1 System ("IIS") which would be owned and maintained by Newfoundland and Labrador Hydro
2 [ML-JDA Clause 2.1 (b)&(c)] ;

- 3 The estimated development costs for ML was agreed to be $1,577 million between Nalcor and
4 Emera based on the estimate as at Emera's Decision Gate 3 at the end of 2013 (defined as "DG3
5 Costs"). ML's actual development costs exceeding $1,577 million, unless otherwise approved by
6 the UARB from NS ratepayers, would be considered cost overruns. Emera would be responsible
7 for the first 5% of such cost overruns; Nalcor would be responsible for the second 5% of such
8 cost overruns; and any additional cost overruns above the first and second 5% would be shared
9 equally amongst Nalcor and Emera. The percentage is calculated by the total development costs
10 incurred as a percentage of total approved costs [ML-JDA Clause 8.2 (e)];
- 11 Nalcor would reimburse Emera for actual development costs for ML exceeding 20% of total
12 estimated development costs for all of the Defined Assets. For the purpose of this
13 reimbursement, the 20% of total estimated development costs for all of the Defined Assets is
14 fixed at $1,555.4 million, and ML's actual development costs is capped at $1,577 million. Nalcor
15 would reimburse Emera up to $21.6 million and the reimbursement would be reduced if ML's
16 actual development costs were lower than $1,577 million. This reimbursement should take place
17 no later than 30 days after ML's actual development costs is known. [ML-JDA Clause 2.2 (b), 2.5
18 (a)&(b)] This mechanism for sharing ML's development costs was not outlined in detail in the
19 Term Sheet;
- 20 A Joint Development Committee ("JDC") would be established to oversee the construction of
21 ML and would terminate one year after commercial operation of ML. The JDC would be
22 comprised of six members, four from Nalcor and two from Emera. Decisions should be made
23 by consensus and Nalcor's CEO would have final say in case of disputes, subject to Nalcor's
24 CEO following the Decision Guidelines conforming to normal industry practice in Canada as
25 well as the normal standard of care in Canada. Emera may dispute whether Nalcor's CEO's

1 decision follow such Decision Guidelines through the Dispute Resolution Procedure outlined in
2 the agreement. The Dispute Resolution Procedure outlines how disputes would be resolved first
3 through negotiation, then mediation, and finally arbitration. If the dispute reaches the arbitration
4 stage, both parties may choose a single arbitrator, or select a three-member tribunal where each
5 party appoints an arbitrator and those two arbitrators agree on a third arbitrator [ML-JDA Clause
6 3.1–3.4];

7 • Nalcor would appoint the project director and Emera would appoint the project manager for
8 ML, who would be responsible for managing ML's construction. The project manager would
9 report to the project director [ML-JDA Clause 4.2 & 4.3];

10 • Nalcor would transfer any land needed by Emera for ML to ML at a nominal amount and be
11 returned at the end of the term when ML is transferred to Nalcor 35 years after FCP. [ML-JDA
12 Clause 6.2 (b)(c)&(d)];

13 • Emera would not be held liable for failure to achieve project milestones unless it was due to
14 Emera's gross negligence [ML-JDA Clause 7.3 (c)]; and

15 • Emera would reimburse Nalcor for ML-related development costs incurred prior to July 31,
16 2014 by Nalcor internally. Emera and Nalcor would share equally any third party development
17 costs incurred by both parties prior to July 31, 2014. All development costs incurred after July
18 31, 2014 would be fully borne by Emera, subject to the 20% limit of the total estimated
19 development costs for all Defined Assets. [ML-JDA Clause 8.1(a) & 8.2(a)] The sharing of third
20 party development costs was not mentioned in the Term Sheet.

21 <u>Commentary on impact to NL ratepayers & taxpayers:</u> Emera's share of ML's development costs is limited to
22 20% of the total estimated development costs of all of the Defined Assets. Emera can pay less than 20% of
23 the total development costs of the Defined Assets (i.e. if there are cost overruns in LTA, LIL and MFP). As a
24 result, Nalcor can pay more than 80% of the total development costs of the Defined Assets which could
25 adversely impact NL's ratepayers or taxpayers depending on whether Nalcor recovers any true-up payments
26 to Emera in rates.

CIMFP Exhibit P-00453 Page 18

As Nalcor would share a portion of the unapproved cost overruns from ML with Emera, such costs would become a cost to NL's ratepayers and taxpayers, depending on whether Nalcor recovers any cost overrun payments to Emera in rates.

The equal sharing of third party development costs on ML amongst Nalcor and Emera incurred prior to July 31, 2014 deviated from the Term Sheet and represents additional cost to Nalcor and NL's ratepayers and taxpayers, depending on whether Nalcor recovers any third party development costs in rates.

