

## Muskrat Falls Project Oversight Committee

July 2017 Reporting September 21, 2017

### Project Progress

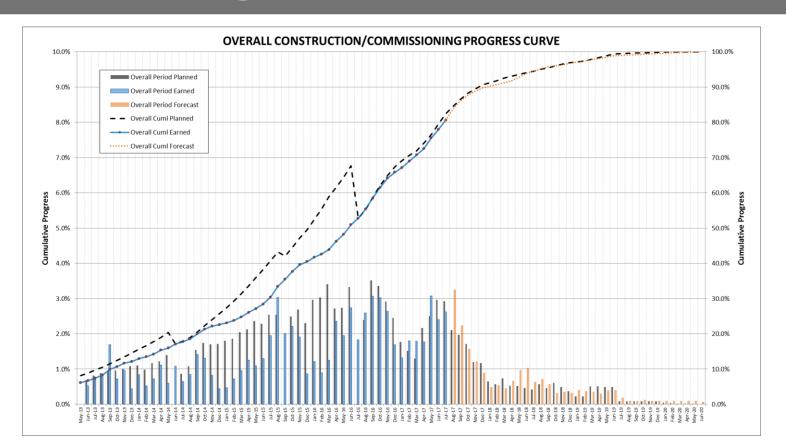


#### Muskrat Falls Project Progress at July 2017

		<u>Ju</u>			
July 2017	Weight <u>Factor %</u>	<u>Planned</u>	<u>Earned</u>	<u>Variance</u>	<u>June</u> <u>2017 Variance</u>
Sub-Project	Α	В	С	D = C - B	E
Muskrat Falls Generation (MFGen)	46.3%	71.4%	71.1%	-0.3%	0.6%
Labrador Island Transmission Link (LITL)	43.9%	90.2%	87.1%	-3.1%	-3.3%
Labrador Transmission Asset (LTA)	9.8%	99.9%	96.5%	-3.4%	-4.0%
Muskrat Falls Project - Overall	100.0%	82.4%	80.6%	-1.8%	-1.5%

### Overall Progress Curve





# Earned Progress MF Generating Facility

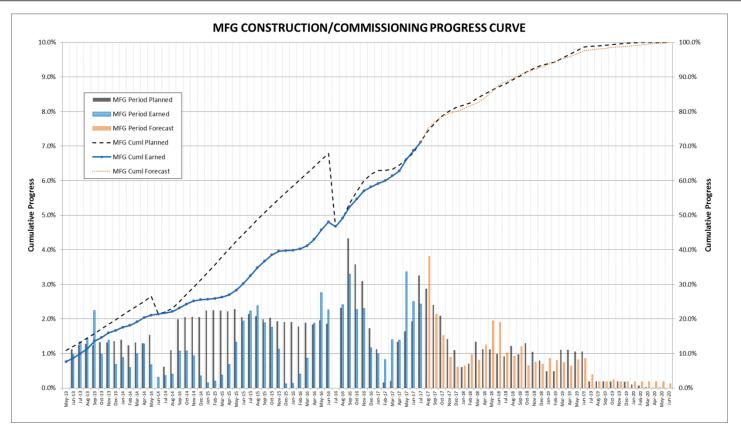


		July 20			
July 2017	Weight <u>Factor %</u>	<u>Plan</u>	<u>Earned</u>	<u>Variance</u>	<u>June 2017</u> <u>Variance</u>
Sub-Project	Α	В	С	D = C - B	Е
MFG Road/Camp/Constr. Power	8.9%	100.0%	100.0%	0.0%	0.0%
MFG Reservoir Preparation	5.8%	100.0%	98.0%	-2.0%	-2.0%
MFG Spillway & Gates	12.2%	89.5%	84.5%	-5.0%	-1.7%
MFG North Spur Stabilization	3.9%	100.0%	99.0%	-1.0%	-1.5%
MFG North Dam	5.7%	64.6%	32.7%	<sup>1.</sup> -31.9%	-20.9%
MFG Powerhouse & Intake	61.3%	59.0%	63.3%	4.3%	3.9%
MFG South Dam	1.1%	99.2%	87.4%	-11.8%	-10.1%
MFG Misc:Eng/ 315kV/Site Rest./logistic	1.1%	79.7%	70.5%	-9.2%	-5.1%
MFGen - Overall	100.0%	71.4%	71.1%	-0.3%	0.6%

<sup>1.</sup> Nalcor advises that construction of the North Dam will now occur over two construction seasons. Adjustment of planned progress above to align with the two season construction schedule will occur in September 2017 monthly project reporting

