Apr-2014	11-Jun-2015	0	LTA-ac Seg2 :Conductor/OPGW Install ██████████																													
<b>j Completions</b>																																	
LTA-ac Seg2: Post Installation Final Inspection (static)	12-Jun-2015	25-Jun-2015	0	LTA-ac Seg2: Post Installation Final Inspection (static) █																													
LTA-ac Seg2 :Connection to CF Switchyard (Slack Span)	09-Jul-2016	10-Jul-2016	0	LTA-ac Seg2 :Connection to CF Switchyard (Slack Span) █																													
<b>LTA (MFATS2) MF Terminal Station (Switchyard)</b>																																	
<b>LTA-MF Switchyard</b>																																	
<b>1 Key Date</b>																																	
KD=LTA MF Swyd: Start Earthworks	05-Nov-2012		0	MF Swyd: Start Earthworks ⚡																													
KD=LTA MF Swyd: Earthworks Complete		29-Oct-2013	0	KD=LTA MF Swyd: Earthworks Complete ⚡																													

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 ■ Baseline Rev B2 ■ DG3 Rev B1



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
KD=LTA MF Swyd: Start Civil Works	05-Nov-2014		-365	KD=LTA MF Swyd: Start Civil Works ▼																											
KD=LTA MF Swyd: Control Building Ready for Equipment Installation		12-May-2015	-365	KD=LTA MF Swyd: Control Building Ready for Equipment Installation ▼																											
KD=LTA MF Swyd: Completed Static Commissioning		10-May-2016	-58	KD=LTA MF Swyd: Completed Static Commissioning ▼																											
KD=LTA MF Swyd: Ready for Operations (RFO)		23-Aug-2016	0	KD=LTA MF Swyd: Ready for Operations (RFO) ▼																											
<b>c Materials</b>																															
LTA MF Swyd: PD0537-Transformers Delivered at Site		06-Jun-2014*	0	LTA MF Swyd: PD0537-Transformers Delivered at Site ▼																											
LTA MF Swyd: PD0505-Equipment Delivered at Site		03-Dec-2014*	0	LTA MF Swyd: PD0505-Equipment Delivered at Site ▼																											
LTA MF Swyd: CD0510-Telecom Equipment Delivered at Site	19-Aug-2015*		0	LTA MF Swyd: CD0510-Telecom Equipment Delivered at Site ▼																											
<b>e Earthworks</b>																															
LTA-MF Swyd: Earthworks (CH0048 & CH0006)	05-Nov-2012	29-Oct-2013	0	Earthworks (CH0048 & CH0006) [Gantt Bar]																											
<b>f Civil/Structures</b>																															
LTA-MF Swyd: Civil Works Control Bldg Erect/Outfit	05-Nov-2014*	12-May-2015	-365	LTA-MF Swyd: Civil Works Control Bldg Erect/Outfit [Gantt Bar]																											
LTA-MF Swyd: Civil Works Foundations/Structures for Outdoor Equipment	05-Nov-2014	07-Aug-2015	-365	LTA-MF Swyd: Civil Works Foundations/Structures for Outdoor Equipment [Gantt Bar]																											
<b>g Installation</b>																															
LTA-MF Swyd: Install Indoor equipment	13-May-2015	17-Nov-2015	-14	LTA-MF Swyd: Install Indoor equipment [Gantt Bar]																											
LTA-MF Swyd: Install Outdoor equipment	08-Aug-2015	10-Apr-2016	-58	LTA-MF Swyd: Install Outdoor equipment [Gantt Bar]																											
LTA-MF Swyd: Gantry Available for TL Connection	11-May-2016		-58	LTA-MF Swyd: Gantry Available for TL Connection ▼																											
<b>h Telecom</b>																															
LTA-MF Swyd: Install Telecom	13-Nov-2015	12-Dec-2015	-58	LTA-MF Swyd: Install Telecom [Gantt Bar]																											
<b>j Completions</b>																															
LTA-MF Swyd: Telecoms Static Commissioning	13-Dec-2015	11-Jan-2016	-58	LTA-MF Swyd: Telecoms Static Commissioning [Gantt Bar]																											
LTA-MF Swyd: Static Commissioning	12-Jan-2016	10-May-2016	-58	LTA-MF Swyd: Static Commissioning [Gantt Bar]																											
LTA-MF Swyd: Dynamic Commissioning (up to takeover)	25-Jul-2016	23-Aug-2016	0	LTA-MF Swyd: Dynamic Commissioning (up to takeover) [Gantt Bar]																											
<b>Labrador Island Transmission Link (LITL)</b>																															
<b>LCP Telecoms-Nfld</b>																															
<b>LCP telecoms</b>																															
<b>j Completions</b>																															
LCP-Telecom LITL: Dynamic Commissioning w/o SW & PH	17-Feb-2017	09-Mar-2017	0	LCP-Telecom LITL: Dynamic Commissioning w/o SW & PH [Gantt Bar]																											
LCP-Telecom LITL: Dynamic Commissioning with SW & PH	10-Mar-2017	23-Mar-2017	0	LCP-Telecom LITL: Dynamic Commissioning with SW & PH [Gantt Bar]																											
<b>LITL Eng/Procure</b>																															
<b>LITL-Eng/Procure</b>																															
<b>2 Eng/Procure</b>																															
LITL - ENG - RFI: LITL RFI Engineering	05-Jan-2012*	08-Oct-2013	0	LITL RFI Engineering [Gantt Bar]																											
LITL - ENG - AFC: LITL AFC Engineering	11-Apr-2012*	01-Jul-2014	0	LITL AFC Engineering [Gantt Bar]																											
<b>LITL (MFACS) MF Converter Station</b>																															
<b>LITL MF Converter</b>																															
<b>1 Key Date</b>																															
KD=LITL MF Convert: CD0503-Start Earth Works	03-May-2013		0	LITL MF Convert: CD0503-Start Earth Works ▼																											
KD=LITL MF Convert: CD0503-Earthworks Complete		21-Dec-2013	0	LITL MF Convert: CD0503-Earthworks Complete ▼																											
KD=LITL MF Convert: CD0501-Start Civil Works	05-Sep-2014		0	KD=LITL MF Convert: CD0501-Start Civil Works ▼																											
KD=LITL MF Convert: CD0501-Buildings Ready for Equipment Installation		03-Sep-2015	0	KD=LITL MF Convert: CD0501-Buildings Ready for Equipment Installation ▼																											
KD=LITL MF Convert: Convert-Convert Complete except for TL Connections		28-Aug-2016	0	KD=LITL MF Convert: Convert-Convert Complete except for TL Connections ▼																											



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
KD=LITL MF Convert: Ready for Operation (RFO)				KD=LITL MF Convert: Ready for Operation (RFO) ⚡																											
<b>c Materials</b>																															
LITL MF Convert: CD0501-ac Equipment Delivered at Site		02-Feb-2015*	0	LITL MF Convert: CD0501-ac Equipment Delivered at Site ⚡																											
LITL MF Convert: CD0501-dc Equipment Delivered at Site		02-Feb-2015*	0	LITL MF Convert: CD0501-dc Equipment Delivered at Site ⚡																											
LITL MF Convert: Telecomm Equipment Delivered at Site	13-Jan-2016*		0	LITL MF Convert: Telecomm Equipment Delivered at Site ⚡																											
<b>e Earthworks</b>																															
LITL-MFConvert: Earthworks	03-May-2013*	21-Dec-2013	0	LITL-MFConvert: Earthworks ██████████																											
<b>f Civil/Structures</b>																															
LITL-MFConvert: Valve Hall Bldg Foundation/Erect/Outfit	05-Sep-2014*	03-Sep-2015	0	LITL-MFConvert: Valve Hall Bldg Foundation/Erect/Outfit ██████████																											
LITL-MFConvert: Control Bldg Foundation/Erect/Outfit	05-Sep-2014	03-Sep-2015	0	LITL-MFConvert: Control Bldg Foundation/Erect/Outfit ██████████																											
LITL-MFConvert: Outdoor Foundations/Structures	05-Sep-2014	03-Sep-2015	0	LITL-MFConvert: Outdoor Foundations/Structures ██████████																											
<b>g Installation</b>																															
LITL-MFConvert: Control Bldg Install Equipment	04-Sep-2015	10-Mar-2016	0	LITL-MFConvert: Control Bldg Install Equipment ██████████																											
LITL-MFConvert: Outdoor Install ac equipment	04-Sep-2015	29-Jul-2016	0	LITL-MFConvert: Outdoor Install ac equipment ██████████																											
LITL-MFConvert: Outdoor Install dc equipment	04-Sep-2015	14-May-2016	0	LITL-MFConvert: Outdoor Install dc equipment ██████████																											
LITL-MFConvert: Valve Hall Bldg Install Equipment	04-Sep-2015	14-May-2016	0	LITL-MFConvert: Valve Hall Bldg Install Equipment ██████████																											
LITL-MFConvert: Gantry available for HVdc Seg1 TL & Lab Electrode TL		28-Aug-2016	0	LITL-MFConvert: Gantry available for HVdc Seg1 TL & Lab Electrode TL ⚡																											
<b>h Telecom</b>																															
LITL-MF Convert: Telecom Install equipment	13-Jan-2016	11-Feb-2016	0	LITL-MF Convert: Telecom Install equipment █																											
<b>j Completions</b>																															
LITL-MFConvert: Telecom - Static Commissioning	12-Feb-2016	12-Mar-2016	0	LITL-MFConvert: Telecom - Static Commissioning █																											
LITL-MFConvert: Static Commissioning	01-Apr-2016	28-Aug-2016	0	LITL-MFConvert: Static Commissioning ██████████																											
LITL-MFConvert: Dynamic Commissioning (up to takeover)	29-Aug-2016	27-Oct-2016	0	LITL-MFConvert: Dynamic Commissioning (up to takeover) ██████████																											
<b>LITL-Lab Electrode Line (L'Anse-au-Diable)</b>																															
<b>LITL-Electrode TL Lab</b>																															
<b>1 Key Date</b>																															
KD=LITL Lab Electr. TL (20km): Start Civil Works	28-Aug-2013		0	TL Lab Electr. TL (20km): Start Civil Works ⚡																											
KD=LITL Lab Electr. TL (20km): Civil Works Complete		30-Jun-2014	0	KD=LITL Lab Electr. TL (20km): Civil Works Complete ⚡																											
KD=LITL Lab Electr. TL (20km): Start Installation	13-Oct-2014		0	KD=LITL Lab Electr. TL (20km): Start Installation ⚡																											
KD=LITL Lab Electr. TL (20km): TL Inspection/Connection Complete		28-Aug-2016	0	KD=LITL Lab Electr. TL (20km): TL Inspection/Connection Complete ⚡																											
<b>c Materials</b>																															
LITL Lab Electr. TL: = Distribution Materials	05-Sep-2014		0	LITL Lab Electr. TL: = Distribution Materials ⚡																											
<b>e Earthworks</b>																															
LITL Lab Electr. TL: Earthworks ROW & Access Road	28-Aug-2013*	30-Jun-2014	0	LITL Lab Electr. TL: Earthworks ROW & Access Road ██████████																											
<b>g Installation</b>																															
LITL Lab Electr. TL: Tower Assembly / Install	13-Oct-2014*	08-Dec-2015	0	LITL Lab Electr. TL: Tower Assembly / Install ██████████																											
LITL Lab Electr. TL: Conductor/OPGW Install	09-Dec-2014	03-Feb-2016	0	LITL Lab Electr. TL: Conductor/OPGW Install ██████████																											
<b>j Completions</b>																															
LITL Lab Electr. TL: Post installation Final Inspection (static)	04-Feb-2016	17-Feb-2016	0	LITL Lab Electr. TL: Post installation Final Inspection (static) █																											
LITL Lab Electr. TL: Connection to Electrode Site (slack span)		28-Aug-2016	0	LITL Lab Electr. TL: Connection to Electrode Site (slack span) ⚡																											
<b>LITL Lab Electrode Site (L'Anse-au-Diable)</b>																															
<b>LITL-Electrode Station Lab</b>																															



