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Request IR-76:

Please explain what potential costs exist and how the agreements protect NS ratepayers, in each of the following scenarios:

(a) The Muskrat Falls generating facility fails to reach a viable stage of completion.

(b) The Maritime Link transmission project fails to reach a viable state of completion.

(c) A delay beyond 2020 in either scenario a) or b).

(d) A failure to interconnect with Newfoundland and Labrador's Lower Churchill Project?

(e) Significant cost overruns beyond the requested variance approval of $60 million on the subsea power cable project?

(f) Significant cost to upgrade the current transmission system in Nova Scotia?

(g) Costs to interconnect beyond Nova Scotia?

(h) Reduced water flow at Muskrat Falls due to contractual water rights issues, a change in climate, or for other reasons.

Response IR-76:

NSPML and NS Power customers are protected in the following manner:

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If any part of the Muskrat Falls Project is delayed but ultimately completed, there is no compensation due to NSPML or the Nova Scotia ratepayer by Nalcor as Nalcor remains obliged to provide the full NS Block.

(a) If Nalcor does not complete any part of its project because of an Extended Force Majeure event described in the Maritime Link Joint Development Agreement, there is no compensation due from Nalcor to Emera. This event is unlikely to occur as Nalcor is relying upon this project to serve customers, the state of design to address project risks and procurement of long lead items to date.

If Nalcor does not complete any of the Muskrat Falls project, the Labrador Island Link or the Labrador Transmission Assets, other than arising from an Extended Force Majeure event, then Nalcor shall compensate Emera for the “Compensation Value” as provided for in the Energy and Capacity Agreement (Section 8.6(b). The Compensation Value calculation is summarized in the answer to Liberal IR-045.

The Government of Newfoundland & Labrador has agreed to guarantee payment to NSPML if Nalcor does not complete any part of its project by reason of a Government Action and does not pay the Compensation Value.

If Compensation Value is due from Nalcor, Emera is obliged to mitigate its losses by ceasing construction on the Maritime Link to the extent that it is possible.

(b) If the failure to complete the Maritime Link is not due to an Extended Force Majeure then Nalcor is entitled to recover provable damages. If the failure is a result of an Extended Force Majeure as defined in the Maritime Link Transmission Service (Nalcor) Agreement, then no compensation is due from Emera to Nalcor.

(c) If the projects are ultimately completed, there is no liability between the parties for the late completion and the NS Block will be delivered at a later start date. See (a) above.

(d) If the Maritime Link has been completed, the consequences for failure to complete the Labrador Island Link are the same as for failure to complete the Muskrat Falls Plant and as is outlined in answer (a).

(e) The liability will be split in accordance with Section 8.2(e) of the Maritime Link Joint Development Agreement. The Overruns, to the extent not prudently incurred and therefore not approved by the UARB for recovery from NS Power, will be shared by Emera and Nalcor on the basis of the first 5 percent being paid by Emera, the second 5 percent being paid by Nalcor, and the balance being shared equally.

(f) Please see the answer to CA-SBA IR-91.

(g) These costs will be a cost to Emera unless approved by the UARB in response to any application for recovery of the same.

(h) Lack of precipitation is expressly not a Force Majeure event and is therefore not a Forgivable Event under the Energy and Capacity Agreement. The NS Block will not be Curtailed for that reason. With respect to water rights not dependant on precipitation, please see the answer to question UARB IR-70 and UARB IR-111.

CONFIDENTIAL (Attachment 2 only)

Request IR-77:

Please provide a copy of all studies and reports, including internal reports that have been completed or in draft that support the requirement and feasibility for Muskrat Falls and the Maritime Link.