# Progress Curve MF Generating Facility





# Earned Progress Labrador Island Transmission Link

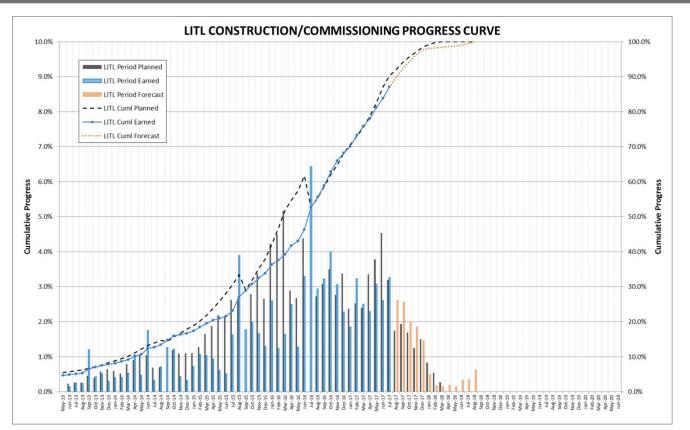


	Weight	July 2017 Cumulative %		June	
<u>July 2017</u>	Factor %	<u>Plan</u>	<u>Earned</u>	<u>Variance</u>	2017 Variance
Sub-Project	Α	В	С	D = C - B	Е
LITL Muskrat Falls Converter	6.1%	97.4%	46.6%	-50.8%	-47.4%
LITL Soldiers Pond Converter	5.5%	97.0%	53.3%	<sup>1.</sup> -43.7%	-36.1%
LITL HVdc Transmission Line Seg 1/2	26.8%	100.0%	100.0%	0.0%	0.0%
LITL HVdc Transmission Line Seg 3/4/5	34.2%	72.7%	86.3%	13.6%	10.5%
LITL Electrode Sites	0.8%	100.0%	75.0%	-25.0%	-25.0%
LITL Transition Compounds	1.7%	96.3%	62.1%	<sup>2.</sup> -34.2%	-8.0%
LITL SOBI Cable Crossing	17.7%	100.0%	100.0%	0.0%	0.0%
LITL Soldiers Pond Switchyard	2.7%	100.0%	97.2%	-2.8%	-3.2%
LITL Soldiers Pond Sync. Condensors	3.1%	99.5%	65.4%	-34.1%	-37.6%
LITL Misc	1.4%	99.1%	68.8%	-30.3%	-29.3%
LITL- Overall	100.0%	90.2%	87.1%	-3.1%	-3.3%

- Nalcor advises progress trending behind plan, mitigations in place to improve progress, no forecast impact on 1<sup>st</sup> power by end of Q2 2018
- 2. Nalcor advises start of work for 2017 construction season delayed, scope not on critical path

### Progress Curve Labrador Island Transmission Link





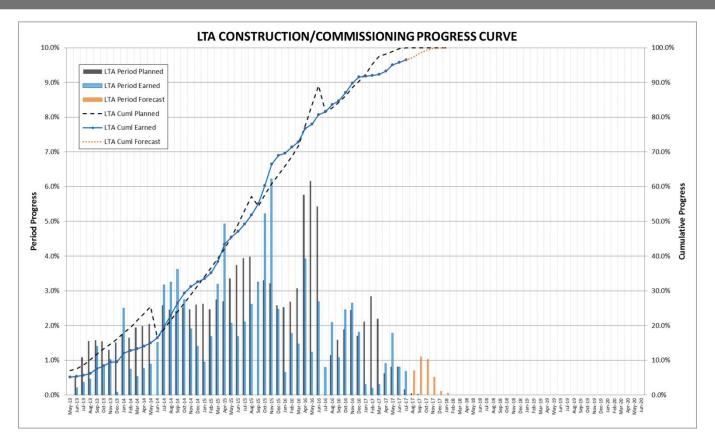
## Earned Progress Labrador Transmission Assets



	Weight	July 2017 Cumulative %			
July 2017	Factor %	<u>Plan</u>	Earned	<u>Variance</u>	June 2017 Variance
Sub-Project	Α	В	С	D = C - B	Е
LTA HVac Transmission Line Seg1/2 - MF to CF	62.8%	100.0%	100.0%	0.0%	0.0%
LTA Churchill Falls Switchyard	21.7%	100.0%	94.8%	-5.2%	-6.6%
LTA Muskrat Falls Switchyard	13.4%	99.4%	84.9%	-14.5%	-15.9%
LTA Misc	2.1%	100.0%	81.6%	-18.4%	-18.4%
LTA - Overall	100.0%	99.9%	96.5%	-3.4%	-4.0%

### Progress Curve Labrador Transmission Assets





### Project Costs



#### Muskrat Falls Project Costs at July 2017 (\$000's)

Muskrat Falls Project: Sub- Project	Percentage of Total Budget			Incurred Costs as of July 2017	Percentage of Budget Incurred	Variance Planned vs. Incurred Costs	Variance as % of Planned Costs	Project Forecast Cost
Muskrat Falls Generating Facility	54.36%	\$5,500,056	\$3,446,314	\$3,466,144	63.0%	\$19,830	0.6%	\$5,500,056
Labrador-Island Transmission Link	36.81%	\$3,723,716	\$2,998,203	\$2,931,895	78.7%	(\$66,308)	-2.2%	\$3,723,716
Labrador Transmission Assets	8.83%	\$893,556	\$820,455	\$811,371	90.8%	(\$9,084)	-1.1%	\$893,556
Total	100.0%	\$10,117,328	\$7,264,972	\$7,209,410	71.3%	(\$55,562)	-0.8%	\$10,117,328

Final Forecast Cost overall unchanged based on AFE – June 2017

## Contingency Allocation



#### Contingency Budget at July 2017 (\$ 000's)

Muskrat Falls: Sub-project	Project Budget June 2017	Project Forecast Cost June 2017	•	Change from Previous Period	Variance PFC from Budget
Muskrat Falls Generating Facility	\$226,400	\$226,400	\$216,673	(\$9,727)	(\$9,727)
Labrador-Island Transmission Link	\$102,750	\$102,750	\$77,718	(\$25,032)	(\$25,032)
Labrador Transmission Assets	\$10,012	\$10,012	\$10,012	\$0	\$0
Total Project	\$339,162	\$339,162	\$304,403	(\$34,759)	(\$34,759)

### Annex – End of July 2017 Concrete Production