Comparison between 2012 and 2014 version: The following differences were noted between the 2012 and 2014 version of the agreement:

- References to the agreement contingent on sanctioning by both parties and the regulatory authorities were removed. By July 31, 2014 the sanctioning had taken place, making those clauses irrelevant;
- The estimated development costs for ML of $1,577 million was added;
- 20% of the overall estimated development costs for the Defined Assets of $1,555.4 million was added;
- A target commission date of October 2017 was added;
- Cost Sharing End Date ("CSED"), which was dated July 31, 2014 when cost sharing ended between Nalcor and Emera on ML, has been defined in the 2014 version to outline the party responsible for ML's cost before and after CSED; and
- Emera's intention to employ project financing to finance ML's development activities was added.

b) The Energy and Capacity Agreement

While the key commercial terms of the ECA were consistent with the Term Sheet and the summary in 2013 NSUARB 154, the agreement provided the following additional details:

- The amount of committed MFP power from Nalcor to Emera is 0.986 TWh annually plus the Supplemental Energy. The 0.986 TWh plus the Supplemental Energy together makes up the Nova Scotia Block. [ECA Clause 1.1(a), ECA Schedule 4];
- The Nova Scotia Block annual energy amount (excluding the Supplemental Energy) would be delivered to Emera during peak hours from 7 am to 11 pm throughout the year. The Supplemental

1 Energy would be delivered to Emera during off-peak hours from 11 pm to 7 am in the months of
2 January, February, March, November, and December; [ECA Schedule 5]

3 • The Supplemental Energy is estimated to provide 240 GWh per year [2013 NSUARB 154 paragraph
4 31] and is based on the premise that NS's ratepayers should be in the same present value cost
5 position as they would have been had ML been owned and depreciated for 50 years versus 35 years.
6 It would be provided to Emera for the 5-year period commencing at FCP and calculated based on an
7 agreed financial model between Nalcor and Emera. Based on the information in the agreement, the
8 inputs into the model include the 0.986 TWh of annual energy to be delivered, transmission losses,
9 capital costs and timing profile, the discount rate to estimate the financing costs and return on equity
10 relating to funds used to finance construction ("AFUDC"), O&M costs, tax rates, capital cost
11 allowance for income tax purposes, debt to equity ratios, cost of debt, and rate of return on equity
12 [ECA Schedule 4];

13 • With regards to the subsequent terms mentioned in the 2013 NSUARB 154 summary, Nalcor and
14 Emera shall complete a study to determine the remaining service life of ML. Upon completion of
15 such study, Emera has the right to serve notice to Nalcor to enter into negotiations for subsequent
16 term(s) beyond the Nova Scotia Block. There are no requirements for either party to agree to any
17 subsequent term(s) nor are there any baselines on the terms for any subsequent term(s), Nalcor may
18 sell the MFP power to another third party if negotiation breaks down [ECA Clause 2.7];

19 • Nalcor shall compensate Emera for failures or delays to deliver the Nova Scotia Block depending on
20 the circumstances as follows:

21 o When the committed power cannot be delivered due to a Force Majeure, a Planned
22 Maintenance Period, a Safety Event or an action required by either party to comply with
23 Good Utility Practice, Nalcor is required to make up for that in electricity during the initial
24 35-year term and if not, then the initial term can be extended. If the initial term is extended,
25 then Emera shall be liable to Nalcor for its pro rata share of the ML O&M Costs incurred by

1 Nalcor during such extension based on the ratio of the actual transmission capacity used by
2 Emera for the delivery of the energy, to the total transmission capacity of the ML [ECA
3 Clause 8.3, 8.5].

4 o When the committed power cannot be delivered due to reasons other than the above,
5 Nalcor is required to deliver 120% of what was initially promised under the Nova Scotia
6 Block as compensation energy along with providing the GHG credits Emera would have
7 received had the energy been delivered. The amount of compensation energy is determined
8 at Emera's choice based on either market price equivalent energy or marginal cost energy,
9 which would most likely be the higher amount of compensation energy of the two choices
10 since it's at Emera's sole discretion. If this is not done within a year, Emera has the option to
11 require Nalcor to pay the monetary equivalent of the undelivered compensation energy
12 subject to the exceptions noted below, where the form of the compensation is Nalcor's
13 choice [ECA Clause 8.4];

14 o In the following circumstances, Nalcor may choose to provide the undelivered power to
15 Emera (where the power does not have to be identical in regulatory and GHG
16 characteristics to the Nova Scotia Block), or pay Emera for the monetary equivalent
17 (provided each choice is available to Nalcor):

18 ▪ Government action;

19 ▪ Nalcor breaching the NLDA, which covers Nalcor's obligation to build, operate,
20 and maintain MFP, LIL, and LTA;

21 ▪ A material portion of the MFP Development Activities (meaning all activities
22 necessary to get MFP to achieve FCP as per the NLDA) are suspended for more
23 than 120 continuously days unless the discontinuation was due to Force Majeure,
24 they were contemplated in the project schedule or are customary seasonal
25 interruptions.