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>1 Key Date</b>																															
KD=LITL Lab Electrode: Start Earthworks	01-May-2015		0	KD=LITL Lab Electrode: Start Earthworks																											
KD=LITL Lab Electrode: Start Civil Works	30-May-2015		0	KD=LITL Lab Electrode: Start Civil Works																											
KD=LITL Lab Electrode: CD0508-Control Building Ready for Equipment Installation		27-Jun-2015	0	KD=LITL Lab Electrode: CD0508-Control Building Ready for Equipment Installation																											
KD=LITL Lab Electrode: Complete except for Line Connections		05-Dec-2015	0	KD=LITL Lab Electrode: Complete except for Line Connections																											
KD=LITL Lab Electrode: Site: Ready for Operations (RFO)		26-Oct-2016	0	KD=LITL Lab Electrode: Site: Ready for Operations (RFO)																											
<b>c Materials</b>																															
LITL Lab Elect: CD0508- Equipment Delivered at Site	08-Aug-2015*		0	LITL Lab Elect: CD0508- Equipment Delivered at Site																											
LITL Lab Elect: CD0510- Telecomm Equipment Delivered at Site	01-Sep-2015*		0	LITL Lab Elect: CD0510- Telecomm Equipment Delivered at Site																											
<b>e Earthworks</b>																															
LITL-LabElectrSt: Earthworks	01-May-2015*	29-May-2015	0	LITL-LabElectrSt: Earthworks																											
<b>f Civil/Structures</b>																															
LITL-LabElectrSt: Pre-Fab Building Foundations Erect & Outfit	30-May-2015	27-Jun-2015	0	LITL-LabElectrSt: Pre-Fab Building Foundations Erect & Outfit																											
LITL-LabElectrSt: Breakwater	30-May-2015	09-Nov-2015	0	LITL-LabElectrSt: Breakwater																											
LITL-LabElectrSt: Foundations & Structures for Outdoor Equipment	30-May-2015	27-Jul-2015	0	LITL-LabElectrSt: Foundations & Structures for Outdoor Equipment																											
<b>g Installation</b>																															
LITL-LabElectrSt: Install Indoor equipment	10-Aug-2015	07-Sep-2015	0	LITL-LabElectrSt: Install Indoor equipment																											
LITL-LabElectrSt: Install Outdoor equipment	14-Aug-2015	15-Nov-2015	0	LITL-LabElectrSt: Install Outdoor equipment																											
LITL-LabElectrSt: Gantry available for Lab Electrode TL	06-Dec-2015		0	LITL-LabElectrSt: Gantry available for Lab Electrode TL																											
<b>h Telecom</b>																															
LITL-LabElectrSt: Install Telecom	01-Sep-2015	28-Sep-2015	0	LITL-LabElectrSt: Install Telecom																											
<b>j Completions</b>																															
LITL-LabElectrSt: Telecom Static commissioning	29-Sep-2015	08-Oct-2015	0	LITL-LabElectrSt: Telecom Static commissioning																											
LITL-Lab ElectrSt: Static Commissioning	12-Nov-2015	05-Dec-2015	0	LITL-Lab ElectrSt: Static Commissioning																											
LITL-LabElectrSt: Dynamic Commissioning	28-Sep-2016	26-Oct-2016	0	LITL-LabElectrSt: Dynamic Commissioning																											
<b>LITL-Lab HVdc Seg1/2</b>																															
<b>LITL-HVdc LAB Seg1 MF</b>																															
<b>1 Key Date</b>																															
KD=LITL-dcLabSeg1/Electr TL: Construction Start	28-Aug-2013		0	LITL-dcLabSeg1/Electr TL: Construction Start																											
KD=LITL-dcLabSeg1/Electr TL: Inspection/Connection Complete		28-Aug-2016	0	KD=LITL-dcLabSeg1/Electr TL: Inspection/Connection Complete																											
<b>c Materials</b>																															
LITL-dcLabSeg1/Electr TL: Distribution Materials Start #	05-Sep-2014*		0	LITL-dcLabSeg1/Electr TL: Distribution Materials Start #																											
<b>e Earthworks</b>																															
LITL-dcLabSeg1/Electr TL: ROW Clearing / Survey & Tower Spotting (for civil start)	28-Aug-2013*	30-Jun-2014	0	LITL-dcLabSeg1/Electr TL: ROW Clearing / Survey & Tower Spotting (for civil start)																											
LITL-dcLabSeg1/Electr TL: ROW Clearing / Survey & Tower Spotting (balance)	01-Jul-2014*	19-Oct-2014	0	LITL-dcLabSeg1/Electr TL: ROW Clearing / Survey & Tower Spotting (balance)																											
<b>f Civil/Structures</b>																															
LITL-dcLabSeg1/Electr TL: Civil Works - foundations	10-Sep-2014	08-Oct-2015	0	LITL-dcLabSeg1/Electr TL: Civil Works - foundations																											
<b>g Installation</b>																															
LITL-dcLabSeg1/Electr TL: Tower Assembly / Install	13-Oct-2014	08-Dec-2015	57	LITL-dcLabSeg1/Electr TL: Tower Assembly / Install																											
LITL-dcLabSeg1/Electr TL: Conductor/OPGW Install	28-May-2015	03-Feb-2016	-147	LITL-dcLabSeg1/Electr TL: Conductor/OPGW Install																											
<b>j Completions</b>																															
LITL-dcLabSeg1/Electr TL: Post Installation Final Inspection (static)	04-Feb-2016	17-Feb-2016	0	LITL-dcLabSeg1/Electr TL: Post Installation Final Inspection (static)																											

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 ■ Baseline Rev B2 ■ DG3 Rev B1

Project: IPS Current including PCN 109 & 137  
 Layout = ips Entire Schedule Filter = TASK filter: ips Entire Schedule.



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
LITL-dcLabSeg1/Electr TL: HVdc Seg 1 & Electrode TL Connection to MF Converter (Slack Span)		28-Aug-2016	0	LITL-dcLabSeg1/Electr TL: HVdc Seg 1 & Electrode TL Connection to MF Converter (Slack Span) ◆																											
<b>LITL-HVdc LAB Seg2 SOBI</b>																															
<b>1 Key Date</b>																															
KD=LITL-dcLabSeg2/Electr TL: Construction Start	02-Jul-2013		0	LITL-dcLabSeg2/Electr TL: Construction Start ◆																											
KD=LITL-dcLabSeg2/Electr TL: Inspection/Connection Complete		28-Aug-2016	0	KD=LITL-dcLabSeg2/Electr TL: Inspection/Connection Complete ◆																											
<b>c Materials</b>																															
LITL-dcLabSeg2/Electr TL: Distribution Materials Start #	01-May-2015*		0	LITL-dcLabSeg2/Electr TL: Distribution Materials Start # ◆																											
<b>e Earthworks</b>																															
LITL-dcLabSeg2/Electr TL: ROW Clearing / Survey & Tower Spotting (for civil start)	02-Jul-2013*	30-Apr-2015	0	Survey & Tower Spotting (for civil start)																											
<b>f Civil/Structures</b>																															
LITL-dcLabSeg2/Electr TL: Civil Works - foundations	06-May-2015	06-Jun-2016	0	LITL-dcLabSeg2/Electr TL: Civil Works - foundations																											
<b>g Installation</b>																															
LITL-dcLabSeg2/Electr TL: Tower Assembly / Install	01-Jun-2015	24-Jun-2016	0	LITL-dcLabSeg2/Electr TL: Tower Assembly / Install																											
LITL-dcLabSeg2/Electr TL: Conductor/OPGW Install	14-Sep-2015	05-Aug-2016	0	LITL-dcLabSeg2/Electr TL: Conductor/OPGW Install																											
<b>j Completions</b>																															
LITL-dcLabSeg2/Electr TL: Post Installation Final Inspection (static)	06-Aug-2016	19-Aug-2016	0	LITL-dcLabSeg2/Electr TL: Post Installation Final Inspection (static) ■																											
LITL-dcLabSeg2/Electr TL: Connection to Lab TransCmp (Slack Span)		28-Aug-2016	0	LITL-dcLabSeg2/Electr TL: Connection to Lab TransCmp (Slack Span) ◆																											
<b>LITL Lab Transition Compound</b>																															
<b>LITL-TransCmp Lab</b>																															
<b>1 Key Date</b>																															
KD=LITL Lab TranCmp: CD0503-Start Earth Works	03-May-2013		0	LITL-TransCmp: CD0503-Start Earth Works ◆																											
KD=LITL Lab TranCmp: CD0503-Earthworks Complete		29-Jul-2013	0	LITL-TransCmp: CD0503-Earthworks Complete ◆																											
KD=LITL Lab TranCmp: CD0501-Start Civil Works	06-Aug-2014		0	LITL-TransCmp: CD0501-Start Civil Works ◆																											
KD=LITL Lab TranCmp: CD0501- Buildings Ready for Equipment Installation		10-Feb-2015	0	LITL-TransCmp: CD0501- Buildings Ready for Equipment Installation ◆																											
KD=LITL Lab TranCmp: CD0501-Complete except for TL Connections		14-Aug-2015	0	LITL-TransCmp: CD0501-Complete except for TL Connections ◆																											
KD=LITL Lab TranCmp: SOBI Cable Systems available (Post SRI Test)	26-Oct-2016		0	LITL-TransCmp: SOBI Cable Systems available (Post SRI Test) ◆																											
KD=LITL Lab TranCmp: Ready for Operations (RFO)		02-Nov-2016	0	LITL-TransCmp: Ready for Operations (RFO) ◆																											
<b>c Materials</b>																															
LITL Lab TranCmp: CD0501-ac Equipment Delivered at Site		13-May-2014*	0	LITL Lab TranCmp: CD0501-ac Equipment Delivered at Site ◆																											
LITL Lab TranCmp: CD0501-dc Equipment Delivered at Site		02-Feb-2015*	0	LITL Lab TranCmp: CD0501-dc Equipment Delivered at Site ◆																											
LITL Lab TranCmp: CD0510-Telecom Equipment Delivered at Site		18-Mar-2015*	0	LITL Lab TranCmp: CD0510-Telecom Equipment Delivered at Site ◆																											
<b>e Earthworks</b>																															
LITL-LabTrnCmp: Earthworks #	03-May-2013*	29-Jul-2013	0	LITL-LabTrnCmp: Earthworks #																											
<b>f Civil/Structures</b>																															
LITL-LabTrnCmp: Civil Works - Switchgear Bldg Foundation/Erect/Outfit	06-Aug-2014*	10-Feb-2015	0	LITL-LabTrnCmp: Civil Works - Switchgear Bldg Foundation/Erect/Outfit																											
LITL-LabTrnCmp: Civil Works - Control Bldg Foundation/Erect/Outfit	06-Aug-2014	10-Feb-2015	0	LITL-LabTrnCmp: Civil Works - Control Bldg Foundation/Erect/Outfit																											
LITL-LabTrnCmp: Civil Works - Outdoor Equipment Foundations/Structures	06-Aug-2014	29-Nov-2014	0	LITL-LabTrnCmp: Civil Works - Outdoor Equipment Foundations/Structures																											
<b>g Installation</b>																															
LITL-LabTrnCmp: Install Outdoor Equipment	01-Dec-2014	10-Feb-2015	0	LITL-LabTrnCmp: Install Outdoor Equipment																											
LITL-LabTrnCmp: Install Control Bldg Equipment	11-Feb-2015	08-May-2015	0	LITL-LabTrnCmp: Install Control Bldg Equipment																											
LITL-LabTrnCmp: Install Switchgear Bldg Equipment	09-May-2015	25-Jul-2015	0	LITL-LabTrnCmp: Install Switchgear Bldg Equipment																											

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 Baseline Rev B2 DG3 Rev B1





Integrated Project Schedule

Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
LITL-LabTrnCmp: Ready for SOBI Land Cable to terminate		14-Aug-2015	0	LITL-LabTrnCmp: Ready for SOBI Land Cable to terminate																											
LITL-LabTrnCmp: Gantry available for HVdc Seg 2 TL Connection		14-Aug-2015	0	LITL-LabTrnCmp: Gantry available for HVdc Seg 2 TL Connection																											
<b>h Telecom</b>				LITL-LabTrnCmp: Install Telecom																											
LITL-LabTrnCmp: Install Telecom	27-May-2015	25-Jun-2015	0	LITL-LabTrnCmp: Install Telecom																											
<b>j Completions</b>				LITL-LabTrnCmp: Telecom Static Commissioning																											
LITL-LabTrnCmp: Telecom Static Commissioning	26-Jun-2015	15-Jul-2015	0	LITL-LabTrnCmp: Telecom Static Commissioning																											
LITL-LabTrnCmp: Completions - Static Commissioning	16-Jul-2015	14-Aug-2015	0	LITL-LabTrnCmp: Completions - Static Commissioning																											
LITL-LabTrnCmp: Completions - Dynamic Commissioning	28-Sep-2016	21-Oct-2016	0	LITL-LabTrnCmp: Completions - Dynamic Commissioning																											
LITL-LabTrnCmp: Completions - Dynamic Commissioning (with SOBI)	26-Oct-2016	02-Nov-2016	0	LITL-LabTrnCmp: Completions - Dynamic Commissioning (with SOBI)																											
<b>LITL SOBI Crossing</b>				LITL-SOBI Crossing																											
<b>1 Key Date</b>				LITL-SOBI Crossing																											
KD=LITL SOBI -Nfld HDD Construction Start	01-Sep-2013		0	KD=LITL SOBI -Nfld HDD Construction Start																											
KD=LITL SOBI -Lab Road Access Start Construction Start	02-Sep-2013		0	KD=LITL SOBI -Lab Road Access Start Construction Start																											
KD=LITL SOBI -Lab HDD Construction Start	01-May-2014		0	KD=LITL SOBI -Lab HDD Construction Start																											
KD=LITL SOBI -Nfld HDD Construction Complete		06-Mar-2015	0	KD=LITL SOBI -Nfld HDD Construction Complete																											
KD=LITL SOBI -Nfld Land Cable Trenching Complete		23-Sep-2015	0	KD=LITL SOBI -Nfld Land Cable Trenching Complete																											
KD=LITL SOBI -Nfld Land Cable Installation Start	24-Sep-2015		0	KD=LITL SOBI -Nfld Land Cable Installation Start																											
KD=LITL SOBI - Lab Land Cable Trenching Complete		17-Nov-2015	0	KD=LITL SOBI - Lab Land Cable Trenching Complete																											
KD=LITL SOBI -Lab HDD Construction Complete		17-Nov-2015	0	KD=LITL SOBI -Lab HDD Construction Complete																											
KD=LITL SOBI -Lab Land Cable Installation Start	18-Nov-2015		0	KD=LITL SOBI -Lab Land Cable Installation Start																											
KD=LITL SOBI -Cable Install Vessel (CIV) at SOBI	15-Jun-2016		0	KD=LITL SOBI -Cable Install Vessel (CIV) at SOBI																											
KD=LITL SOBI -Cable Rock Placement Start	08-Jul-2016		0	KD=LITL SOBI -Cable Rock Placement Start																											
KD=LITL SOBI -Cable System - 1 Electrically Complete	08-Jul-2016		0	KD=LITL SOBI -Cable System - 1 Electrically Complete																											
KD=LITL SOBI - Cable System - 2 Electrically Complete	01-Aug-2016		0	KD=LITL SOBI - Cable System - 2 Electrically Complete																											
KD=LITL SOBI - Cable System - 3 Electrically Complete	21-Aug-2016		0	KD=LITL SOBI - Cable System - 3 Electrically Complete																											
KD=LITL SOBI -Cable Rock Placement Complete		15-Oct-2016	0	KD=LITL SOBI -Cable Rock Placement Complete																											
KD=LITL SOBI -Marine Cable Rock Placement & Final Cable Testing Complete		25-Oct-2016	0	KD=LITL SOBI -Marine Cable Rock Placement & Final Cable Testing Complete																											
<b>c Materials</b>				LITL-SOBI: Cable Available for Pick-up at manuf.																											
LITL-SOBI: Cable Available for Pick-up at manuf.	08-Apr-2016*		-145	LITL-SOBI: Cable Available for Pick-up at manuf.																											
<b>g1 SOBI Landfall Protection</b>				LITL-SOBI: Nfld Shoal Cove - Bore Hole 1-2 -3																											
LITL-SOBI: Nfld Shoal Cove - Bore Hole 1-2 -3	01-Sep-2013*	06-Mar-2015	0	LITL-SOBI: Nfld Shoal Cove - Bore Hole 1-2 -3																											
LITL-SOBI: Lab Forteau Point - Road Access TCH -> TransCmp -> Drilling Site	02-Sep-2013*	16-Nov-2013	0	LITL-SOBI: Lab Forteau Point - Road Access TCH -> TransCmp -> Drilling Site																											
LITL-SOBI: Lab Forteau Point - Bore Hole 1-2 -3	01-May-2014*	17-Nov-2015	0	LITL-SOBI: Lab Forteau Point - Bore Hole 1-2 -3																											
LITL-SOBI: Nfld Shoal Cove - Land cable Trenching	01-May-2015	23-Sep-2015	0	LITL-SOBI: Nfld Shoal Cove - Land cable Trenching																											
LITL-SOBI: Lab Forteau Point - Land cable Trenching	25-Jun-2015	17-Nov-2015	0	LITL-SOBI: Lab Forteau Point - Land cable Trenching																											
<b>g2 SOBI Cable Supply/install</b>				LITL-SOBI: Nfld Shoal Cove: Land Cable Installation																											
LITL-SOBI: Nfld Shoal Cove: Land Cable Installation	24-Sep-2015	22-Nov-2015	0	LITL-SOBI: Nfld Shoal Cove: Land Cable Installation																											
LITL-SOBI: Lab Forteau Point: Land Cable Installation	18-Nov-2015	16-Jan-2016	0	LITL-SOBI: Lab Forteau Point: Land Cable Installation																											
LITL-SOBI: Subsea Cable 1 Installation	15-Jun-2016	07-Jul-2016	0	LITL-SOBI: Subsea Cable 1 Installation																											
LITL-SOBI: Cable Install Vessel (CIV) at SOBI	15-Jun-2016*		0	LITL-SOBI: Cable Install Vessel (CIV) at SOBI																											
LITL-SOBI: Subsea Cable 2 Installation	08-Jul-2016	31-Jul-2016	0	LITL-SOBI: Subsea Cable 2 Installation																											