Response IR-77:

As stated in UARB IR-51, beginning as early as 2005, NS Power undertook more detailed investigations into the sources of cleaner energy. The 2007 Integrated Resource Plan, and the 2009 IRP Update, anticipated that cleaner energy imports would be part of Nova Scotia's energy future. By 2009, emerging emissions constraints, renewable standards, market conditions and increasing and volatile fossil fuel prices lead to the need to decide whether an import option would be a reliable part of the solution and, if so, from which sources. This work necessitated consideration of transmission systems and constraints in Atlantic Canada. NS Power pursued discussions with both Hydro-Québec and Nalcor Energy to determine whether they could be such sources.

Please refer to Attachment 1, "Project Screening Update, April 4, 2008", which is a project screening update of the transmission infrastructure relating to the development of Lower Churchill Falls generation.

Please refer to Confidential Attachment 2, "Ventyx Study Output", which is a preliminary assessment conducted in early 2010, not a final analysis, and which demonstrated that participation in the Lower Churchill Projects and Maritime Link could be beneficial to Nova Scotia customers. The current analysis filed as evidence in this proceeding constitutes the final analysis and updates the preliminary assumptions and analysis conducted for this early version.

During 2010, Emera continued to advance concepts that would see a regional market developed in Atlantic Canada. Emera took the lead in coordinating meetings with Atlantic Canada utilities and government energy officials to promote the Atlantic Energy Gateway concept. The initial approach was to consider Government of Canada funding support through its P3 program or a Federal Loan Guarantee, which was ultimately achieved. Please refer to NSUARB IR-77 Attachment 3, "P3 Discussion" and Attachment 4, "Transforming Atlantic Canada's Electricity Sector", for examples of the types of presentations prepared at the time.

