# [Cross Reference Exhibit P-01237 – Page 1] April 1, 2012 Meeting re PUB Report Robert, Premier, Brian, Glenda, Ed, Charles, JPK

- ① Release report immediately in morning.
- ② Full and open debate in HoA
- 3 PUB report
  - Extension wouldn't have mattered
  - 9 months and millions of dollars yet no conclusion- must have known months ago
  - Need PUB letter
- 4 DG3 #s
  - Need complete package
  - June timeframe
  - MHI review we decided to hire same experts PUB went to
- ⑤ Update Holyrood #s
- 6 Other options
  - Natural gas
  - Wind

### P(age) 65

- Agree with Nalcor and MHI that based on DG2 #s, Interconnected Option could be said to have a lower CPW based on analysis on feasibility level information
- Board does not believe, however, that conclusion assists in determining whether least-coast option.

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Board's conclusions

# [Cross Reference Exhibit P-01237 – Page 10] April 6, 2012 Meeting re MF Sanction Ed, Brian, Robert, Glenda, Charles, JPK

- Will Nalcor have DG3 #s in time for June debate in House
  - Not involving Maritime Link
- June 7 cutoff May 18 for group
  - Risk analysis, contingency back-up
- DG3 cap[ital.] costs can be done by May 18
- Updated schedule
- Updated CPW with sensitivities
- Updated report submitted to the PUB
- MHI updated report
  - Give MHI information as it becomes available
  - What we need
    - Schedule
    - DG3 #s
- Premier \*there have to be deadlines\*
  - MHI's involvement changes timelines
  - DG3 #s always meant to be provided in June
- Early Works
- Natural Gas
- Wind

### [Cross Reference Exhibit P-01237 – Pages 35-36] October 30, 2012 Technical Briefing Nalcor / DG3 #s

- Page 3
  - Maritime Link of \$1.2B (Nov/10) number expected to change
  - Sanctioning decision in 2013
- Page 4
  - Costs increase for both Holyrood and Muskrat Falls in range of 20-25%
- Page 5
  - Engineering work of Muskrat Falls (from 5% in DG2 to currently over 50%)
  - Costs have increased with greater project definition but much greater confidence in estimate
  - Design enhancements since DG2 much more robust and reliable design
- Page 6
  - DG2 vs DG3 Chart (\$6.2 B to \$7.4B)
- Page 7
  - Muskrat Falls (\$5.0B \$6.2B) DG2 vs DG3 Chart
- Page 8-9 DG3 costs as a result of
  - Greater definition and design improvements with engineering over 50% complete
  - Overland transmission more robust and reliable
  - Transmission voltage optimized to reduce line losses
  - Muskrat Falls powerhouse reorientation to maximize energy output
  - Muskrat Falls excavation & concrete quantities increased
  - Total project person hours increased from 15M to 20M
  - DG2 base estimate –[\$]3.9B (out of \$5.6B)
  - DG3 base estimate [\$]5.4B (out of \$6.2B)
- Page 10: Cost Estimate chart
- Page 11: HVdc Transmission \$481M

Page 12: Muskrat Falls Structures - \$267M

Page 13: Engineering and Project Management - \$166M

Page 15: Site services - \$121M

Page 16: HVac transmission \$90M

Page 17: Other (Convertors, SOBI, Muskrat Falls Site, Land) - \$192M

2010-12 Adjustment - \$176M

Contingency and escalation - \$730M

Page 14: Switchyards - \$126M

Page 18: Estimate confidence

Page 19: Schedule – first power in 2017

Rates will begin to be impacted in 2017

 Page 33: CPW – standard industry used in making an apple to apple cost comparison to determine lowest cost generation alternative

Compares alternatives by weighing all future costs (capital cost, operating and maintenance costs, fuel costs, financing costs, cost of purchased power).

Page 34: Chart of FLG included - \$2.4[B] preference

Page 35: CPW has changed – decrease in fuel forecast (10-15%) from DG2

Increases tos capital costs

Discount rate changed from 8-7%

Financing costs decreased

Inclusion of FLG at DG3

Adjustment 2010\$ to 2012\$

Inclusion of more wind

Page 39: Sensitivity Analysis

Page 44: Conclusion

Nalcor's underlying Brent forecast is \$110 US in today's currency

Would have to decrease to ~\$50 US to make Muskrat Falls equal to

Holyrood