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
LITL-SOBI: Subsea Cable 3 Installation	01-Aug-2016	20-Aug-2016	0	LITL-SOBI: Subsea Cable 3 Installation																											
LITL-SOBI: All 3 Cables Installed & Electrically Complete		20-Aug-2016	0	LITL-SOBI: All 3 Cables Installed & Electrically Complete																											
<b>g3 SOBI Cable Protection</b>																															
LITL-SOBI: Subsea Cable 1 Rock placement	08-Jul-2016	29-Aug-2016	0	LITL-SOBI: Subsea Cable 1 Rock placement																											
LITL-SOBI: Subsea Cable 2 Rock placement	01-Aug-2016	19-Sep-2016	0	LITL-SOBI: Subsea Cable 2 Rock placement																											
LITL-SOBI: Subsea Cable 3 Rock placement	21-Aug-2016	15-Oct-2016	0	LITL-SOBI: Subsea Cable 3 Rock placement																											
<b>j Completions</b>																															
LITL-SOBI: Subsea Cables Post Rock placement Test (Static - POST SRI)	16-Oct-2016	25-Oct-2016	0	LITL-SOBI: Subsea Cables Post Rock placement Test (Static - POST SRI)																											
<b>LITL Nfld Transition Compound</b>																															
<b>LITL-Transition Compound Nfld</b>																															
<b>1 Key Date</b>																															
KD=LITL Nfld TranCmp: CD0503-Start Earth Works	03-May-2013		0	TranCmp: CD0503-Start Earth Works																											
KD=LITL Nfld TranCmp: CD0503-Earthworks Complete		29-Jul-2013	0	TranCmp: CD0503-Earthworks Complete																											
KD=LITL Nfld TranCmp: CD0501-Start Civil Works	06-Aug-2014		0	KD=LITL Nfld TranCmp: CD0501-Start Civil Works																											
KD=LITL Nfld TranCmp: CD0501- Buildings Ready for Equipment Installation		10-Feb-2015	0	Nfld TranCmp: CD0501- Buildings Ready for Equipment Installation																											
KD=LITL Nfld TranCmp: CD0501-Complete except for Line Connections		14-Aug-2015	0	KD=LITL Nfld TranCmp: CD0501-Complete except for Line Connections																											
KD=LITL Nfld TranCmp: Ready for Operations (RFO)		09-Mar-2017	0	KD=LITL Nfld TranCmp: Ready for Operations (RFO)																											
<b>c Materials</b>																															
LITL Nfld TranCmp: CD0501-ac Equipment Delivered at Site		14-May-2014*	0	Nfld TranCmp: CD0501-ac Equipment Delivered at Site																											
LITL Nfld TranCmp: CD0510-Telecomm Equipment Delivered at Site		13-Jan-2015*	0	L Nfld TranCmp: CD0510-Telecomm Equipment Delivered at Site																											
LITL Nfld TranCmp: CD0501-dc Equipment Delivered at Site		02-Feb-2015*	0	LITL Nfld TranCmp: CD0501-dc Equipment Delivered at Site																											
<b>e Earthworks</b>																															
LITL-NfldTrnCmp: Earthworks #	03-May-2013*	29-Jul-2013	0	LITL-NfldTrnCmp: Earthworks #																											
<b>f Civil/Structures</b>																															
LITL-NfldTrnCmp: Civil Works - Switchgear Bldg Foundation/Erect/Outfit	06-Aug-2014*	10-Feb-2015	0	TrnCmp: Civil Works - Switchgear Bldg Foundation/Erect/Outfit																											
LITL-NfldTrnCmp: Civil Works - Control Bldg Foundation/Erect/Outfit	06-Aug-2014	10-Feb-2015	0	TrnCmp: Civil Works - Control Bldg Foundation/Erect/Outfit																											
LITL-NfldTrnCmp: Civil Works - Outdoor Equipment Foundations/Structures	06-Aug-2014	29-Nov-2014	0	Civil Works - Outdoor Equipment Foundations/Structures																											
<b>g Installation</b>																															
LITL-NfldTrnCmp: Install Outdoor Equipment	01-Dec-2014	10-Feb-2015	0	LITL-NfldTrnCmp: Install Outdoor Equipment																											
LITL-NfldTrnCmp: Install Control Bldg Equipment	11-Feb-2015	08-May-2015	0	LITL-NfldTrnCmp: Install Control Bldg Equipment																											
LITL-NfldTrnCmp: Install Switchgear Bldg Equipment	09-May-2015	25-Jul-2015	0	LITL-NfldTrnCmp: Install Switchgear Bldg Equipment																											
LITL-NfldTrnCmp: Ready for SOBI Lans Cable Install		14-Aug-2015	0	LITL-NfldTrnCmp: Ready for SOBI Lans Cable Install																											
LITL-NfldTrnCmp: Gantry available for HVdc Seg 3 TL Connection		14-Aug-2015	0	LITL-NfldTrnCmp: Gantry available for HVdc Seg 3 TL Connection																											
<b>h Telecom</b>																															
LITL-NfldTrnCmp: Telecom	09-May-2015	07-Jun-2015	0	LITL-NfldTrnCmp: Telecom																											
<b>j Completions</b>																															
LITL-NfldTrnCmp: Telecom Static Commissioning	26-Jun-2015	15-Jul-2015	0	LITL-NfldTrnCmp: Telecom Static Commissioning																											
LITL-NfldTrnCmp: Completions - Static Commissioning	16-Jul-2015	14-Aug-2015	0	LITL-NfldTrnCmp: Completions - Static Commissioning																											
LITL-NfldTrnCmp: Dynamic Commissioning	08-Feb-2017	09-Mar-2017	0	LITL-NfldTrnCmp: Dynamic Commissioning																											
<b>LITL-Nfld HVdc line Marshalling Yard</b>																															
<b>LITL-HVdc Line Marshalling Yard Nfld</b>																															
<b>1 Key Date</b>																															



Integrated Project Schedule

Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	Timeline																													
				2011				2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
KD=LITL Nfld Marshalling Yard (dc): Start Construction	14-Oct-2013		0	LITL Nfld Marshalling Yard (dc): Start Construction																													
KD=LITL Nfld Marshalling Yard (dc): Available		14-Mar-2014	0	LITL Nfld Marshalling Yard (dc): Available																													
<b>e Earthworks</b>																																	
LITL Nfld Marshalling Yard (dc): Clear	14-Oct-2013*	02-Nov-2013	0	LITL Nfld Marshalling Yard (dc): Clear																													
<b>f Civil/Structures</b>																																	
LIITL Nfld Marshalling Yard (dc): Construct	03-Nov-2013	14-Mar-2014	0	LIITL Nfld Marshalling Yard (dc): Construct																													
<b>LITL-Nfld HVdc TL Seg 3/4/5</b>																																	
<b>LITL-HVdc NFLD Seg3 SOBI</b>																																	
<b>1 Key Date</b>																																	
KD=LITL HVdc Seg3: TL Construction Start	17-Dec-2013		0	KD=LITL HVdc Seg3: TL Construction Start																													
KD=LITL HVdc Seg3: TL Inspection/Connection Complete (Ready to Energize)		16-Feb-2017	0	KD=LITL HVdc Seg3: TL Inspection/Connection Complete (Ready to Energize)																													
<b>c Materials</b>																																	
LITL HVdc Seg3: = Distribution Materials Start #	28-Nov-2014*		0	LITL HVdc Seg3: = Distribution Materials Start #																													
<b>e Earthworks</b>																																	
LITL-dcNfSeg3: ROW Clearing / Survey & Tower Spotting (for civil start)	17-Dec-2013*	23-Oct-2014	0	LITL-dcNfSeg3: ROW Clearing / Survey & Tower Spotting (for civil start)																													
<b>f Civil/Structures</b>																																	
LITL-dcNfSeg3: Civil Works - foundations	03-Dec-2014	18-Mar-2016	0	LITL-dcNfSeg3: Civil Works - foundations																													
<b>g Installation</b>																																	
LITL-dcNfSeg3: Tower Assembly / Install	17-Dec-2014	08-Apr-2016	0	LITL-dcNfSeg3: Tower Assembly / Install																													
LITL-dcNfSeg3: Conductor/OPGW Install	20-Feb-2015	23-May-2016	0	LITL-dcNfSeg3: Conductor/OPGW Install																													
<b>j Completions</b>																																	
LITL-dcNfSeg3: Installation Final Inspection Nfld (static)	24-May-2016	06-Jun-2016	0	LITL-dcNfSeg3: Installation Final Inspection Nfld (static)																													
LITL-dcNfSeg3: Connection to Nfld TransCmp (Slack Span)		16-Feb-2017	0	LITL-dcNfSeg3: Connection to Nfld TransCmp (Slack Span)																													
<b>LITL-HVdc NFLD Seg4</b>																																	
<b>1 Key Date</b>																																	
KD=LITL HVdc Seg4: TL Construction Start	29-Aug-2014		0	KD=LITL HVdc Seg4: TL Construction Start																													
<b>c Materials</b>																																	
LITL HVdc Seg4: = Distribution Materials Start #	04-Aug-2015*		0	LITL HVdc Seg4: = Distribution Materials Start #																													
LITL HVdc-Nfld telecom: Telecom Equip Delivered to Site #		23-May-2016*	0	LITL HVdc-Nfld telecom: Telecom Equip Delivered to Site #																													
<b>e Earthworks</b>																																	
LITL-dcNfSeg4: ROW Clearing / Survey & Tower Spotting (for civil start)	29-Aug-2014*	13-Jul-2015	0	LITL-dcNfSeg4: ROW Clearing / Survey & Tower Spotting (for civil start)																													
<b>f Civil/Structures</b>																																	
LITL-dcNfSeg4: Civil Works - foundations	07-Aug-2015	07-Nov-2016	0	LITL-dcNfSeg4: Civil Works - foundations																													
<b>g Installation</b>																																	
LITL-dcNfSeg4: Tower Assembly / Install	26-Aug-2015	05-Jan-2017	0	LITL-dcNfSeg4: Tower Assembly / Install																													
LITL-dcNfSeg4: Conductor/OPGW Install	05-Nov-2015	02-Feb-2017	0	LITL-dcNfSeg4: Conductor/OPGW Install																													
<b>h Telecom</b>																																	
LITL HVdc-Nfld Repeater: CD0510 Telecom Install (Existing Stoney Brook Swyd)	24-May-2016	17-Aug-2016	0	LITL HVdc-Nfld Repeater: CD0510 Telecom Install (Existing Stoney Brook Swyd)																													
<b>j Completions</b>																																	
LITL HVdc-Nfld Repeater: CD0510 Telecom Static Comm (Existing Stoney Brook Swyd)	18-Aug-2016	06-Sep-2016	0	LITL HVdc-Nfld Repeater: CD0510 Telecom Static Comm (Existing Stoney Brook Swyd)																													
LITL-dcNfSeg4: Installation Final Inspection Nfld (static)	03-Feb-2017	16-Feb-2017	0	LITL-dcNfSeg4: Installation Final Inspection Nfld (static)																													
<b>LITL-HVdc NFLD Seg5 SP</b>																																	