Lower Churchill Falls Project Infrastructure Opportunities

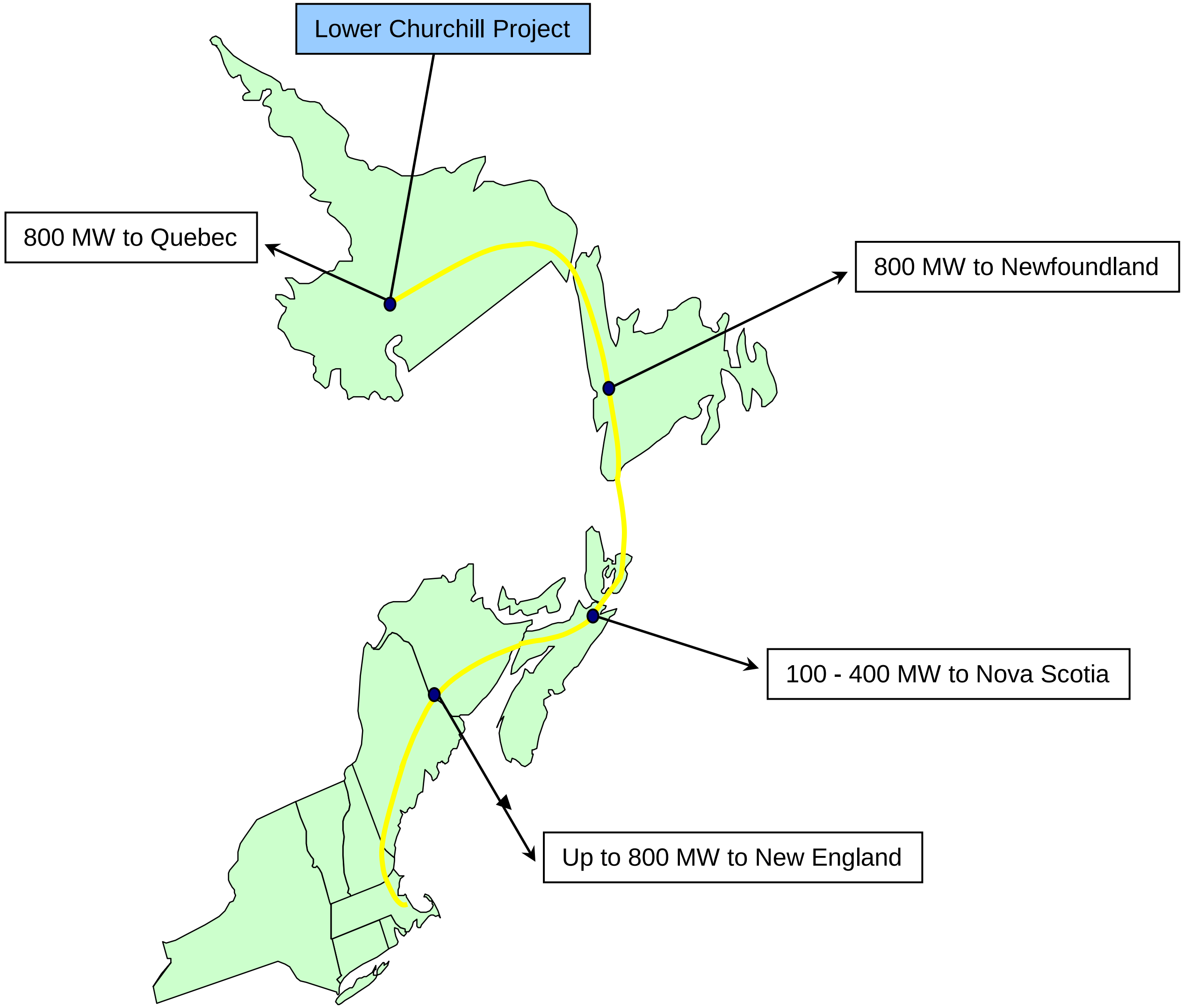
Project Screening Update

April 4, 2008

Agenda

- Atlantic Pathway Options Update (Emera/NSP)
  - Energy Markets Overview
  - Assumptions
  - Alternatives and Netback Pricing
- NEL Project Update (Emera/NSP)
  - National Grid MOU
  - Market Efficiency Upgrade
- Lower Churchill Update (NFLD Hydro)
- Next Steps

Project Description



Maritime Link NSUARB IR-77 Attachment 1 Page 3 of 16

Key Assumptions and Sources

Exported Power

- 800 MW at 69% capacity factor, 4.8 TWhr (per Lower Churchill Project)

Market Revenues – Boston Zone

- Energy 83 – 93 $ per MWhr *Source ESAI, London Economics*
- Capacity 11 – 14 $ per MWhr (based on $6 – 8 per KW-month and 720 MW, and 4.8 TWhr) *Source ESAI, London Economics*
- No green energy revenues assumed

Market Revenues – NEPOOL Import Point

- Pooled transmission line no charge to generator
- 3$ per MWhr differential based on LMP differential of $2 per MWhr and ISO-New England in-fees of 1 $ per MWhr

New Brunswick Tarriff

- 2.2% losses
- 2,426 $ per MW-month transmission service charge (per New Brunswick ISO existing tarriff)