1 o In case of disputes, the agreements contains a dispute resolution procedure that is similar to
2 the other agreements. Similar to what's described in the ML-JDA, any disputes should first
3 be resolved via negotiation, then mediation, and finally arbitration [ECA Clause 8.6].

4 Commentary on impact to NL ratepayers & taxpayers: In terms of the consideration that Emera would
5 receive, they would receive a fixed amount of power from MFP at 0.986 TWh annually (plus Supplemental
6 Energy expected to be 240 GWh annually for the first five years upon FCP, referred to together as the "Nova
7 Scotia Block") that approximates 20% of MFP's annual estimated output of 4.9 TWh based on initial
8 estimates. However, if actual output becomes lower, Nalcor will have to provide more than 20% of MFP's
9 power to Emera since the Nova Scotia Block is fixed. Nalcor may have to find power elsewhere if MFP's
10 output is insufficient to fulfill NL's native loads. This would also result in less power available to Nalcor for
11 export which would adversely affect NL's taxpayers.

12 While Emera would be receiving a fixed amount of power from the Nova Scotia Block, their share of the
13 development costs would be the lesser of ML's development costs or 20% of the total estimated
14 development costs for all of the Defined Assets. Depending on the actual output of MFP, Emera may be
15 paying less than 20% of the total actual development costs for the entire project but receiving approximately
16 20% of the power or more. This may negatively impact NL's ratepayers since they may be paying for a higher
17 share of the development costs through rates versus proportion of power retained.

18 Any penalties to be paid from Nalcor to Emera for not delivering MFP power would translate into costs to
19 NL's taxpayers. The severity of the penalties depends on the circumstances that caused Nalcor to not be able
20 to deliver power to Emera. The circumstances can be subject to different interpretations and the resulting
21 severity of the penalty can be a point of debate. For example, the agreement does not define what a material
22 portion of the MFP Development Activities is when it comes to defining 120 days of continuous delays in the
23 MFP project, nor does it define what customary seasonal interruptions would include. These potential
24 disputes can cause additional delays and costs from arbitration between the parties which could translate into
25 additional cost to NL's taxpayers.

26 The Nova Scotia Block is committed to Emera and will represent approximately 20% of total power output
27 or more. If output is less than forecast or market prices for power increases significantly, the Nova Scotia
28 Block commitment limits the availability of surplus power for export to other markets, which would
29 negatively impact NL's taxpayers.

30 Comparison between 2012 and 2014 version: The following differences were noted between the 2012 and
31 2014 version of this agreement:

32 • References to the agreement contingent on sanctioning by both parties and by the regulatory
33 authorities were removed. By July 31, 2014 the sanctioning had taken place, making those clauses
34 irrelevant;

1 • Schedule 2 "Methodology for Calculating Average Energy Production Entitlement at the Muskrat
2 Falls Plant" was removed. The schedule stated that the Nova Scotia Block should be 20% of the
3 predicted average energy production of MFP. Instead of providing a method for calculating that
4 figure, this was set at 0.986 TWh in the 2014 agreement.

5 c) The Joint Operations Agreement

6 While the key commercial terms of the JOA are consistent with the Term Sheet and the summary in 2013
7 NSUARB 154, the agreement provided the following additional details:

8 • Nalcor would be responsible for the operation and maintenance of LIL and LTA, while Emera
9 would be responsible for the operations and maintenance of ML [JOA Clause 2.1(a)&(b)];

10 • A joint operations committee ("JOC") would be formed between Nalcor and Emera to oversee the
11 O&M of ML, LIL and LTA. Four representatives would be appointed by Nalcor and two would be
12 appointed by Emera. The JOC would be disbanded 35 years after FCP. Decisions to be made by the
13 JOC should be made by consensus from all representatives but Nalcor's CEO would have the final
14 say if there are disputes subject to the decision guideline identical to what is outlined in the ML-JDA.
15 Emera may dispute whether Nalcor's CEO's decision is in adherence with the decision guideline via
16 the dispute resolution procedure which is similar to the ML-JDA [JOA Clause 3.1-3.4];