◆ Baseline Rev B2    ▼ DG3 Rev B1  
 ■ Baseline Rev B2    ■ DG3 Rev B1



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>1 Key Date</b>																															
KD=LITL HVdc Seg5: TL Construction Start	07-Oct-2014		0	KD=LITL HVdc Seg5: TL Construction Start																											
KD=LITL HVdc Seg5: TL Inspection/Connection Complete (Ready to Energize)		16-Feb-2017	0	KD=LITL HVdc Seg5: TL Inspection/Connection Complete (Ready to Energize)																											
<b>c Materials</b>																															
LITL HVdc Seg5: = Distribution Materials Start #	01-Oct-2015*		0	LITL HVdc Seg5: = Distribution Materials Start #																											
<b>e Earthworks</b>																															
LITL-dcNfSeg5: ROW Clearing / Survey & Tower Spotting (for civil start)	07-Oct-2014*	16-Sep-2015	0	LITL-dcNfSeg5: ROW Clearing / Survey & Tower Spotting (for civil start)																											
<b>f Civil/Structures</b>																															
LITL-dcNfSeg5: Civil Works - foundations	06-Oct-2015	04-Oct-2016	0	LITL-dcNfSeg5: Civil Works - foundations																											
<b>g Installation</b>																															
LITL-dcNfSeg5: Tower Assembly / Install	28-Oct-2015*	02-Dec-2016	0	LITL-dcNfSeg5: Tower Assembly / Install																											
LITL-dcNfSeg5: Conductor/OPGW Install	11-Dec-2015	26-Jan-2017	0	LITL-dcNfSeg5: Conductor/OPGW Install																											
<b>j Completions</b>																															
LITL-dcNfSeg5: Installation Final Inspection Nfld (static)	27-Jan-2017	09-Feb-2017	0	LITL-dcNfSeg5: Installation Final Inspection Nfld (static)																											
LITL-dcNfSeg5: Connection to SP Converter (Slack Span)		16-Feb-2017	0	LITL-dcNfSeg5: Connection to SP Converter (Slack Span)																											
<b>LITL (SOPCS) SP Converter Station</b>																															
<b>LITL SP Converter</b>																															
<b>1 Key Date</b>																															
KD=LITL SP Convert: CD0503-Start Earth Works	03-May-2013		0	LITL SP Convert: CD0503-Start Earth Works																											
KD=LITL SP Convert: CD0503-Earthworks Complete		21-Dec-2013	0	LITL SP Convert: CD0503-Earthworks Complete																											
KD=LITL SP Convert: CD0501-Start Civil Works	05-Sep-2014		0	KD=LITL SP Convert: CD0501-Start Civil Works																											
KD=LITL SP Convert: CD0501-Buildings Ready for Equipment Installation		03-Sep-2015	0	KD=LITL SP Convert: CD0501-Buildings Ready for Equipment Installation																											
KD=LITL SP Convert: CD0501-Convert Completion except for TL Connections		28-Aug-2016	0	KD=LITL SP Convert: CD0501-Convert Completion except for TL Connections																											
KD=LITL SP Convert: Ready for Operation (RFO)		08-May-2017	0	KD=LITL SP Convert: Ready for Operation (RFO)																											
<b>c Materials</b>																															
LITL SP Convert: CD0501-ac Equipment Delivered at Site		02-Feb-2015*	0	LITL SP Convert: CD0501-ac Equipment Delivered at Site																											
LITL SP Convert: CD0501-dc Equipment Delivered at Site		02-Feb-2015*	0	LITL SP Convert: CD0501-dc Equipment Delivered at Site																											
LITL SP Convert: CD0510-Telecom Equipment Delivered at Site	13-Jan-2016*		0	LITL SP Convert: CD0510-Telecom Equipment Delivered at Site																											
<b>e Earthworks</b>																															
LITL-SPConvert: Earthworks	03-May-2013*	21-Dec-2013	0	LITL-SPConvert: Earthworks																											
<b>f Civil/Structures</b>																															
LITL-SPConvert: Valve Hall Bldg Foundation/Erect/Outfit	05-Sep-2014*	03-Sep-2015	0	LITL-SPConvert: Valve Hall Bldg Foundation/Erect/Outfit																											
LITL-SPConvert: Control Bldg Foundation/Erect/Outfit	05-Sep-2014	03-Sep-2015	0	LITL-SPConvert: Control Bldg Foundation/Erect/Outfit																											
LITL-SPConvert: Outdoor Foundations/Structures	05-Sep-2014	03-Sep-2015	0	LITL-SPConvert: Outdoor Foundations/Structures																											
<b>g Installation</b>																															
LITL-SPConvert: Control Bldg Install Equipment	04-Sep-2015	10-Mar-2016	0	LITL-SPConvert: Control Bldg Install Equipment																											
LITL-SPConvert: Outdoor Install ac equipment	04-Sep-2015	29-Jul-2016	0	LITL-SPConvert: Outdoor Install ac equipment																											
LITL-SPConvert: Outdoor Install dc equipment	04-Sep-2015	14-May-2016	0	LITL-SPConvert: Outdoor Install dc equipment																											
LITL-SPConvert: Valve Hall Bldg Install Equipment	04-Sep-2015	14-May-2016	0	LITL-SPConvert: Valve Hall Bldg Install Equipment																											
LITL-SPConvert: Gantry available for HVdc Seg5 TL & Nfld Electr TL		28-Aug-2016	0	LITL-SPConvert: Gantry available for HVdc Seg5 TL & Nfld Electr TL																											
<b>h Telecom</b>																															
LITL-SPConvert: Telecom Install equipment	13-Jan-2016	11-Feb-2016	0	LITL-SPConvert: Telecom Install equipment																											



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>j Completions</b>																															
LITL-SPConvert: Telecom - Static Commissioning	12-Feb-2016	12-Mar-2016	0	LITL-SPConvert: Telecom - Static Commissioning																											
LITL-SPConvert: Static Commissioning	01-Apr-2016	28-Aug-2016	0	LITL-SPConvert: Static Commissioning																											
LITL-SPConvert: Dynamic Commissioning (up to takeover)	10-Mar-2017	08-May-2017	0	LITL-SPConvert: Dynamic Commissioning (up to takeover)																											
<b>LITL-Nfld Electrode Line (Dowden's Point)</b>																															
<b>LITL-Electrode TL Nfld</b>																															
<b>1 Key Date</b>																															
KD=LITL Nfld Electr. TL (15km): Start Civil Works	17-Sep-2015		0	KD=LITL Nfld Electr. TL (15km): Start Civil Works																											
KD=LITL Nfld Electr. TL (15km): Civil Works Complete		27-Oct-2015	0	KD=LITL Nfld Electr. TL (15km): Civil Works Complete																											
KD=LITL Nfld Electr. TL (15km): Start Installation	28-Oct-2015		0	KD=LITL Nfld Electr. TL (15km): Start Installation																											
KD=LITL Nfld Electr. TL (15km): TL Inspection/Connection Complete		28-Aug-2016	0	KD=LITL Nfld Electr. TL (15km): TL Inspection/Connection Complete																											
<b>c Materials</b>																															
LITL Nfld Electr. TL: = Distribution Materials	28-Nov-2014		0	LITL Nfld Electr. TL: = Distribution Materials																											
<b>e Earthworks</b>																															
LITL Nfld Electr. TL: Earthworks ROW & Access Road	17-Sep-2015*	27-Oct-2015	0	LITL Nfld Electr. TL: Earthworks ROW & Access Road																											
<b>g Installation</b>																															
LITL Nfld Electr. TL: Poles Assembly / Install	28-Oct-2015	07-Dec-2015	0	LITL Nfld Electr. TL: Poles Assembly / Install																											
LITL Nfld Electr. TL: Conductor/OPGW Install	25-Nov-2015	27-Jan-2016	0	LITL Nfld Electr. TL: Conductor/OPGW Install																											
<b>j Completions</b>																															
LITL Nfld Electr. TL: Post installation Final Inspection (static)	28-Jan-2016*	10-Feb-2016	0	LITL Nfld Electr. TL: Post installation Final Inspection (static)																											
LITL Nfld Electr. TL: Connection to Electrode Site (slack span)		28-Aug-2016	0	LITL Nfld Electr. TL: Connection to Electrode Site (slack span)																											
<b>LITL Nfld Electrode Site (Dowden's Point)</b>																															
<b>LITL-Electrode Station Nfld</b>																															
<b>1 Key Date</b>																															
KD=LITL Nfld Electrode Site: CD0508-Start Earthworks	01-May-2015		0	KD=LITL Nfld Electrode Site: CD0508-Start Earthworks																											
KD=LITL Nfld Electrode Site: CD0508-Start Civil Works	30-May-2015		0	KD=LITL Nfld Electrode Site: CD0508-Start Civil Works																											
KD=LITL Nfld Electrode Site: CD0508-Control Building Ready for Equipment Installation		27-Jun-2015	0	LITL Nfld Electrode Site: CD0508-Control Building Ready for Equipment Installation																											
KD=LITL Nfld Electrode Site: CD0508-Complete except for Line Connection		05-Dec-2015	0	KD=LITL Nfld Electrode Site: CD0508-Complete except for Line Connection																											
KD=LITL Nfld Elec Line: Electrode Line Ready (Link with Converter Station & Electrode Site)		08-Apr-2017	0	KD=LITL Nfld Elec Line: Electrode Line Ready (Link with Converter Station & Electrode Site)																											
KD=LITL Nfld Electrode Site: Ready for Operations (RFO)		02-May-2017	0	KD=LITL Nfld Electrode Site: Ready for Operations (RFO)																											
<b>c Materials</b>																															
LITL Nfld Elect: CD0508- Equipment Delivered at Site	08-Aug-2015*		0	LITL Nfld Elect: CD0508- Equipment Delivered at Site																											
LITL Nfld Elect: CD0510- Telecom Equipment Delivered at Site	01-Sep-2015*		0	LITL Nfld Elect: CD0510- Telecom Equipment Delivered at Site																											
<b>e Earthworks</b>																															
LITL-Nfld ElectrSt: Earthworks	01-May-2015*	29-May-2015	0	LITL-Nfld ElectrSt: Earthworks																											
<b>f Civil/Structures</b>																															
LITL-Nfld ElectrSt: Breakwater	30-May-2015	09-Nov-2015	0	LITL-Nfld ElectrSt: Breakwater																											
LITL-Nfld ElectrSt: Pre-Fab Building Foundations Erect & Outfit	30-May-2015	27-Jun-2015	0	LITL-Nfld ElectrSt: Pre-Fab Building Foundations Erect & Outfit																											
LITL-Nfld ElectrSt: Foundations & Structures for Outdoor Equipment	30-May-2015	27-Jul-2015	0	LITL-Nfld ElectrSt: Foundations & Structures for Outdoor Equipment																											
<b>g Installation</b>																															

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 ■ Baseline Rev B2 ■ DG3 Rev B1