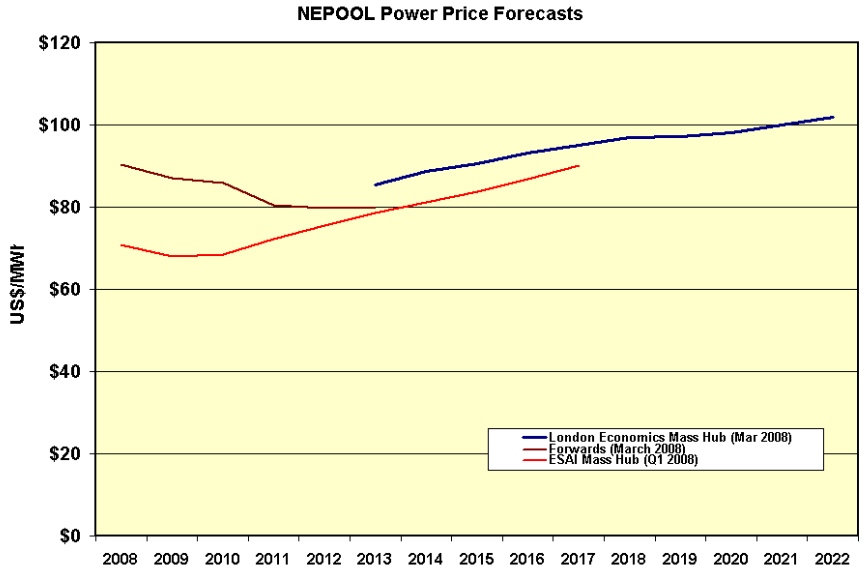
Nova Scotia Transmission Charge

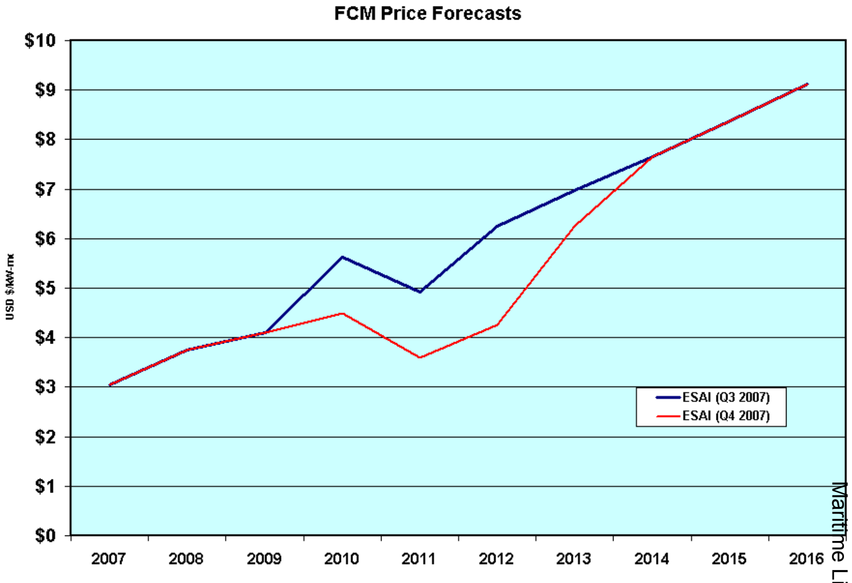
- 40-year tarriff, levelized
- $1.5 billion transmission project cost (direct to New Brunswick border, upgrades to Nova Scotia system, 2014 construction)
- 12.4% ROE on 50% equity (or 8.4% unlevered IRR)
- No losses assumed

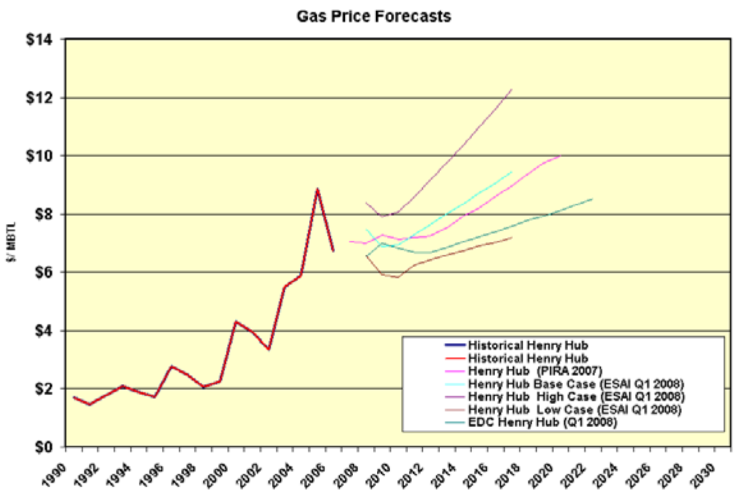
Newfoundland Transmission

- 40-year tarriff, levelized
- $0.4 billion transmission project cost allocated to exported power
- 12.4% ROE on 50% equity (or 8.4% unlevered IRR)
- No losses assumed