17 • Both Nalcor and Emera would prepare a Long Term Asset Management Plan for the respective
18 assets each party is responsible for. The LTAMP's purpose is to outline the estimated O&M activities
19 required and the expected associated cost. Each party would provide its LTAMP to the other for
20 review and comments. The initial LTAMP was due on October 31, 2014 for both parties, and these
21 would be updated into in-service LTAMP once FCP has commenced for all Defined Assets. [JOA
22 Clause 5.1-5.2];

23 • Consistent with the Term Sheet, Emera would pay 20% of the O&M costs for all of the Defined
24 Assets. The remaining O&M costs would be paid for by Nalcor. There would be a one-time payment
25 to true up each party's O&M to the 80%/20% target once the O&M cost estimates for the in-service

1 LTAMP have been finalized. After this one-time payment, each party would be responsible for the
2 actual O&M costs it incurs and would not be responsible for the other party's O&M costs [JOA
3 Clause 5.5(a)&(b)];

4 • Each party should report its O&M costs and activities to the JOC within 90 days of the end of the
5 operating year [JOA Clause 6.4(a)];

6 • If there is work agreed by the JOC to extend ML's service life during the term of the JOA, Emera
7 would carry out the work but Nalcor would reimburse for the costs [JOA Clause 4.8(a)];

8 • At the end of the 35 year term after FCP, Emera would transfer ML to Nalcor for $1 along with all
9 related contracts and data. Emera's employees primarily responsible for ML's O&M have the option
10 to take employment at Nalcor [JOA Clause 7.1(a)];

11 • Before the transfer date, Emera would give Nalcor unlimited access for audit and inspection. After
12 the transfer, Emera shall not be held liable for any undiscovered issues irrespective of when the issue
13 arose. Any of ML's O&M costs to be paid by Emera due to audit and inspection must be agreed to
14 in writing [JOA Clause 7.2].

15 <u>Comparison between 2012 and 2014 version:</u> Other than the removal of terms references that are contingent
16 on sanctioning by both parties and the regulatory authorities, there were no material differences between the
17 2012 and 2014 agreement.

18 <u>Commentary on impact to NL ratepayers & taxpayers:</u> In contrast to the development costs, Emera would
19 pay exactly 20% of the estimated O&M costs of the Defined Assets and Nalcor would pay exactly 80% of the
20 estimated O&M costs of the Defined Assets up to when the in-service long-term asset management plan
21 ("LTAMP") is finalized when FCP commences for all of the Defined Assets. After the in-service LTAMP is
22 finalized, each party would be responsible for their respective actual O&M costs incurred. Any amounts paid
23 or received by Nalcor on finalization of the in-service LTAMP would represent a cost or benefit to ratepayers
24 as applicable.

25 d) <u>The Newfoundland and Labrador Development Agreement</u>

26 The NLDA interacts extensively with the LIL LPA. The NLDA details the transactions that forms LIL LP,
27 while the LIL LPA details the structure and the distributions of the partnership.

28 While the key commercial terms of the NLDA are consistent with the Term Sheet and the summary in 2013
29 NSUARB 154, the agreement provided the following additional details:

1 • A Joint Development Committee is to be established to provide a common understanding on the
2 project progress of MFP, LTA, and LIL. While Emera would hold two out of the six seats and
3 Nalcor would hold the other four seats, this committee is to provide progress updates only since
4 Emera has no managerial involvement in the MFP, LTA, or LIL. All decisions shall be made by
5 Nalcor [NLDA Clause 3.1 – 3.6].
6 • Nalcor would own all of LIL's transmission rights [NLDA Clause 5.1].
7 • The development contributions into LIL LP from Nalcor and Emera would take place as described
8 in appendix A [NLDA Clause 5.3 - 5.8]:
9 • For cost overruns not expected to be sanctioned by the PUB or other authorized authority, Nalcor
10 would contribute the amount of those cost overruns into LIL LP in exchange for Class C units and
11 Nalcor's contributions for Class C units for such cost overruns would be used to return capital back
12 to Class A and B unitholders [NLDA Clause 2.6(b)&(c)].
13 • At the end of LIL's service life, Nalcor has an option to acquire all of Emera's LIL ownership
14 interest for $1 plus any remaining capital [NLDA Clause 5.15(b)]
15 e) <u>The Labrador-Island Link Limited Partnership Agreement</u>
16 The Labrador-Island Link Limited Partnership is the partnership formed between Nalcor and Emera to
17 construct, operate and maintain LIL. The agreement outlined the partnership's structure as follows:
18 • Through Labrador-Island Link General Partner Corporation, which is a wholly-owned subsidiary of
19 Nalcor, Nalcor is the general partner ("GP") responsible for the regular operations and management
20 of LIL LP. The GP would have one total vote. The GP has nominal right to receive income and loss
21 allocations. The GP cannot resign until 180 days after the completion of LIL's development
22 activities;
23 • There are three classes of limited partnership units: Class A owned by Nalcor, Class B owned by
24 Emera, and Class C owned by Nalcor. Nalcor's LP units are held through its wholly-owned
25 subsidiary Labrador-Island Link Holding Corporation, while Emera's LP units are held through its