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
LITL-Nfld ElectrSt: Install Indoor equipment	10-Aug-2015	07-Sep-2015	0	LITL-Nfld ElectrSt: Install Indoor equipment																											
LITL-Nfld ElectrSt: Install Outdoor equipment	14-Aug-2015	15-Nov-2015	0	LITL-Nfld ElectrSt: Install Outdoor equipment																											
LITL-Nfld ElectrSt: Gantry available for Electrode Line	06-Dec-2015		0	LITL-Nfld ElectrSt: Gantry available for Electrode Line																											
<b>h Telecom</b>																															
LITL-Nfld ElectrSt: Install Telecom	01-Sep-2015	28-Sep-2015	0	LITL-Nfld ElectrSt: Install Telecom																											
<b>j Completions</b>																															
LITL-Nfld ElectrSt: Telecom Static commissioning	29-Sep-2015	18-Oct-2015	0	LITL-Nfld ElectrSt: Telecom Static commissioning																											
LITL-Nfld ElectrSt: Static Commissioning	12-Nov-2015	05-Dec-2015	0	LITL-Nfld ElectrSt: Static Commissioning																											
LITL-Nfld ElectrSt: Dynamic Commissioning	09-Apr-2017	02-May-2017	0	LITL-Nfld ElectrSt: Dynamic Commissioning																											
<b>LITL (SOPTS) Soldiers Pond Terminal Station (Switchyard)</b>																															
<b>LITL-SP Switchyard</b>																															
<b>1 Key Date</b>																															
KD=LITL SP Swyd: CD0503-Start Earth Works	03-May-2013		0	SP Swyd: CD0503-Start Earth Works																											
KD=LITL SP Swyd: CD0503-Earthworks Complete		21-Dec-2013	0	D=LITL SP Swyd: CD0503-Earthworks Complete																											
KD=LITL SP Swyd: CD0502-Start Civil Works	05-Nov-2014		0	KD=LITL SP Swyd: CD0502-Start Civil Works																											
KD=LITL SP Swyd: CD0502-Control Building Ready for Equipment Installation		12-May-2015	0	L SP Swyd: CD0502-Control Building Ready for Equipment Installation																											
KD=LITL SP Swyd: CD0502-Completed Static Commissioning		13-Jan-2017	0	KD=LITL SP Swyd: CD0502-Completed Static Commissioning																											
KD=LITL SP Swyd: CD0502-Ready for Re-terminations - Holyrood/Hardwoos/Oxenpond/West Av		18-May-2017	0	KD=LITL SP Swyd: CD0502-Ready for Re-terminations - Holyrood/Hardwoos/Oxenpond/West Av																											
KD=LITL SP Swyd: Ready for Operations (RFO)		18-May-2017	0	KD=LITL SP Swyd: Ready for Operations (RFO)																											
<b>c Materials</b>																															
LITL SP Swyd: PD0505-Equipment Delivered at Site		03-Dec-2014*	0	LITL SP Swyd: PD0505-Equipment Delivered at Site																											
LITL SP Swyd: CD0510-Telecom Equipment Delivered at Site	03-May-2016*		0	LITL SP Swyd: CD0510-Telecom Equipment Delivered at Site																											
<b>e Earthworks</b>																															
LITL-SP Swyd: Earthworks	03-May-2013*	21-Dec-2013	0	LITL-SP Swyd: Earthworks																											
<b>f Civil/Structures</b>																															
LITL-SP Swyd: Civil Works Control Bldg Erect/Outfit	05-Nov-2014*	12-May-2015	0	LITL-SP Swyd: Civil Works Control Bldg Erect/Outfit																											
LITL-SP Swyd: Civil Works Foundations/Structures for Outdoor Equipment	05-Nov-2014	07-Aug-2015	0	LITL-SP Swyd: Civil Works Foundations/Structures for Outdoor Equipment																											
<b>g Installation</b>																															
LITL-SP Swyd: Install Indoor equipment	13-May-2015	03-Nov-2016	0	LITL-SP Swyd: Install Indoor equipment																											
LITL-SP Swyd: Install Outdoor equipment	08-Aug-2015	14-Dec-2016	0	LITL-SP Swyd: Install Outdoor equipment																											
<b>h Telecom</b>																															
LITL-SP Swyd: Install Telecom	03-Jun-2016	28-Aug-2016	0	LITL-SP Swyd: Install Telecom																											
<b>j Completions</b>																															
LITL-SP Swyd: Telecom Static Commissioning	28-Aug-2016	27-Sep-2016	0	LITL-SP Swyd: Telecom Static Commissioning																											
LITL-SP Swyd: Static Commissioning	27-Sep-2016	13-Jan-2017	0	LITL-SP Swyd: Static Commissioning																											
LITL-SP Swyd: Dynamic Commissioning (up to takeover)	09-Apr-2017	18-May-2017	0	LITL-SP Swyd: Dynamic Commissioning (up to takeover)																											
<b>LITL-Nfld TL Line Crossing Mods</b>																															
<b>LITL-Nfld HVac Crossing Mods</b>																															
<b>1 Key Date</b>																															
KD=LITL-Nfld ac TL Crossing Mods: Start	14-Aug-2013		0	KD=LITL-Nfld ac TL Crossing Mods: Start																											
KD=LITL-Nfld ac TL Crossing Mods: Start of TL Shutdowns TL218,242,265>268	20-Feb-2014		0	Mod: Start of TL Shutdowns TL218,242,265>268																											

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 ■ Baseline Rev B2 ■ DG3 Rev B1



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
KD=LITL-Nfld ac TL Crossing Mods: Complete TL218,242,265>268		20-Sep-2014	0	TL-Nfld ac TL Crossing Mods: Complete TL218,242,265>268																											
KD=LITL-Nfld ac TL Crossing Mods: Complete Mods 1 to 6		02-Dec-2014	0	KD=LITL-Nfld ac TL Crossing Mods: Complete Mods 1 to 6																											
<b>e Earthworks</b>																															
LITL-Nfld ac TL Crossing Mods: Earth ROW Clearing TL218,242,265>268	14-Aug-2013*	19-Sep-2013	0	Earth ROW Clearing TL218,242,265>268																											
LITL-Nfld ac TL Crossing Mods: Earth ROW Clearing- Mods 1 to 6	29-Aug-2014*	09-Oct-2014	0	LITL-Nfld ac TL Crossing Mods: Earth ROW Clearing- Mods 1 to 6																											
<b>f Civil/Structures</b>																															
LITL-Nfld ac TL Crossing Mods: Civil TL218,242,265>268	20-Sep-2013	12-Nov-2013	0	TL Crossing Mods: Civil TL218,242,265>268																											
LITL-Nfld ac TL Crossing Mods: Civil- Mod 3	30-Sep-2014	14-Oct-2014	0	LITL-Nfld ac TL Crossing Mods: Civil- Mod 3																											
<b>g Installation</b>																															
LITL-Nfld ac TL Crossing Mods: Install TL218,242,265>268	20-Nov-2013	19-Feb-2014	0	TL Crossing Mods: Install TL218,242,265>268																											
LITL-Nfld ac TL Crossing Mods: Install- Mods 1 to 6	31-Aug-2014	27-Nov-2014	0	LITL-Nfld ac TL Crossing Mods: Install- Mods 1 to 6																											
<b>j Completions</b>																															
LITL-Nfld ac TL Crossing Mods Completions: Line Final Inspections TL218,242,265>268 (static)		19-Feb-2014	0	Line Final Inspections TL218,242,265>268 (static)																											
LITL-Nfld ac TL Crossing Mods Completions: Shut Down & Connect to Existing Lines TL218,242,265>268 (static)	20-Feb-2014	10-Sep-2014	0	Connect to Existing Lines TL218,242,265>268 (static)																											
LITL-Nfld ac TL Crossing Mods Completions: ReConnect in SP Swyrd- TL218,242,265>268 (static)	11-Sep-2014	20-Sep-2014	0	Completions: ReConnect in SP Swyrd- TL218,242,265>268 (static)																											
LITL-Nfld ac TL Crossing Mods Completions: Line Final Inspections- Mods 1 to 6 (st	28-Nov-2014	02-Dec-2014	0	Completions: Line Final Inspections- Mods 1 to 6 (static)																											
<b>LITL (SOPSC) SP Synchronous Condenser</b>																															
<b>LITL-SP Synch Cond</b>																															
<b>1 Key Date</b>																															
KD=LITL SP SynCond: CD0503-Start Earth Works	03-May-2013		0	SynCond: CD0503-Start Earth Works																											
KD=LITL SP SynCond: CD0503-Earthworks Complete		21-Dec-2013	0	LITL SP SynCond: CD0503-Earthworks Complete																											
KD=LITL SP SynCond: CD0502-Start Civil Works	05-Nov-2014		0	KD=LITL SP SynCond: CD0502-Start Civil Works																											
KD=LITL SP SynCond: CD0502-Building Ready for Equipment Installation		07-Aug-2015	0	KD=LITL SP SynCond: CD0502-Building Ready for Equipment Installation																											
KD=LITL SP SynCond: CD0534-Complete Ready for Enerization		30-Dec-2016	0	KD=LITL SP SynCond: CD0534-Complete Ready for Enerization																											
KD=LITL SP SynCond: Ready for Operations (RFO)		27-Jun-2017	0	KD=LITL SP SynCond: Ready for Operations (RFO)																											
<b>c Materials</b>																															
LITL SP SynCond: CD0534-Synch Cond/Equipment Available for Delivery to Site (1st unit)	02-May-2014*		0	Synch Cond/Equipment Available for Delivery to Site (1st unit)																											
LITL SP SynCond: PD0537-Transformers Delivered at Site	06-Jun-2014*		0	LITL SP SynCond: PD0537-Transformers Delivered at Site																											
LITL SP SynCond: CD0534-Synch Cond/Equipment Available for Delivery to Site (2nd unit)	03-Nov-2014*		0	Synch Cond/Equipment Available for Delivery to Site (2nd unit)																											
LITL SP SynCond: PD0505-Swyd equipment Delivered at Site	03-Dec-2014*		0	LITL SP SynCond: PD0505-Swyd equipment Delivered at Site																											
LITL SP SynCond: CD0534-Synch Cond/Equipment Available for Delivery to Site (3rd unit)	14-Dec-2014*		0	CD0534-Synch Cond/Equipment Available for Delivery to Site (3rd unit)																											
LITL SP SynCond: CD0510-Telecom Equipment Delivered at Site	01-Apr-2016*		0	LITL SP SynCond: CD0510-Telecom Equipment Delivered at Site																											
<b>e Earthworks</b>																															
LITL-SPSynCd: Earthworks	03-May-2013*	21-Dec-2013	0	LITL-SPSynCd: Earthworks																											
<b>f Civil/Structures</b>																															
LITL-SPSynCd: Outdoor equipment foundations/structure	05-Nov-2014	07-Aug-2015	0	LITL-SPSynCd: Outdoor equipment foundations/structure																											
LITL-SPSynCd: Bldg Foundation/Erect/Outfit	05-Nov-2014*	07-Aug-2015	0	LITL-SPSynCd: Bldg Foundation/Erect/Outfit																											
<b>g Installation</b>																															



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
LITL-SPSynCd: Outdoor equipment Installation	08-Aug-2015	03-Nov-2015	0	LITL-SPSynCd: Outdoor equipment Installation																											
LITL-SPSynCd: Indoor Installation of 1st Unit	08-Aug-2015	05-Aug-2016	0	LITL-SPSynCd: Indoor Installation of 1st Unit																											
LITL-SPSynCd: Indoor Installation of 2nd Unit	04-Nov-2015	03-Sep-2016	0	LITL-SPSynCd: Indoor Installation of 2nd Unit																											
LITL-SPSynCd: Indoor Installation of 3rd Unit	13-Feb-2016	30-Nov-2016	0	LITL-SPSynCd: Indoor Installation of 3rd Unit																											
<b>h Telecom</b>																															
LITL-SPSynCd: Telecom	01-Apr-2016	30-May-2016	0	LITL-SPSynCd: Telecom																											
<b>j Completions</b>																															
LITL-SPSynCd: Telecom - Static Commissioning	31-May-2016	19-Jun-2016	0	LITL-SPSynCd: Telecom - Static Commissioning																											
LITL-SPSynCd: Static Commissioning	03-Aug-2016	30-Dec-2016	0	LITL-SPSynCd: Static Commissioning																											
LITL-SPSynCd: Dynamic Commissioning (up to takeover)	09-May-2017	27-Jun-2017	0	LITL-SPSynCd: Dynamic Commissioning (up to takeover)																											
<b>Muskrat Falls - Generation (MGen)</b>																															
<b>LCP Telecoms-Lab</b>																															
<b>LCP telecoms</b>																															
<b>j Completions</b>																															
LCP-Telecom MGen (Lab): Dynamic Commissioning	29-Aug-2016	18-Sep-2016	0	LCP-Telecom MGen (Lab): Dynamic Commissioning																											
<b>MGen Eng/Procure</b>																															
<b>MF Eng/Procure</b>																															
<b>2 Eng/Procure</b>																															
MFG - ENG - RFI: MGen RFI Engineering	28-Oct-2011*	30-May-2013	0	Engineering																											
MFG - ENG - AFC: MFG AFC Engineering	05-Dec-2011*	25-Nov-2013	0	Engineering																											
<b>MGen Access Road</b>																															
<b>MGen Access Road</b>																															
<b>1 Key Date</b>																															
KD=MFG -South Side Site Access Road Start Construction	02-Jun-2012		0	ad Start Construction																											
KD=MFG -South Side Site Access Road Passable		15-Oct-2012	0	e Site Access Road Passable																											
KD=MFG -South Side Site Access Road & Temp. McKenzie Bridge - Complete		05-Dec-2012	0	. McKenzie Bridge - Complete																											
KD=MFG -South Side Site Access Road & perm. McKenzies Bridge-Complete		08-Oct-2013	0	s Road & perm. McKenzies Bridge-Complete																											
<b>c Materials</b>																															
MFG-South Side Site Access: McKenzie River Temp Bridge - Transport To Site		27-Sep-2012*	0	p Bridge - Transport To Site																											
MFG-South Side Site Access Bridge Rebar - Transport To Site		09-Apr-2013*	0	ess Bridge Rebar - Transport To Site																											
MFG-South Side Site Access: McKenzie River Bridge Deck Beams - Transport To Site		04-Jul-2013*	0	r Bridge Deck Beams - Transport To Site																											
<b>e Earthworks</b>																															
MFG-South Side Site Access Tote Road - Up to Passable Site Access	02-Jun-2012*	15-Oct-2012	0	p Passable Site Access																											
MFG-South Side Site Access Road Earthworks - McKenzie and other Bridges	16-Oct-2012	05-Dec-2012	0	McKenzie and other Bridges																											
<b>g Installation</b>																															
MFG-South Side Site Access McKenzie Temp. bridge	28-Sep-2012	13-Oct-2012	0	ess McKenzie Temp. bridge																											
MFG-South Side Site Access permanent McKenzie bridge	01-May-2013	08-Oct-2013	0	Access permanent McKenzie bridge																											
<b>MGen Construction Power</b>																															
<b>MF Gen Constr Power</b>																															
<b>1 Key Date</b>																															
KD=MFG -Start Construction Power	23-Jun-2012		0	rt Construction Power																											

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 ■ Baseline Rev B2 ■ DG3 Rev B1





Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>KD=MFG ConstrPwr -25 kV Construction Power Available for Starter Camp</b>																															
<b>KD=MFG ConstrPwr -25 kV Construction Power Available for Main Camp</b>																															
<b>c Materials</b>																															
<b>MFG-ConsPwr Material: 25 kV Switchgear Arrive at Site</b>																															
<b>e Earthworks</b>																															
<b>MFG-ConsPwr Earthworks: Clear North Spur ROW and Swyd</b>																															
<b>MFG-ConsPwr Earthworks: Clear South Side ROW</b>																															
<b>g Installation</b>																															
<b>MFG-ConsPwr Installation: Poles/Lines/Equip for Starter Camp</b>																															
<b>MFG-ConsPwr Installation Remaining Poles/Lines/Equip for Main Camp</b>																															
<b>MFG-ConsPwr Installation: Equipment for Main Camp</b>																															
<b>j Completions</b>																															
<b>MFG-ConsPwr: Completions (Static - Dynamic Comm) for Starter Camp</b>																															
<b>MFG-ConsPwr: Completions (Static - Dynamic Comm) for Main Camp</b>																															
<b>MFGGen Reservoir Preparation</b>																															
<b>MF Reservoir</b>																															
<b>1 Key Date</b>																															
<b>KD=MFG-Reservoir: Start Reservoir Works</b>																															
<b>KD=MFG Reservoir-Ready to Impound</b>																															
<b>KD=MFG Reservoir -Impoundment Complete</b>																															
<b>e Earthworks</b>																															
<b>MFG-Reservoir North:Clearing</b>																															
<b>MFG-Reservoir South:Clearing</b>																															
<b>MFG-Reservoir Aquatic Habitat Restoration</b>																															
<b>f Civil/Structures</b>																															
<b>MFG-Reservoir :Upstream &amp; Downstream- Log Booms</b>																															
<b>g Installation</b>																															
<b>MFG-Reservoir Reservoir Works Complete</b>																															
<b>n Impoundment</b>																															
<b>MFG Reservoir - Diversion Head Pond</b>																															
<b>MFG Reservoir - Ready for Diversion Headpond</b>																															
<b>MFG Reservoir-Ready to Impound</b>																															
<b>MFG Reservoir -Impoundment</b>																															
<b>MFGGen Accommodations</b>																															
<b>MFGGen Accommodations</b>																															
<b>1 Key Date</b>																															
<b>KD=MFG Camp -150 Bed Capacity (Starter Camp) - Start Construction</b>																															
<b>KD=MFG Camp -150 Bed Capacity (Starter Camp) - Ready to Occupation</b>																															
<b>KD=MFG Camp -500 Bed Capacity - Complete</b>																															
<b>KD=MFG Camp -1000 Bed Capacity - Complete</b>																															
<b>KD=MFG Camp -1500 Bed Capacity - Complete</b>																															
<b>KD=MFG Camp -Accomodations Complete</b>																															



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>g Installation</b>																															
MFG-Camp Installation: Starter Camp (150 bed) and Utilities	12-Oct-2012*	19-Dec-2012	0	Camp (150 bed) and Utilities																											
MFG-Camp Installation: 500 bed sections/Admin bldgs/Utilities	20-Dec-2012	30-Jul-2013	0	sections/Admin bldgs/Utilities																											
MFG-Camp Installation: 1000 bed sections and Utilities	23-May-2013*	02-Aug-2013	0	Installation: 1000 bed sections and Utilities																											
MFG-Camp Installation: 1500 bed sections and Utilities	03-Aug-2013	14-Sep-2013	0	Installation: 1500 bed sections and Utilities																											
<b>j Completions</b>																															
MFG-Camp Completions: 150 bed - Starter camp complete		19-Dec-2012	0	150 bed - Starter camp complete																											
MFG-Camp Completions: 500 bed sections/Admin bldgs/Utilities Complete		30-Jul-2013	0	sections/Admin bldgs/Utilities Complete																											
MFG-Camp Completions: 1000 bed - Complete		02-Aug-2013	0	Camp Completions: 1000 bed - Complete																											
MFG-Camp Completions: 1500 bed - Complete		14-Sep-2013	0	Camp Completions: 1500 bed - Complete																											
<b>MFGen North Spur Stabilization</b>																															
<b>MF North Spur</b>																															
<b>1 Key Date</b>																															
KD=MFG North Spur - Start Work	01-Jul-2014		0	KD=MFG North Spur - Start Work																											
KD=MFG North Spur - Ready for Impoundment (Complete)		30-Sep-2016	0	KD=MFG North Spur - Ready for Impoundment (Complete)																											
KD=MFG North Spur - Ready for Diversion Headpond		25-Oct-2016	-348	KD=MFG North Spur - Ready for Diversion Headpond																											
<b>e Earthworks</b>																															
MFG-North Spur: North Spur earthworks Phase 1 & cut-off	01-Jul-2014*	15-Oct-2015	0	MFG-North Spur: North Spur earthworks Phase 1 & cut-off																											
MFG-North Spur: North Spur earthworks Phase 2	02-Jun-2016*	21-Sep-2016	0	MFG-North Spur: North Spur earthworks Phase 2																											
<b>f Civil/Structures</b>																															
MFG-North Spur Civil: Refurbish existing wells #check#	29-Jul-2014	14-Jun-2015	0	MFG-North Spur Civil: Refurbish existing wells #check#																											
<b>g Installation</b>																															
MFG-North Spur: Instrumentation	08-Jul-2015	15-Oct-2015	0	MFG-North Spur: Instrumentation																											
MFG-North Spur: Pumpwells and Relief Wells	14-Jan-2016	30-Sep-2016	0	MFG-North Spur: Pumpwells and Relief Wells																											
<b>MFGen North RCC Dam</b>																															
<b>MF North Dam</b>																															
<b>1 Key Date</b>																															
KD=MFG North Dam - Downstream Cofferdam(6) Complete		24-Oct-2016	-348	KD=MFG North Dam - Downstream Cofferdam(6) Complete																											
KD=MFG North Dam - Upstream Cofferdam(5) Complete		25-Oct-2016	-348	KD=MFG North Dam - Upstream Cofferdam(5) Complete																											
KD=MFG North Dam - Ready to Impound		03-Nov-2017	-191	KD=MFG North Dam - Ready to Impound																											
KD=MFG North Dam - Complete		30-Nov-2017	-218	KD=MFG North Dam - Complete																											
<b>e Earthworks</b>																															
MFG-North Dam: Upstream Cofferdam(5)	21-Jun-2016	25-Oct-2016	-348	MFG-North Dam: Upstream Cofferdam(5)																											
MFG-North Dam: Downstream Cofferdam(6)	10-Oct-2016	24-Oct-2016	-348	MFG-North Dam: Downstream Cofferdam(6)																											
MFG-North Dam Earth: Foundation Preparation	25-Oct-2016	31-May-2017	-294	MFG-North Dam Earth: Foundation Preparation																											
MFG-North Dam Earth: Curtain grouting	08-Jul-2017	14-Oct-2017	-336	MFG-North Dam Earth: Curtain grouting																											
<b>f Civil/Structures</b>																															
MFG-North Dam: CVC D/S Walls & Abutments	28-Nov-2016	29-Jun-2017	-284	MFG-North Dam: CVC D/S Walls & Abutments																											
MFG-North Dam: RCC	18-Jun-2017	30-Sep-2017	-334	MFG-North Dam: RCC																											
MFG-North Dam: CVC	17-Aug-2017	03-Nov-2017	-191	MFG-North Dam: CVC																											
<b>g Installation</b>																															
MFG-North Dam Install: Outfitting (Lighting/HVAC/Etc)	22-Sep-2017	03-Nov-2017	-314	MFG-North Dam Install: Outfitting (Lighting/HVAC/Etc)																											



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012		2013		2014		2015		2016		2017		2018			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>j Completions</b>				MFG-North Dam Completions: Static - Dynamic Comm (Lighting/HVAC/Etc) ■																	
<b>MFGGen Spillway/Diverson</b>																					
<b>MF Gen</b>																					
<b>1 Key Date</b>																					
KD=MFG Reservoir-End of Spring Flood (June 15 2015)	15-Jun-2015*		0	KD=MFG Reservoir-End of Spring Flood (June 15 2015) ◆																	
KD=MFG Reservoir-End of Spring Flood (June 15 2016)	15-Jun-2016*		0	KD=MFG Reservoir-End of Spring Flood (June 15 2016) ◆																	
KD=MFG Reservoir-End of Spring Flood (May 1 2017)	01-May-2017*		0	KD=MFG Reservoir-End of Spring Flood (May 1 2017) ◆																	
<b>MF Bulk Excavation</b>																					
<b>1 Key Date</b>																					
KD=MFG-SpilDiv1: Spillway Cofferdams (1, 2 & 10) Complete		26-Oct-2013	0	1: Spillway Cofferdams (1, 2 & 10) Complete ◆																	
KD=MFG-SpilDiv1: Cofferdams 1 & 2 Removed		06-Jul-2016	-348	KD=MFG-SpilDiv1: Cofferdams 1 & 2 Removed ▼ ◆																	
<b>e Earthworks</b>																					
MFG-SpilDiv1: Excavation - Spillway	05-Apr-2013*	22-Jul-2013	0	MFG-SpilDiv1: Excavation - Spillway ■																	
MFG-SpilDiv1: Civil Works: Cofferdams 1/ 2/Riverside RCC(10)	23-Jul-2013	26-Oct-2013	0	Works: Cofferdams 1/ 2/Riverside RCC(10) ■																	
MFG-SpilDiv1: Civil Works:Cofferdams 1/2/Riverside RCC(10) Removed	15-Jun-2016	06-Jul-2016	-348	MFG-SpilDiv1: Civil Works:Cofferdams 1/2/Riverside RCC(10) Removed ■																	
<b>Spillway/Div Ph 1</b>																					
<b>1 Key Date</b>																					
KD=MFG SW/PH-Access Available Across Structures		14-Nov-2015	0	KD=MFG SW/PH-Access Available Across Structures ◆																	
KD=MFG Spillway -Phase I Ready for Diversion		14-Feb-2016	-227	KD=MFG Spillway -Phase I Ready for Diversion ▼ ◆																	
<b>c Materials</b>																					
MFG-SpilDiv1 Materials: CD0510-Telecom Equipment Delivered at Site	14-Oct-2015		-227	-SpilDiv1 Materials: CD0510-Telecom Equipment Delivered at Site ▼ ◆																	
<b>f Civil/Structures</b>																					
MFG-SpilDiv1 Civil:: Ph1 Foundation Preparation - Spillway	11-Nov-2013	04-Apr-2014	-15	Civil:: Ph1 Foundation Preparation - Spillway ■																	
MFG-SpilDiv1 Civil: Ph1 Foundation Preparation - other Structures req for Diversion	11-Nov-2013	01-Aug-2014	-15	Preparation - other Structures req for Diversion ■																	
MFG-SW CH0007 Mobilization Complete (Work can begin)	11-Nov-2013*		-25	07 Mobilization Complete (Work can begin) ▼ ◆																	
MFG-SpilDiv1 Civil: Ph1 Structures - other Structures req for Diversion	27-Nov-2013	15-Feb-2015	-4	Structures - other Structures req for Diversion ■																	
MFG-SpilDiv1 Civil: Ph1 Structures - Spillway	29-Jan-2014	15-Feb-2015	-164	MFG-SpilDiv1 Civil: Ph1 Structures - Spillway ■																	
MFG-SpilDiv1 Civil: Ph1 Structures - Upstream Temp bridge	07-Mar-2014	14-Jun-2014	-15	Div1 Civil: Ph1 Structures - Upstream Temp bridge ■																	
<b>g Installation</b>																					
MFG-SpilDiv1 Install: Hydro-Mech Spillway (gates/Stoplogs)	16-Feb-2015	02-Dec-2015	-227	MFG-SpilDiv1 Install: Hydro-Mech Spillway (gates/Stoplogs) ■																	
<b>h Telecom</b>																					
MFG-SpilDiv1 Install: Install Telecom	14-Oct-2015	07-Nov-2015	-227	MFG-SpilDiv1 Install: Install Telecom ■																	
<b>j Completions</b>																					
MFG-SpilDiv1 Install: Telecom Static Comm	08-Nov-2015	02-Dec-2015	-227	MFG-SpilDiv1 Install: Telecom Static Comm ■																	
MFG-SpilDiv1 Completions: Hydro-Mech Spillway (static - dynamic-gates/Stoplogs)	03-Dec-2015	14-Feb-2016	-227	Completions: Hydro-Mech Spillway (static - dynamic-gates/Stoplogs) ■																	
<b>Spillway Ph2-Bay 1</b>																					
<b>1 Key Date</b>																					
KD=MFG Spillway -Complete Phase 2 - Gate 1		25-Apr-2017	-345	KD=MFG Spillway -Complete Phase 2 - Gate 1 ▼ ◆																	
<b>f Civil/Structures</b>																					
MFG-SpilDiv2 Place Stoplogs and Dewater Bay 1	26-Oct-2016	27-Oct-2016	-348	MFG-SpilDiv2 Place Stoplogs and Dewater Bay 1 ■																	
MFG-SpilDiv2 Civil Works: Rollway 1	28-Oct-2016	13-Mar-2017	-345	MFG-SpilDiv2 Civil Works: Rollway 1 ■																	