Market Price Forecasts







Maritime Link NSUARB IR-77 Attachment 1 Page 5 of 16

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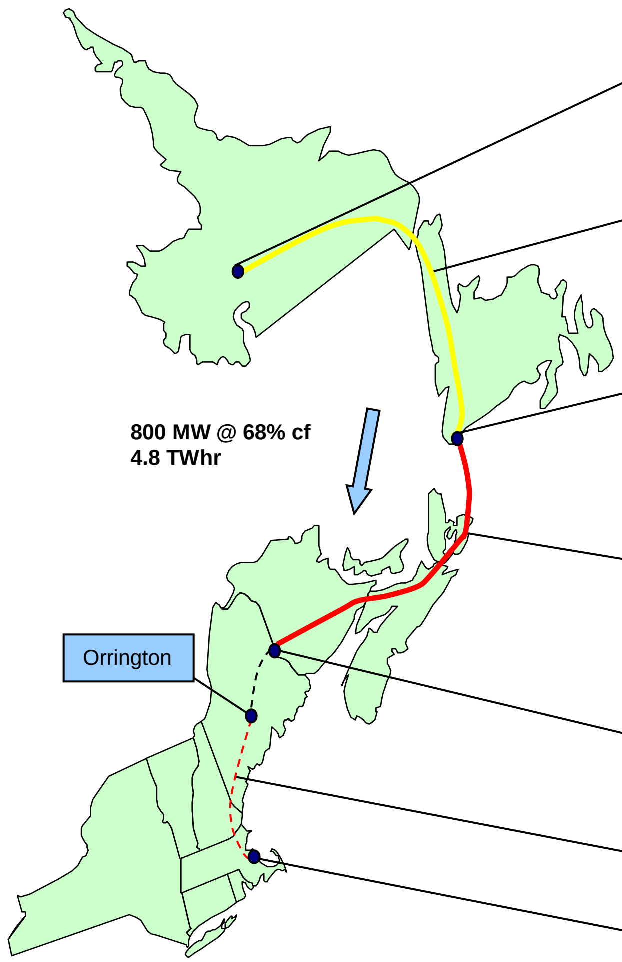
Net-back price sensitivities

Summary of High-Level Economics – option (a)

Emera

- Based on DC transmission line to US border, no connections to New Brunswick system or Nova Scotia system.



Lower Churchill Generation — **Maximum Cost of Generation: 44 - 57 $/MWhr**

Newfoundland and Labrador Transmission Line — Tariff: 8 $/MWhr (based on $0.4 billion)

Newfoundland and Labrador Interface — Netback Price: 52 – 65 $/MWhr

Nova Scotia Transmission Line — Tariff: 39 $/MWhr (based on $1.5 billion) (a)

NEPOOL Import Price — Netback Price: 91 – 104 $/MWhr

NEL Project — Pooled Facility

Boston Zone — Total Revenue:
83 – 93 $/MWhr energy
<u>11 – 14 $/MWhr capacity</u>
94 – 107$/MWhr total