1 wholly-owned subsidiary ENL Island Link Incorporated. The significant rights and obligations are as
2 follows [LIL LPA Clauses 3.2, 5.1, 5.2, 5.3, 6.1]:

	Class A	**Class B**	**Class C**
Voting rights	1 vote per unit	1 vote per unit	None
Right to receive distributions	Yes	Yes	Yes
Right to contribute	Yes – see NLDA below for further details	Yes – see NLDA below for further details	Contribution is required when there is development cost overrun in LIL
Right to receive tax adjustments	No	Yes	No
Right to receive income and be allocated losses	Yes	Yes	No
Rights to remaining assets upon liquidation	Yes – same as Class B	Yes – same as Class A	Yes – after class A and B
Subject to mandatory retirement by the GP (see below)	No	Yes	No

3 • Upon mandatory retirement which would be triggered at Nalcor's option, Emera's capital would be
4 calculated and returned as redemption and the class B units would be cancelled by LIL LP. Emera
5 would continue to receive retirement payments until the end of LIL's service life based on Emera's
6 ownership immediately prior to retirement. [LIL LPA Clause 3.12]

7 • LIL LP cannot issue any further Class A or B Units beyond the initial subscriptions detailed in
8 appendix A. Any further contributions would be credited to the Capital Accounts of such unitholders
9 [NLDA Clause 2.3]. Based on the initial subscriptions, Nalcor would have 75% of LIL LP's voting
10 rights and Emera would have 25% of LIL LP's voting rights.

11 The distributions of income to Emera and Nalcor depends on a variety of factors and inputs, one of which is
12 the contributions made as per the NLDA. A comprehensive numerical example is included in schedule 3 of
13 the LIL LPA.

14 Commentary on impact to NL ratepayers & taxpayers: Regardless of the actual development costs for each of
15 the transmission assets (i.e. LTA, ML, and LIL), Nalcor would take 51% interest in the transmission assets
16 and Emera would take the remaining 49% interest through their respective investment in LIL LP. Subject to
17 the maximum equity percentage approved by the PUB for privately-owned regulated electrical utilities set at
18 45%, Emera can decide, at its own discretion, how much of that interest is in debt versus in equity. This
19 could result in a higher relative equity investment compared to if Nalcor were to make the LIL investment on

its own. A higher equity investment by Emera would result in higher electricity rates due to the higher return on equity allowed to be recovered in rates, and would negatively impact NL's ratepayers.

Comparison between 2012 and 2014 version: As the LIL LPA did not have a 2014 version, a comparison was only performed for the NLDA. Other than the removal of terms references that are contingent on sanctioning by both parties and by the regulatory authorities, there were no material differences between the 2012 and 2014 agreement.

Regulatory Process, EAA, and EAA's Impact to NL's Ratepayers & Taxpayers

The construction of the Defined Assets were sanctioned by the government of NL in 2012, and ML was approved by NSUARB in 2013. However, as per the 2013 NSUARB 154 issued on July 22 2013, NSUARB was concerned whether ML represented the lowest long-term cost alternative for Nova Scotia ratepayers. Specifically, the business case that ML represented the lowest long-term cost alternative for Nova Scotia ratepayers was based on the assumption that ML would allow NSPI, who is the rate-regulated power provider in Nova Scotia wholly-owned by Emera, to import market-priced energy from out of province at a much cheaper rate compared to the existing method of generating energy through fossil fuels. While the NSUARB expected NS to have reasonable access to market-priced energy after 2041 once Nalcor's contract with Hydro Quebec for Churchill Fall's Power expires, there were no commercial agreements providing a capacity guarantee for NSPI to import market-priced power via ML prior to 2041. Therefore, as a condition for approval, the NSUARB required Nalcor, Emera and NSPI to enter into a commercial agreement to ensure that part of ML's capacity is committed to allow power to be imported into Nova Scotia via ML.