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>g Installation</b>																															
MFG-SpilDiv2 Install: Stoplog/Gate Guides Gate 1	14-Mar-2017	17-Apr-2017	-345	MFG-SpilDiv2 Install: Stoplog/Gate Guides Gate 1																											
<b>j Completions</b>																															
MFG-SpilDiv2 Completions: Spillway Gates Bay 1 - Dry Test (Static)	18-Apr-2017	25-Apr-2017	-345	MFG-SpilDiv2 Completions: Spillway Gates Bay 1 - Dry Test (Static)																											
<b>Spillway Ph2-Bay 3</b>																															
<b>1 Key Date</b>																															
KD=MFG Spillway -Complete Phase 2 - Gate 3		01-Nov-2017	-339	KD=MFG Spillway -Complete Phase 2 - Gate 3																											
<b>f Civil/Structures</b>																															
MFG-SpilDiv2 Place Stoplogs and Dewater Bay 3	30-May-2017	30-May-2017	-345	MFG-SpilDiv2 Place Stoplogs and Dewater Bay 3																											
MFG-SpilDiv2 Civil Works: Rollway 3	31-May-2017	19-Sep-2017	-339	MFG-SpilDiv2 Civil Works: Rollway 3																											
<b>g Installation</b>																															
MFG-SpilDiv2 Install: Guides Rollway 3 -Phase 2	20-Sep-2017	24-Oct-2017	-339	MFG-SpilDiv2 Install: Guides Rollway 3 -Phase 2																											
<b>j Completions</b>																															
MFG-SpilDiv2 Completions: Spillway Gates Bay 3 - Dry Test (static)	25-Oct-2017	01-Nov-2017	-339	MFG-SpilDiv2 Completions: Spillway Gates Bay 3 - Dry Test (static)																											
<b>Spillway Ph2-Bay 5</b>																															
<b>1 Key Date</b>																															
KD=MFG Spillway -Complete Phase 2 - Gate 5		01-Nov-2017	-339	KD=MFG Spillway -Complete Phase 2 - Gate 5																											
<b>f Civil/Structures</b>																															
MFG-SpilDiv2 Place Stoplogs and Dewater Bay 5	30-May-2017	30-May-2017	-345	MFG-SpilDiv2 Place Stoplogs and Dewater Bay 5																											
MFG-SpilDiv2 Civil Works: Rollway 5	31-May-2017	19-Sep-2017	-339	MFG-SpilDiv2 Civil Works: Rollway 5																											
<b>g Installation</b>																															
MFG-SpilDiv2 Install: Guides Rollway 5 - Phase 2	20-Sep-2017	24-Oct-2017	-339	MFG-SpilDiv2 Install: Guides Rollway 5 - Phase 2																											
<b>j Completions</b>																															
MFG-SpilDiv2 Completions: Spillway gates Rollway 5 - Dry test (static)	25-Oct-2017	01-Nov-2017	-339	MFG-SpilDiv2 Completions: Spillway gates Rollway 5 - Dry test (static)																											
<b>Spillway Ph2-Bay 2</b>																															
<b>1 Key Date</b>																															
KD=MFG Spillway -Complete Phase 2 - Gate 2		29-Apr-2018	-212	KD=MFG Spillway -Complete Phase 2 - Gate 2																											
<b>f Civil/Structures</b>																															
MFG-SpilDiv2 Place Stoplogs and Dewater Bay 2	05-Nov-2017	05-Nov-2017	-187	MFG-SpilDiv2 Place Stoplogs and Dewater Bay 2																											
MFG-SpilDiv2 Civil Works: Rollway 2	06-Nov-2017	17-Mar-2018	-208	MFG-SpilDiv2 Civil Works: Rollway 2																											
<b>g Installation</b>																															
MFG-SpilDiv2 Install: Guides Rollway 2 - Phase 2	18-Mar-2018	21-Apr-2018	-211	MFG-SpilDiv2 Install: Guides Rollway 2 - Phase 2																											
<b>j Completions</b>																															
MFG-SpilDiv2 Completions: Spillway Gates Bay 2 - Dry Test (static)	22-Apr-2018	29-Apr-2018	-212	MFG-SpilDiv2 Completions: Spillway Gates Bay 2 - Dry Test (static)																											
<b>Spillway Ph2-Bay 4</b>																															
<b>1 Key Date</b>																															
KD=MFG Spillway -Complete Phase 2 - Gate 4		29-Apr-2018	-212	KD=MFG Spillway -Complete Phase 2 - Gate 4																											
<b>f Civil/Structures</b>																															
MFG-SpilDiv2 Place Stoplogs and Dewater Bay 4	05-Nov-2017	05-Nov-2017	-187	MFG-SpilDiv2 Place Stoplogs and Dewater Bay 4																											
MFG-SpilDiv2 Civil Works: Rollway 4	07-Nov-2017	17-Mar-2018	-208	MFG-SpilDiv2 Civil Works: Rollway 4																											
<b>g Installation</b>																															
MFG-SpilDiv2 Install: Guides Rollway 4 - Phase 2	18-Mar-2018	21-Apr-2018	-211	MFG-SpilDiv2 Install: Guides Rollway 4 - Phase 2																											



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>j Completions</b>																															
MFG-SpilDiv2 Completions: Spillway gates Rollway 4 - Dry test (static)	22-Apr-2018	29-Apr-2018	-212	MFG-SpilDiv2 Completions: Spillway gates Rollway 4 - Dry test (static)																											
<b>MFGGen Power House &amp; Intake</b>																															
<b>Key Dates</b>																															
<b>1 Key Date</b>																															
KD=MFG-PH CH0007 Mobilization Complete	11-Nov-2013		-25	KD=MFG-PH CH0007 Mobilization Complete																											
KD=MFG -Main Powerhouse Bridge Crane Ready		17-Jul-2015	-63	KD=MFG -Main Powerhouse Bridge Crane Ready																											
KD=MFGGen Unit 1 Ready for Operations (RFO)		30-Dec-2017	-176	KD=MFGGen Unit 1 Ready for Operations (RFO)																											
KD=MFGGen Unit 2 Ready for Operations (RFO)		18-Feb-2018	-176	KD=MFGGen Unit 2 Ready for Operations (RFO)																											
KD=MFGGen Unit 3 Ready for Operations (RFO)		12-Apr-2018	-143	KD=MFGGen Unit 3 Ready for Operations (RFO)																											
KD=MFGGen Unit 4 Ready for Operations (RFO)		22-May-2018	-143	KD=MFGGen Unit 4 Ready for Operations (RFO)																											
<b>MF Bulk Excavation</b>																															
<b>1 Key Date</b>																															
KD=MFG-PH: CH0006 Bulk Exca Equip Mob Complete	13-Jan-2013*		0	Bulk Exca Equip Mob Complete																											
<b>e Earthworks</b>																															
MFG-PH Excavation: Powerhouse (incl Cofferdam 3)	13-Jan-2013	25-Oct-2013	0	Powerhouse (incl Cofferdam 3)																											
<b>PH Tailrace Excavation</b>																															
<b>e Earthworks</b>																															
MFG-PH Earth: Tail race plug excavation	14-Aug-2016	12-Sep-2016	-122	MFG-PH Earth: Tail race plug excavation																											
<b>PH South Service Bay &amp; South Transition dam</b>																															
<b>f1 civil Phase-1</b>																															
MFG-PH Civil: South Service Bay (Including Enclosure)	04-Nov-2013*	30-Apr-2015	-99	Civil: South Service Bay (Including Enclosure)																											
MFG-PH Civil: South transition dam	30-May-2014*	31-Oct-2014	0	MFG-PH Civil: South transition dam																											
<b>g Installation</b>																															
MFG-PH Install: Powerhouse crane	01-May-2015	11-Jun-2015	-48	MFG-PH Install: Powerhouse crane																											
MFG-PH Civil: South Service Bay Bldg Utilities	01-May-2015	30-May-2015	-99	MFG-PH Civil: South Service Bay Bldg Utilities																											
<b>h Telecom</b>																															
MFG-PH: Install Telecom South Service bay	16-May-2015	09-Jun-2015	-99	MFG-PH: Install Telecom South Service bay																											
<b>j Completions</b>																															
MFG-PH: Static - Dynamic Checks South Service Bay Utilities	09-Jun-2015	26-Jun-2015	-96	MFG-PH: Static - Dynamic Checks South Service Bay Utilities																											
MFG-PH Telecom: Static Comm-South Service bay	10-Jun-2015	26-Jun-2015	-96	MFG-PH Telecom: Static Comm-South Service bay																											
MFG-PH Completions: Dynamic Comm. Overhead crane	27-Jun-2015	17-Jul-2015	-63	MFG-PH Completions: Dynamic Comm. Overhead crane																											
<b>Power House T/G Unit 1 Area</b>																															
<b>f1 civil Phase-1</b>																															
MFG-PH Civil: Unit 1 Structure Ph 1 (bldg enclosed)	11-Dec-2013	30-Sep-2015	-54	PH Civil: Unit 1 Structure Ph 1 (bldg enclosed)																											
MFG-PH Civil: Unit 1 Intake Structure	29-Mar-2014	31-Mar-2016	-205	MFG-PH Civil: Unit 1 Intake Structure																											
<b>f2 Civil/Install</b>																															
MFG-PH Install: T/G Embedded Parts & Structure Ph 2 Unit 1	01-Oct-2015	30-Nov-2016	-100	MFG-PH Install: T/G Embedded Parts & Structure Ph 2 Unit 1																											
<b>g Installation</b>																															
MFG-PH Install: Hydro-mech Draft tube (incl Dry Test) Unit 1	01-Oct-2015	16-May-2016	-54	MFG-PH Install: Hydro-mech Draft tube (incl Dry Test) Unit 1																											
MFG-PH Install/Comm: T/G Ancillary Systems - Unit 1	01-Oct-2015	29-Jul-2017	-100	MFG-PH Install/Comm: T/G Ancillary Systems - Unit 1																											
MFG-PH Install/Comm: Bldg Utility Systems - Unit 1	01-Oct-2015	30-Nov-2016	-100	MFG-PH Install/Comm: Bldg Utility Systems - Unit 1																											

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 ■ Baseline Rev B2 ■ DG3 Rev B1



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>MFG-PH Install: Hydro-mech Intake (incl Dry Test) Unit 1</b>	01-Apr-2016	10-Nov-2016	-205	MFG-PH Install: Hydro-mech Intake (incl Dry Test) Unit 1																											
<b>MFG-PH Install: Pit free - Unit 1</b>		30-Nov-2016	-100	MFG-PH Install: Pit free - Unit 1																											
<b>MFG-PH Install: Turbine/generator - Unit 1 Pit Free to Dry Test</b>	30-Nov-2016	29-Jul-2017	-100	MFG-PH Install: Turbine/generator - Unit 1 Pit Free to Dry Test																											
<b>h Telecom</b>				MFG-PH: Install Telecom - Unit 1																											
<b>MFG-PH: Install Telecom - Unit 1</b>	29-Jan-2016	27-Apr-2016	-54	MFG-PH: Install Telecom - Unit 1																											
<b>j Completions</b>				MFG-PH Telecom: Static Comm-Unit 1																											
<b>MFG-PH Telecom: Static Comm-Unit 1</b>	28-Apr-2016	17-May-2016	-54	MFG-PH Telecom: Static Comm-Unit 1																											
<b>MFG-PH Completions: Static Comm. (Dry Tests) - Unit 1</b>	29-Jul-2017	21-Aug-2017	-100	MFG-PH Completions: Static Comm. (Dry Tests) - Unit 1																											
<b>MFG-PH Completions: Ready to Turn - Unit 1</b>		21-Aug-2017	-100	MFG-PH Completions: Ready to Turn - Unit 1																											
<b>MFG-PH Completions: WATER Available- Unit 1</b>		19-Nov-2017	-186	MFG-PH Completions: WATER Available- Unit 1																											
<b>MFG-PH Completions: Dynamic Comm. (Wet Tests to takeover) T/G- Unit 1</b>	21-Nov-2017	30-Dec-2017	-176	MFG-PH Completions: Dynamic Comm. (Wet Tests to takeover) T/G- Unit 1																											
<b>MFG-PH Completions: Ready for Power Generation - Unit 1</b>		30-Dec-2017	-176	MFG-PH Completions: Ready for Power Generation - Unit 1																											
<b>Power House T/G Unit 2 Area</b>																															
<b>f1 civil Phase-1</b>				MFG-PH Civil: Unit 2 Structure Ph 1 (bldg enclosed)																											
<b>MFG-PH Civil: Unit 2 Structure Ph 1 (bldg enclosed)</b>	12-Feb-2014	11-Nov-2015	-29	MFG-PH Civil: Unit 2 Structure Ph 1 (bldg enclosed)																											
<b>MFG-PH Civil: Unit 2 Intake Structure</b>	06-Apr-2014	29-Jun-2016	-281	MFG-PH Civil: Unit 2 Intake Structure																											
<b>f2 Civil/Install</b>				MFG-PH Install:T/G Embedded Parts & Structure Ph 2 Unit 2																											
<b>MFG-PH Install:T/G Embedded Parts &amp; Structure Ph 2 Unit 2</b>	12-Nov-2015	11-Jan-2017	-92	MFG-PH Install:T/G Embedded Parts & Structure Ph 2 Unit 2																											
<b>g Installation</b>				MFG-PH Install: Hydro-mech Draft tube (incl Dry Test) Unit 2																											
<b>MFG-PH Install: Hydro-mech Draft tube (incl Dry Test) Unit 2</b>	12-Nov-2015	28-Apr-2016	-29	MFG-PH Install: Hydro-mech Draft tube (incl Dry Test) Unit 2																											
<b>MFG-PH Install/Comm: Bldg Utility Systems - Unit 2</b>	12-Nov-2015	11-Jan-2017	-92	MFG-PH Install/Comm: Bldg Utility Systems - Unit 2																											
<b>MFG-PH Install/Comm: T/G Ancillary Systems - Unit 2</b>	12-Nov-2015	07-Sep-2017	-92	MFG-PH Install/Comm: T/G Ancillary Systems - Unit 2																											
<b>MFG-PH Install: Hydro-mech Intake (incl Dry Test) Unit 2</b>	30-Jun-2016	08-Feb-2017	-281	MFG-PH Install: Hydro-mech Intake (incl Dry Test) Unit 2																											
<b>MFG-PH Install: Pit free - Unit 2</b>		11-Jan-2017	-92	MFG-PH Install: Pit free - Unit 2																											
<b>MFG-PH Install: Turbine/generator - Unit 2 Pit Free to Dry Test</b>	12-Jan-2017	07-Sep-2017	-92	MFG-PH Install: Turbine/generator - Unit 2 Pit Free to Dry Test																											
<b>h Telecom</b>				MFG-PH: Install Telecom - Unit 2																											
<b>MFG-PH: Install Telecom - Unit 2</b>	11-Mar-2016	08-Jun-2016	-29	MFG-PH: Install Telecom - Unit 2																											
<b>j Completions</b>				MFG-PH Telecom: Static Comm-Unit 2																											
<b>MFG-PH Telecom: Static Comm-Unit 2</b>	09-Jun-2016	28-Jun-2016	-29	MFG-PH Telecom: Static Comm-Unit 2																											
<b>MFG-PH Completions: Static Comm. (Dry Tests) - Unit 2</b>	07-Sep-2017	07-Oct-2017	-92	MFG-PH Completions: Static Comm. (Dry Tests) - Unit 2																											
<b>MFG-PH Completions: Ready to Turn - Unit 2</b>		07-Oct-2017	-92	MFG-PH Completions: Ready to Turn - Unit 2																											
<b>MFG-PH Completions: WATER Available- Unit 2</b>		19-Nov-2017	-186	MFG-PH Completions: WATER Available- Unit 2																											
<b>MFG-PH Completions: Dynamic Comm. (Wet Tests to takeover) T/G- Unit 2</b>	31-Dec-2017	18-Feb-2018	-176	MFG-PH Completions: Dynamic Comm. (Wet Tests to takeover) T/G- Unit 2																											
<b>MFG-PH Completions: Ready for Power Generation - Unit 2</b>		18-Feb-2018	-176	MFG-PH Completions: Ready for Power Generation - Unit 2																											
<b>Power House T/G Unit 3 Area</b>																															
<b>f1 civil Phase-1</b>				MFG-PH Civil: Unit 3 Structure Ph 1 (bldg enclosed)																											
<b>MFG-PH Civil: Unit 3 Structure Ph 1 (bldg enclosed)</b>	19-Mar-2014	20-Jan-2016	-82	MFG-PH Civil: Unit 3 Structure Ph 1 (bldg enclosed)																											
<b>MFG-PH Civil: Unit 3 Intake Structure</b>	07-May-2014	27-Sep-2016	-355	MFG-PH Civil: Unit 3 Intake Structure																											
<b>f2 Civil/Install</b>				MFG-PH Install: T/G Embedded Parts & Structure Ph 2 Unit 3																											
<b>MFG-PH Install: T/G Embedded Parts &amp; Structure Ph 2 Unit 3</b>	21-Jan-2016	04-Mar-2017	-110	MFG-PH Install: T/G Embedded Parts & Structure Ph 2 Unit 3																											
<b>g Installation</b>				MFG-PH Install: Hydro-mech Draft tube (incl Dry Test) Unit 3																											
<b>MFG-PH Install: Hydro-mech Draft tube (incl Dry Test) Unit 3</b>	21-Jan-2016	27-Jun-2016	-82	MFG-PH Install: Hydro-mech Draft tube (incl Dry Test) Unit 3																											