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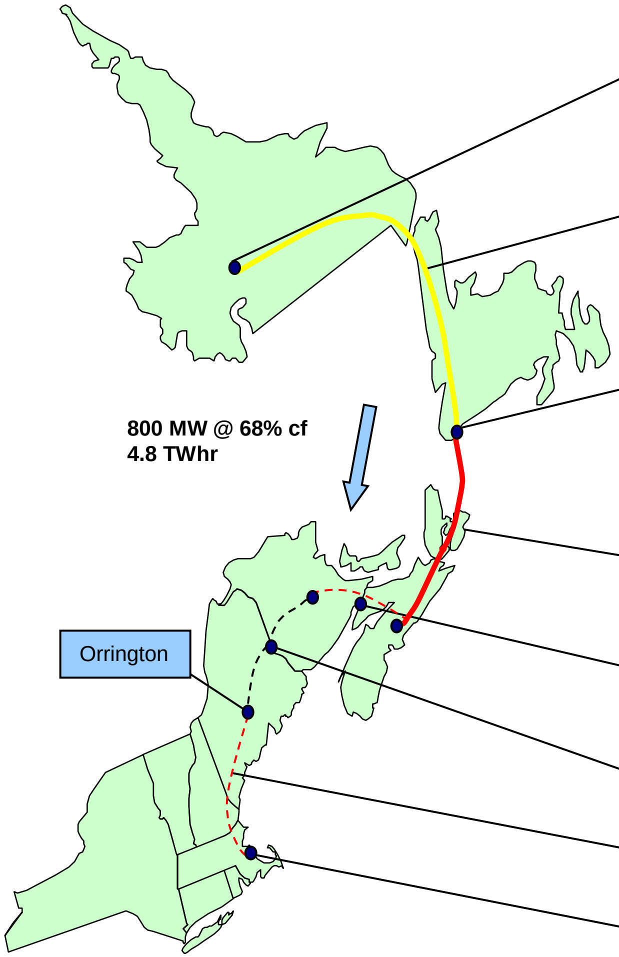
Emera

Summary of High-Level Economics – option (b)

- Based on DC transmission line to Halifax area, and reinforcements to Nova Scotia system.



Lower Churchill Generation	**Maximum Cost of Generation: 37 - 50 $/MWhr**
Newfoundland and Labrador Transmission Line	Tariff: 8 $/MWhr (based on $0.4 billion)
Newfoundland and Labrador Interface	Netback Price: 50 – 63 $/MWhr
Nova Scotia Transmission Line	Tariff: 39 $/MWhr (based on $1.5 billion)
New Brunswick Interface	Netback Price: 84 – 97 $/MWhr
NEPOOL Import Price	Netback Price: 91 – 104 $/MWhr
NEL Project	Pooled Facility
Boston Zone	Total Revenue: 83 – 93 $/MWhr energy 11 – 14 $/MWhr capacity **94 – 107$/MWhr total**

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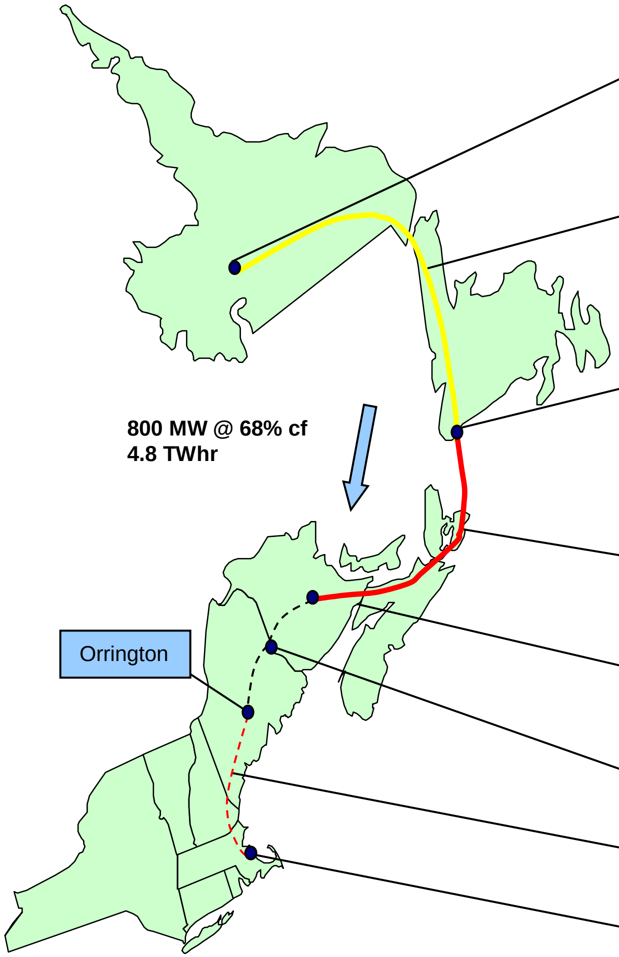
Summary of High-Level Economics – option (c)

- Based on DC transmission line to Salisbury, New Brunswick and no connection to Nova Scotia system.