As a result, the EAA was entered into on October 20, 2013 which was then subsequently amended on April 13, 2015. A summary of the significant terms in the initial EAA, as quoted from the Morrison Report, are as follows:

- Nalcor commits to make available to NSPI 1.2 TWh of non-firm energy (i.e., where the delivery of the energy may be interrupted for any reason without liability to either parties) per year on average over the course of the Agreement. The term begins upon FCP until August 31, 2041. If FCP is delayed, then the total energy Nalcor is committed to solicit to NSPI is reduced since the August 31, 2041 end date is fixed;
- The energy made available to NSPI is in excess to the energy required by Nalcor to satisfy NL's native load and the Nova Scotia Block. There are no restrictions on where Nalcor may obtain the energy from (i.e. generated or imported) nor is there any characteristic requirements (e.g. GHG credits, time of day) tied to this energy;

1 • Annual availability of energy could be up to 1.8 TWh, but could be as low as 0 TWh in any given
2 Contract Year (September 1 – August 31) depending on the Nalcor Forecast of Available Energy. In
3 years where Nalcor's available energy falls short of the 1.2 TWh annual average, Nalcor must provide
4 additional available energy in the remaining years of the term;
5 • Nalcor commits to provide NSPI with a rolling 24-month forecast of expected available non-firm
6 energy on a monthly basis;
7 • Once per year, in the month of June, NSPI has the option to issue a solicitation for non-firm energy
8 for the following Contract Year, and Nalcor commits to bid into that solicitation, based on Nalcor's
9 May 31 Forecast, up to a maximum of 1.8 TWh;
10 • In NSPI's solicitation, Nalcor may bid any price for its energy, up to and including the MassHub
11 price from ISO New England, or the higher price of any alternative liquid market opportunity
12 available to Nalcor. In both cases, the bid price shall be for the energy-only and would not include
13 any adjustments for tariffs and transmission losses incurred by Nalcor;
14 • If there is an extended dry period or some other system difficulty, and it appears that there would be
15 insufficient energy available for export from Newfoundland and Labrador, Nalcor would declare that
16 there would be a shortfall, referred to as "Variance". In this event, Emera shall be responsible for the
17 first 300 GWh per annum of any shortfall from the 1.2 TWh commitment, and Nalcor shall be
18 responsible for the remainder. Similar to non-variance bids, the bid price to NSPI for variance energy
19 from Nalcor and Emera would be capped at the higher of the MassHub price, or any alternative
20 liquid market opportunity available to Nalcor and Emera. There are also no sourcing requirements to
21 the variance energy although Emera has the option to fulfill the Variance with renewable energy as
22 detailed below;
23 • In the case of a Variance, if Emera chooses to satisfy its obligation to offer up to 300 GWh of energy
24 through the construction of new intermittent energy facilities in Nova Scotia (including wind, solar
25 and tidal power facilities), then Nalcor would offer up to 100 MW of balancing services. Balancing

1 services refers to Nalcor re-delivering the energy originally provided by Emera to balance the
2 intermittent output of the alternative generation facilities. Emera would pay Nalcor an annual fee of
3 $87,600/MW (expressed in 2013 dollars and escalating at CPI) for the Balancing Services;

4 - Even in the event that Nalcor satisfies the commitment to provide at least 1.2 TWh per Contract
5 Year on average before the term of the Agreement is completed (by providing more than 1.2 TWh
6 per year in the early years, for example), Nalcor must still offer its Forecast Available Energy in
7 NSPI's annual solicitation throughout the full term of the Agreement.

8 The signing of the EAA provided a contractual guarantee from Nalcor and Emera to NSPI and NS's
9 ratepayers to surplus market-based energy being available for purchase. While the EAA did not provide a
10 pricing guarantee and the bid price from Nalcor would likely be the prevailing market price, it provided NSPI
11 with a right of first refusal to market-priced power while not locking NSPI into any electricity volume
12 obligations. This reinforced the projection that ML provided NS ratepayers the least costly electricity option
13 by contractually guaranteeing access to market-priced energy, which was a key input into the projection. As
14 such, the NSUARB was satisfied that NSPI would have access to market-priced energy via ML, and approved
15 the construction of ML in November 2013 as per 2013 NSUARB 242.

16 <u>Impact to NL's taxpayers and ratepayers</u>

17 Since NL's native loads would take priority over the energy to be exported to NSPI as required by the EAA,
18 there are no impact to NL's ratepayers.