Integrated Project Schedule

Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>MFG-PH Install/Comm: Bldg Utility Systems - Unit 3</b>	21-Jan-2016	04-Mar-2017	-110	MFG-PH Install/Comm: Bldg Utility Systems - Unit 3																											
<b>MFG-PH Install/Comm: T/G Ancillary Systems - Unit 3</b>	21-Jan-2016	17-Dec-2017	-110	MFG-PH Install/Comm: T/G Ancillary Systems - Unit 3																											
<b>MFG-PH Install: Hydro-mech Intake (incl Dry Test) Unit 3</b>	28-Sep-2016	07-May-2017	-355	MFG-PH Install: Hydro-mech Intake (incl Dry Test) Unit 3																											
<b>MFG-PH Install: Pit free - Unit 3</b>		04-Mar-2017	-110	MFG-PH Install: Pit free - Unit 3																											
<b>MFG-PH Install: Turbine/generator - Unit 3 Pit Free to Dry Test</b>	05-Mar-2017	17-Dec-2017	-110	MFG-PH Install: Turbine/generator - Unit 3 Pit Free to Dry Test																											
<b>h Telecom</b>																															
<b>MFG-PH: Install Telecom - Unit 3</b>	20-May-2016	17-Aug-2016	-82	MFG-PH: Install Telecom - Unit 3																											
<b>j Completions</b>																															
<b>MFG-PH Telecom: Static Comm-Unit 3</b>	18-Aug-2016	06-Sep-2016	-82	MFG-PH Telecom: Static Comm-Unit 3																											
<b>MFG-PH Completions: WATER Available- Unit 3</b>		19-Nov-2017	-186	MFG-PH Completions: WATER Available- Unit 3																											
<b>MFG-PH Completions: Static Comm. (Dry Tests) - Unit 3</b>	17-Dec-2017	16-Jan-2018	-110	MFG-PH Completions: Static Comm. (Dry Tests) - Unit 3																											
<b>MFG-PH Completions: Ready to Turn - Unit 3</b>		16-Jan-2018	-110	MFG-PH Completions: Ready to Turn - Unit 3																											
<b>MFG-PH Completions: Dynamic Comm. (Wet Tests to takeover) T/G- Unit 3</b>	19-Feb-2018	12-Apr-2018	-143	MFG-PH Completions: Dynamic Comm. (Wet Tests to takeover) T/G- Unit 3																											
<b>MFG-PH Completions: Ready for Power Generation - Unit 3</b>		12-Apr-2018	-143	MFG-PH Completions: Ready for Power Generation - Unit 3																											
<b>Power House T/G Unit 4 Area</b>																															
<b>f1 civil Phase-1</b>																															
<b>MFG-PH Civil: Unit 4 Structure Ph 1 (bldg enclosed)</b>	23-Apr-2014	02-Mar-2016	-82	MFG-PH Civil: Unit 4 Structure Ph 1 (bldg enclosed)																											
<b>MFG-PH Civil: Unit 4 Intake Structure</b>	11-Jun-2014	23-Dec-2016	-407	MFG-PH Civil: Unit 4 Intake Structure																											
<b>f2 Civil/Install</b>																															
<b>MFG-PH Install: T/G Embedded Parts &amp; Structure Ph 2 Unit 4</b>	03-Mar-2016	26-Apr-2017	-100	MFG-PH Install: T/G Embedded Parts & Structure Ph 2 Unit 4																											
<b>g Installation</b>																															
<b>MFG-PH Install: Hydro-mech Draft tube (incl Dry Test) Unit 4</b>	03-Mar-2016	04-Jul-2016	-82	MFG-PH Install: Hydro-mech Draft tube (incl Dry Test) Unit 4																											
<b>MFG-PH Install/Comm: Bldg Utility Systems - Unit 4</b>	03-Mar-2016	26-Apr-2017	-100	MFG-PH Install/Comm: Bldg Utility Systems - Unit 4																											
<b>MFG-PH Install/Comm: T/G Ancillary Systems - Unit 4</b>	03-Mar-2016	25-Jan-2018	-100	MFG-PH Install/Comm: T/G Ancillary Systems - Unit 4																											
<b>MFG-PH Install: Hydro-mech Intake (incl Dry Test) Unit 4</b>	24-Dec-2016	21-Jul-2017	-407	MFG-PH Install: Hydro-mech Intake (incl Dry Test) Unit 4																											
<b>MFG-PH Install: Pit free - Unit 4</b>		26-Apr-2017	-100	MFG-PH Install: Pit free - Unit 4																											
<b>MFG-PH Install: Turbine/generator - Unit 4 Pit Free to Dry Test</b>	27-Apr-2017	25-Jan-2018	-100	MFG-PH Install: Turbine/generator - Unit 4 Pit Free to Dry Test																											
<b>h Telecom</b>																															
<b>MFG-PH: Install Telecom - Unit 4</b>	01-Jul-2016	28-Sep-2016	-82	MFG-PH: Install Telecom - Unit 4																											
<b>j Completions</b>																															
<b>MFG-PH Telecom: Static Comm-Unit 4</b>	29-Sep-2016	18-Oct-2016	-82	MFG-PH Telecom: Static Comm-Unit 4																											
<b>MFG-PH Completions: WATER Available- Unit 4</b>		19-Nov-2017	-186	MFG-PH Completions: WATER Available- Unit 4																											
<b>MFG-PH Completions: Static Comm. (Dry Tests) - Unit 4</b>	25-Jan-2018	24-Feb-2018	-100	MFG-PH Completions: Static Comm. (Dry Tests) - Unit 4																											
<b>MFG-PH Completions: Ready to Turn - Unit 4</b>		24-Feb-2018	-100	MFG-PH Completions: Ready to Turn - Unit 4																											
<b>MFG-PH Completions: Dynamic Comm. (Wet Tests to takeover) T/G- Unit 4</b>	13-Apr-2018	22-May-2018	-143	MFG-PH Completions: Dynamic Comm. (Wet Tests to takeover) T/G- Unit 4																											
<b>MFG-PH Completions: Ready for Power Generation - Unit 4</b>		22-May-2018	-143	MFG-PH Completions: Ready for Power Generation - Unit 4																											
<b>PH North Service Bay &amp; Center Transition dam</b>																															
<b>f1 civil Phase-1</b>																															
<b>MFG-PH Civil: Center transition dam (PH side)</b>	11-Jun-2014	13-Aug-2016	-276	MFG-PH Civil: Center transition dam (PH side)																											
<b>MFG-PH Civil: North Service bay (Including Enclosure)</b>	03-Mar-2016	09-Apr-2016	-88	MFG-PH Civil: North Service bay (Including Enclosure)																											
<b>g Installation</b>																															
<b>MFG-PH Civil: North Service Bay Bldg Utilities</b>	10-Apr-2016	09-May-2016	-88	MFG-PH Civil: North Service Bay Bldg Utilities																											



Integrated Project Schedule  
Layout: ips Entire Schedule

Updated: Baseline

Activity Name	Start	Finish	Change from Rev B1	2011		2012				2013				2014				2015				2016				2017				2018	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>j Completions</b>																															
MFG-PH Completions: Static - Dynamic Checks Service Bay North	10-May-2016	08-Jun-2016	-88	MFG-PH Completions: Static - Dynamic Checks Service Bay North																											
<b>MFGen-315kV Collector Line (Powerhouse-&gt;MF Switchyard)</b>																															
<b>MF HVac TL PH-&gt; MF Swyd</b>																															
<b>1 Key Date</b>																															
KD=MFGen-315 PH-SY TL: Start Construction	24-Feb-2014		0	KD=MFGen-315 PH-SY TL: Start Construction																											
KD=MFGen-315 PH-SY TL: TL Inspection/Connection Complete		02-Dec-2016	-100	KD=MFGen-315 PH-SY TL: TL Inspection/Connection Complete																											
<b>e Earthworks</b>																															
MFGen-315 PH-SY TL: ROW Clearing	24-Feb-2014*	05-Mar-2014	0	MFGen-315 PH-SY TL: ROW Clearing																											
<b>f Civil/Structures</b>																															
MFGen-315 PH-SY TL: Foundations	12-Aug-2014*	26-Mar-2015	0	MFGen-315 PH-SY TL: Foundations																											
<b>g Installation</b>																															
MFGen-315 PH-SY TL: Tower Assembly / Install	27-Mar-2015	26-May-2015	0	MFGen-315 PH-SY TL: Tower Assembly / Install																											
MFGen-315 PH-SY TL: Conductor/OPGW Install	27-May-2015	28-Jun-2015	0	MFGen-315 PH-SY TL: Conductor/OPGW Install																											
<b>j Completions</b>																															
MFGen-315 PH-SY TL: Post Installation Final Inspection (static)		28-Jun-2015	0	MFGen-315 PH-SY TL: Post Installation Final Inspection (static)																											
MFGen-315 PH-SY TL: Connection to MF Swyd (Slack Span)	11-May-2016*	12-May-2016	-58	MFGen-315 PH-SY TL: Connection to MF Swyd (Slack Span)																											
MFGen-315 PH-SY TL: Connection to PH (Slack Span)	30-Nov-2016	02-Dec-2016	-100	MFGen-315 PH-SY TL: Connection to PH (Slack Span)																											
<b>MFGen South Dam</b>																															
<b>MF South Dam</b>																															
<b>1 Key Date</b>																															
KD=MFG -South Dam - Start Construction	02-May-2015		0	KD=MFG -South Dam - Start Construction																											
KD=MFG -South Dam - Complete		14-Nov-2015	0	KD=MFG -South Dam - Complete																											
<b>e Earthworks</b>																															
MF-South Dam Earthworks: Access Road	02-May-2015*	28-May-2015	0	MF-South Dam Earthworks: Access Road																											
MF-South Dam Earthworks: Grub/strip/excav	29-May-2015	26-Jun-2015	0	MF-South Dam Earthworks: Grub/strip/excav																											
<b>f Civil/Structures</b>																															
MF-South Dam Civil: Foundations/Grout	27-Jun-2015	24-Jul-2015	0	MF-South Dam Civil: Foundations/Grout																											
MF-South Dam Civil: Fill	25-Jul-2015	14-Nov-2015	0	MF-South Dam Civil: Fill																											
<b>MFGen Site Restoration</b>																															
<b>MFG-Site Restoration</b>																															
<b>1 Key Date</b>																															
KD=MFG- Start Restoration	20-Nov-2017		-186	KD=MFG- Start Restoration																											
<b>LTA (MFATS2) MF Terminal Station (Switchyard)</b>																															
<b>LTA-MF Switchyard</b>																															
<b>e Earthworks</b>																															
MFG-PH Earth: MF Switchyard earthworks	05-Nov-2012*	29-Oct-2013	0	: MF Switchyard earthworks																											

◆ Baseline Rev B2 ▼ DG3 Rev B1  
 ■ Baseline Rev B2 ■ DG3 Rev B1