Lower Churchill Generation	**Maximum Cost of Generation: 42 - 55 $/MWhr**
Newfoundland and Labrador Transmission Line	Tariff: 8 $/MWhr (based on $0.4 billion)
Newfoundland and Labrador Interface	Netback Price: 50 – 63 $/MWhr
Nova Scotia Transmission Line	Tariff: 34 $/MWhr (based on $1.3 billion) (c)
New Brunswick Interface	Netback Price: 84 – 97 $/MWhr
NEPOOL Import Price	Netback Price: 91 – 104 $/MWhr
NEL Project	Pooled Facility
Boston Zone	Total Revenue: 83 – 93 $/MWhr energy 11 – 14 $/MWhr capacity **94 – 107$/MWhr total**

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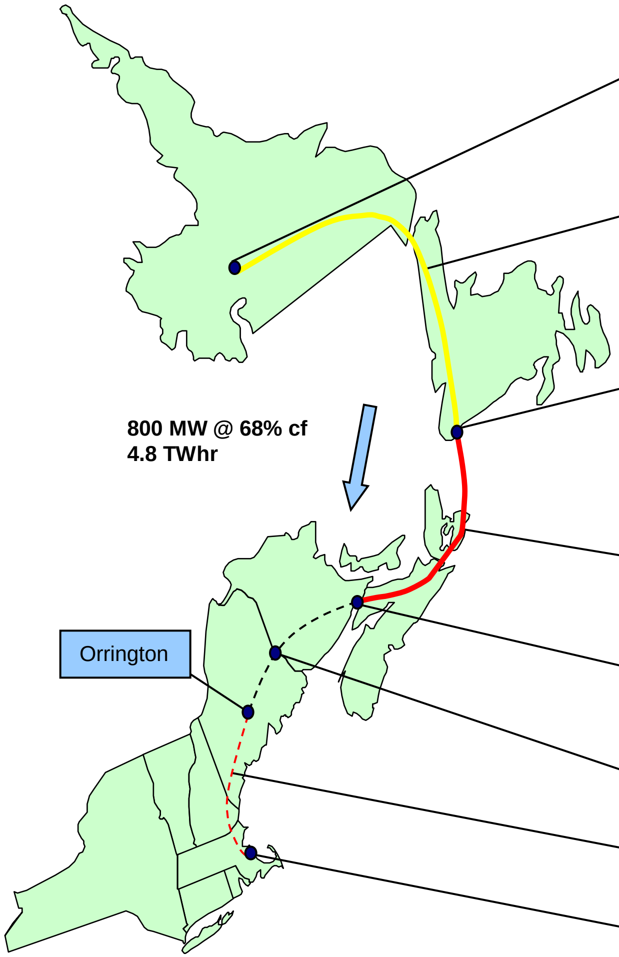
Summary of High-Level Economics – option (d)