19 While the energy to be sold to NSPI would be at market rates, its bid price to NSPI is limited to energy only
20 and Nalcor would not be able to include any tariffs and transmission costs it incurs in sourcing the energy. In
21 order to minimize the cost of tariffs and transmission, Nalcor would be incentivized to source NSPI's energy
22 from MF (based on MF's proximity to NS as well as Nalcor's transmission access to NS via ML) rather than,
23 as an example, import additional energy from New England and incurring additional tariffs and transmission
24 costs. Therefore if MF's actual output was lower than expected, Nalcor may need to incur additional tariffs
25 and transmission costs to fulfill its obligations under the EAA, adversely impacting NL's taxpayers.

26 **Comparison of Oversight: UARB vs. PUB**

27 <u>Summary of the PUB's Decision</u>

28 On June 17, 2011, NL's Government directed the PUB *"to review and report on whether the development of the
29 Muskrat Falls generation facility and the Labrador-Island Link transmission line is the least-cost option for the supply of power
30 to Island Interconnected customers over the period of 2011-2017, as compared to the isolated Island Development scenario"*.
31 The PUB engaged Manitoba Hydro International ("MHI") as its expert consultant. The PUB issued its

findings on March 30, 2012 with the conclusion that the information provided by Nalcor was not detailed, complete, nor current enough for the PUB to determine which option represented the least cost option.

The PUB found that most of the information submitted by Nalcor was as of November 2010 for the purpose of a concept and feasibility study of MFP and LIL. Nalcor did not provide detailed engineering and financial analysis that was completed subsequently. The PUB noted this resulted in a large range of estimates which can significantly impact the project definition and costs of the interconnected option.

With reference to the timeline of the PUB's decision, the initial deadline for the PUB to decide on the Reference Question was originally December 20, 2011. In September 2011, the PUB requested an extension from the Minister of Natural Resources who granted an extension to March 31, 2012. In December 2011, the PUB requested further extension to June 30, 2012 to address the information deficiency noted above but was denied by the Minister. As such, the PUB noted in its decision that it did not have sufficiently detailed and updated information to make a decision.

Reference questions

The PUB only had one reference question to review and report on whether the development of the Muskrat Falls generation facility and the Labrador-Island Link transmission line was the least-cost option for the supply of power to the Island interconnected System over the period of 2011-2067, as compared to the isolated Island development scenario.

While the least-cost option was one of the questions considered by UARB with reference to ML, the UARB also considered other questions. The following is a full list of reference questions considered in 2013 NSUARB 154:

1. Does the ML Project represent the lowest long-term cost alternative for electricity for ratepayers in the Province?
2. Is the ML Project consistent with obligations under the Electricity Act?
3. Is the ML Project consistent with any obligations governing the release of greenhouse gases and air pollutants under the Environment Act, the Canadian Environmental Protection Act and any associated documents?
4. Are the engineering and design details included in the Application sufficient to enable the Board to approve the ML Project?
5. Should the capital and operating cost estimates for the ML Project be approved, including the capital structure and return-on-investment?

1 6. What variance, if any, should be established by the Board with respect to the approved cost of the
2 ML Project?
3 7. Will NSPI ratepayers receive benefits from the ML Project commensurate with the risks and costs
4 they will bear if the ML Project is approved?
5 8. Do the ML Project and Nalcor Transactions comply with applicable provisions of NS Power's Code
6 of Conduct governing Affiliate Transactions?
7 9. If the Board approves the ML Project, should it order any terms and conditions in its approval?
8 10. Do the ML Act and Regulations authorize or require the Board to approve the Nalcor Transactions
9 and related transactions?
10 11. Are the ML Project and Nalcor Transactions supported by a reasonable and comprehensive set of
11 commercial agreements?
12 12. Does the ML Act authorize or require the Board to approve the transfer of the Maritime Link to
13 Nalcor, and the sale of the Woodbine Upgrades to NSPI, following a period of 35 years after energy
14 is first delivered to NSPML?
15 13. What schedule should the Board order for project reports, if any, on the progress of the ML Project?
16 14. Does the Open Access Transmission Tariff ("OATT") need to be amended to incorporate or
17 otherwise accommodate the provisions of the NSTUA?
18 15. How does the provision for delivery of energy other than the NS Block affect the distribution of
19 benefits, costs and risks among the parties involved in the ML Project, the Nalcor Transactions, and
20 related transactions, including whether Nova Scotia ratepayers are subsidizing transactions?
21 16. Will the ML Project result in a requirement for increased reserves to meet the reliability standards
22 and criteria?
23 17. Are there contractual obligations, including water rights issues, that would serve as an impediment to
24 NSPI obtaining the NS Block?
25 As such, the resulting analysis from NSUARB was much more comprehensive compared to the PUB.

