# Muskrat Falls Project Oversight Committee 

 July ReportingSeptember 12, 2019

## July 2019 Project Progress




## Project Progress

## Muskrat Falls Project Progress at July 2019

| July 2019 | Weight Factor \% | July 2019 Cumulative \% |  |  | June 2019 Variance |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Planned | Earned | Variance |  |
| Sub-Project | A | B | C | D $=\mathrm{C}-\mathrm{B}$ | E |
| Muskrat Falls Generation (MFGen) | 46.3\% | 98.8\% | 96.2\% | -2.6\% | -2.8\% |
| Labrador Island Transmission Link (LITL) | 43.9\% | 100.0\% | 99.9\% | -0.1\% | -0.08\% |
| Labrador Transmission Asset (LTA) | 9.8\% | 100.0\% | 100.0\% | 0.0\% | 0.00\% |
| Muskrat Falls Project - Overall | 100.0\% | 99.4\% | 98.2\% | -1.2\% | -1.3\% |
| *Project - Overall adjusted for planned delay to ro | diway installation | 99.0\% | 98.2\% | -0.8\% |  |

## Overall Progress Curve

Newfoundland Labrador


## Earned Progress MF Generating Facility

| July 2019 | Weight <br> Factor \% | July 2019 Cumulative \% |  |  | June 2019 Variance |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Plan | Earned | Variance |  |
| Sub-Project | A | B | C | $D=C-B$ | E |
| MFG Road/Camp/Constr. Power | 8.9\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
| MFG Reservoir Preparation | 5.8\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
| MFG Spillway \& Gates | 12.2\% | 100.0\% | 92.5\% | -7.5\% | -8.6\% |
| MFG North Spur Stabilization | 3.9\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
| MFG North Dam | 5.7\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
| MFG Powerhouse \& Intake | 61.3\% | 98.1\% | 95.4\% | -2.7\% | -2.8\% |
| MFG South Dam | 1.1\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
| MFG Misc:Eng/ 315kV/Site Rest./logistic | 1.1\% | 93.6\% | 91.9\% | -1.7\% | 1.6\% |
| MFGen - Overall | 100.0\% | 98.8\% | 96.2\% | -2.6\% | -2.8\% |
| * MFGen - Overall adjusted for rollway installa | on schedule | 97.8\% | 96.2\% | -1.6\% |  |

## Progress Curve MF Generating Facility



## Earned Progress <br> Labrador Island Transmission Link

## July 2019

Sub-Project
LITL Muskrat Falls Converter
LITL Soldiers Pond Converter
LITL HVdc Transmission Line Seg 1/2
LITL HVdc Transmission Line Seg 3/4/5
LITL Electrode Sites
LITL Transition Compounds
LITL SOBI Cable Crossing
LITL Soldiers Pond Switchyard
LITL Soldiers Pond Sync. Condensors
LITL Misc

|  | Weight | July 2019 Cumulative \% |  |  | June 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Factor \% | Plan | Earned | Variance | Variance |
|  | A | B | C | D $=\mathrm{C}-\mathrm{B}$ | E |
|  | 6.1\% | 100.0\% | 99.6\% | -0.4\% | -0.5\% |
|  | 5.5\% | 100.0\% | 99.3\% | -0.7\% | -0.7\% |
|  | 26.8\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
|  | 34.2\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
|  | 0.8\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
|  | 1.7\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
|  | 17.7\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
|  | 2.7\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
|  | 3.1\% | 100.0\% | 99.7\% | -0.3\% | -0.3\% |
|  | 1.4\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
| LITL- Overall | 100.0\% | 100.0\% | 99.9\% | -0.1\% | -0.08\% |

## Progress Curve

## Labrador Island Transmission Link



## Earned Progress Labrador Transmission Assets

July 2019

Sub-Project
LTA HVac Transmission Line Seg $1 / 2$ - MF to CF LTA Churchill Falls Switchyard
LTA Muskrat Falls Switchyard
LTA Misc

|  | Weight | July 2019 Cumulative \% |  |  | $\frac{\text { June } 2019}{\text { Variance }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Factor \% | Plan | Earned | Variance |  |
|  | A | B | c | D $=\mathrm{C}-\mathrm{B}$ | E |
| CF | 62.8\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
|  | 21.7\% | 100.0\% | 100.0\% | 0.0\% | 0.0\% |
|  | 13.4\% | 100.0\% | 100.00\% | 0.00\% | 0.00\% |
|  | 2.1\% | 100.0\% | 100.00\% | 0.00\% | 0.00\% |
| LTA - Overall | 100.0\% | 100.0\% | 100.00\% | 0.00\% | 0.00\% |

## Progress Curve

 Labrador Transmission Assets

## Muskrat Falls Project Costs at July 2019 (\$000’s)

| Muskrat Falls Project: SubProject | Percentage of Total Budget | Project Budget at June 2017 (LTA and LITL Contingency amended in March 2018) | lanned Costs as of July 2019 | Incurred Costs as of July 2019 | 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 | \$5,242,498 | \$4,944,137 | 89.9\% | $(\$ 298,361)$ | -5.7\% | \$5,500,056 |
| Labrador-Island Transmission Link | 36.71\% | \$3,713,716 | \$3,713,716 | \$3,538,474 | 95.3\% | (\$175,242) | -4.7\% | \$3,713,716 |
| Labrador Transmission Assets | 8.93\% | \$903,556 | \$903,556 | \$863,262 | 95.5\% | (\$40,294) | -4.5\% | \$903,556 |
| Total | 100.0\% | \$10,117,328 | \$9,859,770 | \$9,345,873 | 92.4\% | $(\$ 513,897)$ | -5.2\% | \$10,117,328 |

Overall Final Forecast Cost unchanged from June 2017 AFE. Additional risks ( $\$ 835$ million) not included.

## Contingency Budget at July 2019 (\$ 000’s)

| Muskrat Falls Project | Project Budget June 2017and amended March 2018 | Project Forecast Cost June 2019 | Project Forecast Cost July 2019 | Change from revious Period | Variance PFC from Budget |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total Project | \$339,162 | \$140,695 | \$130,800 | $(\$ 9,895)$ | $(\$ 208,362)$ |