CIMFP Exhibit P-00453 Page 31

1 Timing and Information presented

2 The PUB's analysis and conclusion was issued substantially earlier in March 2012 than the NSUARB's
3 analysis and conclusion issued in July 2013. As such, the NSUARB had much more detailed information to
4 analyze its decision versus the PUB. This had a significant impact on the conclusion reached by both
5 regulatory bodies. In its decision, the PUB stated that it did not have enough information to reach a
6 conclusive decision, whereas the NSUARB was able to reach a conclusive decision and providing action items
7 to Emera to provide the EAA agreement to guarantee NS's access to the electricity market.

CIMFP Exhibit P-00453 Page 32

Appendix A – Capital Contributions into LIL LP

Steps:

1. Nalcor pays $100 for its GP interest and $1 for 1 unit of class C units.
2. Nalcor would transfer all of its LIL assets into LIL LP in exchange for a promissory note equal to the cost of the LIL assets plus interest accrued based on NLH's cost of capital rate.
3. Nalcor would subscribe into 75 Class A LP units in exchange for the cancellation of the promissory note.
4. Emera would pay $1,000 for 25 Class B LP units.
5. After LIL has been sanctioned, Emera shall make capital contribution where its contribution % would equal to:
   a) 49% of the total estimated development cost of LIL, LTA, and ML combined less 100% of the estimated development cost of ML; divided by
   b) LIL's estimated development cost.
6. LIL LP would raise debt based the target debt to equity ratio ("DER") provided by Nalcor and Emera. Emera's DER ratio would be limited by the maximum equity stake it is allowed to take in LIL by the PUB set at 45% equity. The debt raised by LIL LP are first guaranteed by Nalcor and Emera, and then to be covered by the Federal Loan Guarantee ("FLG"). The FLG stipulates that LIL's DER cannot exceed 75% debt to 25% equity.
7. Once all of the Defined Assets are in commercial operations and the development costs have been finalized, the calculation in step 5 to determine Emera's equity contribution is revised while holding Emera's DER the same. Nalcor and Emera would exchange equity via cash transaction through the GP to reach the revised equity contribution. As well, debt would be re-attributed to ensure each partner's DER is in compliance with the initial DER.

See numerical example per schedule 1 of the NLDA.

Appendix B – Glossary of Abbreviated Terms

Abbreviations	Full Term
AFUDC	Allowance for fund used during construction
Commission	The Commission of Inquiry Respecting the Muskrat Falls Project
CSED	Cost Sharing End Date
DER	Debt to Equity Ratio
DG3	Decision Gate 3
EAA	Energy Access Agreement
ECA	Energy and Capacity Agreement
Emera	Emera Inc.
FCP	First Commercial Power
FLG	Federal Loan Guarantee
GHG	Greenhouse Gas
GP	General Partner
GWh	Gigawatt Hours
IIS	Island Interconnected System
IOA	Interconnection Operators Agreement
IPA	Inter-Provincial Agreement
JDC	Joint Development Committee
JOA	Joint Operations Agreement
LIL	Labrador Island Link
LIL LP	Labrador Island Link Limited Partnership
LIL LPA	Labrador Island Link Limited Partnership Agreement
LIL Opco	Labrador Island Link Operation Corporation
LP	Limited Partner
LTA	Labrador Transmission Assets
LTAMP	Long Term Asset Management Plan
MEPCO	Maine Electric Power Company Inc.
MEPCO TRA	MEPCO Transmission Rights Agreement
MFP	Muskrat Falls Plant
MHI	Manitoba Hydro International
ML	Maritime Link
ML(E)TSA	Maritime Link (Emera) Transmission Service Agreement
ML(N)TSA	Maritime Link (Nalcor) Transmission Service Agreement
ML-JDA	Maritime Link Joint Development Arrangement
Morrison Report	MPA Morrison Park Advisors Inc. report entitled "Review and Consideration of the Energy Access Agreement and Related Information"
Nalcor	Nalcor Energy
NBTUA	New Brunswick Transmission Utilization Agreement
NL	Newfoundland and Labrador

CIMFP Exhibit P-00453 Page 34

Abbreviations	Full Term
NLDA	Newfoundland and Labrador Development Agreement
NLH	Newfoundland and Labrador Hydro
NS	Nova Scotia
NSPI	Nova Scotia Power Incorporated
NSPML	NSP Maritime Link Inc.
NSTUA	Nova Scotia Transmission Utilization Agreement
NSUARB or UARB	Nova Scotia Utility and Review Board
O&M	Operating and Maintenance
OATT	Open Access Transmission Tariff
PUB	The Board of Commissioners of Public Utilities - Newfoundland and Labrador
Term Sheet	Term Sheet between Nalcor and Emera dated November 18, 2010
TWh	Terawatt Hour