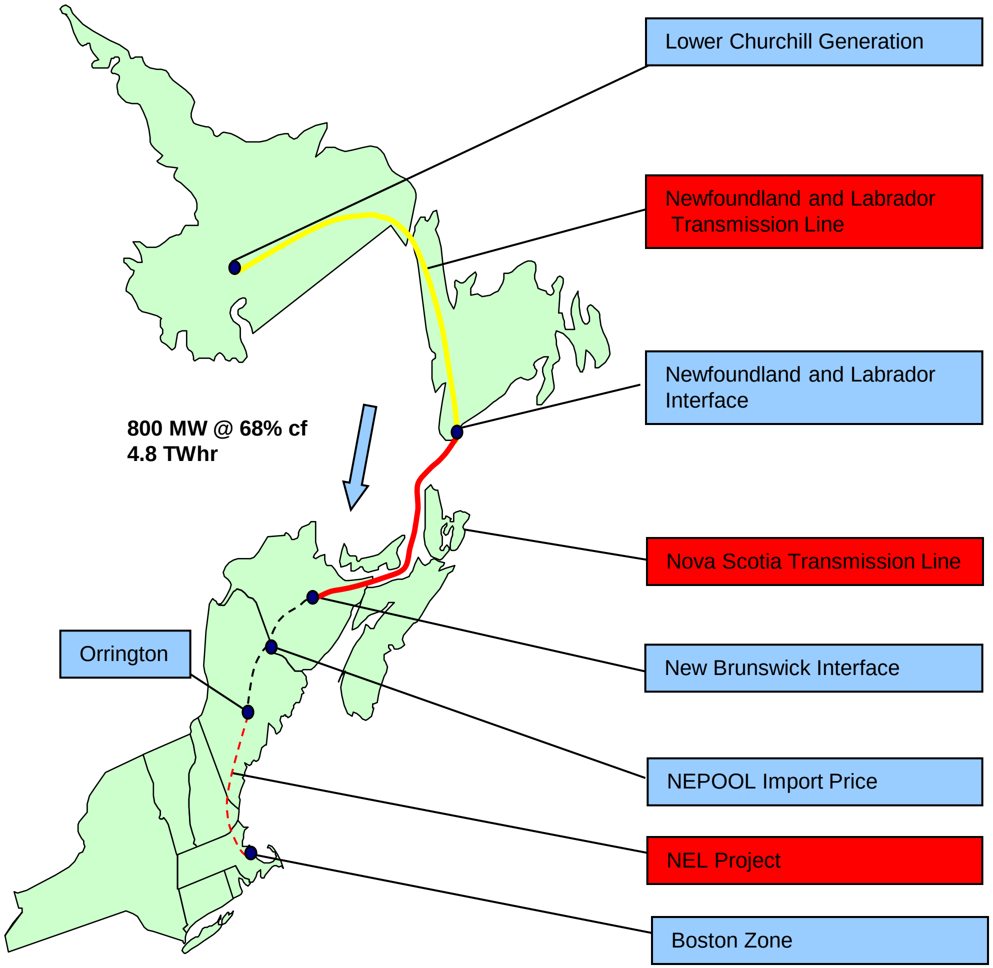
- Based on DC transmission line direct to New Brunswick border, and reinforcement with-in Nova Scotia system Onslow to Salisbury.



Lower Churchill Generation	**Maximum Cost of Generation: 37 - 50 $/MWhr**
Newfoundland and Labrador Transmission Line	Tariff: 8 $/MWhr (based on $0.4 billion)
Newfoundland and Labrador Interface	Netback Price: 45 – 58 $/MWhr
Nova Scotia Transmission Line	Tariff: 39 $/MWhr (based on $1.5 billion) (d)
New Brunswick Interface	Netback Price: 84 – 97 $/MWhr
NEPOOL Import Price	Netback Price: 91 – 104 $/MWhr
NEL Project	Pooled Facility
Boston Zone	Total Revenue: 83 – 93 $/MWhr energy 11 – 14 $/MWhr capacity **94 – 107$/MWhr total**

Summary of High-Level Economics – option (e)

- Based on DC transmission line to New Brunswick, New Brunswick routing, no connection to Nova Scotia system.



Maximum Cost of Generation: 32 - 45 $/MWhr

Tariff: 8 $/MWhr (based on $0.4 billion)

Netback Price: 40 – 53 $/MWhr

Tariff: 44 $/MWhr (based on $1.7 billion)

Netback Price: 84 – 97 $/MWhr

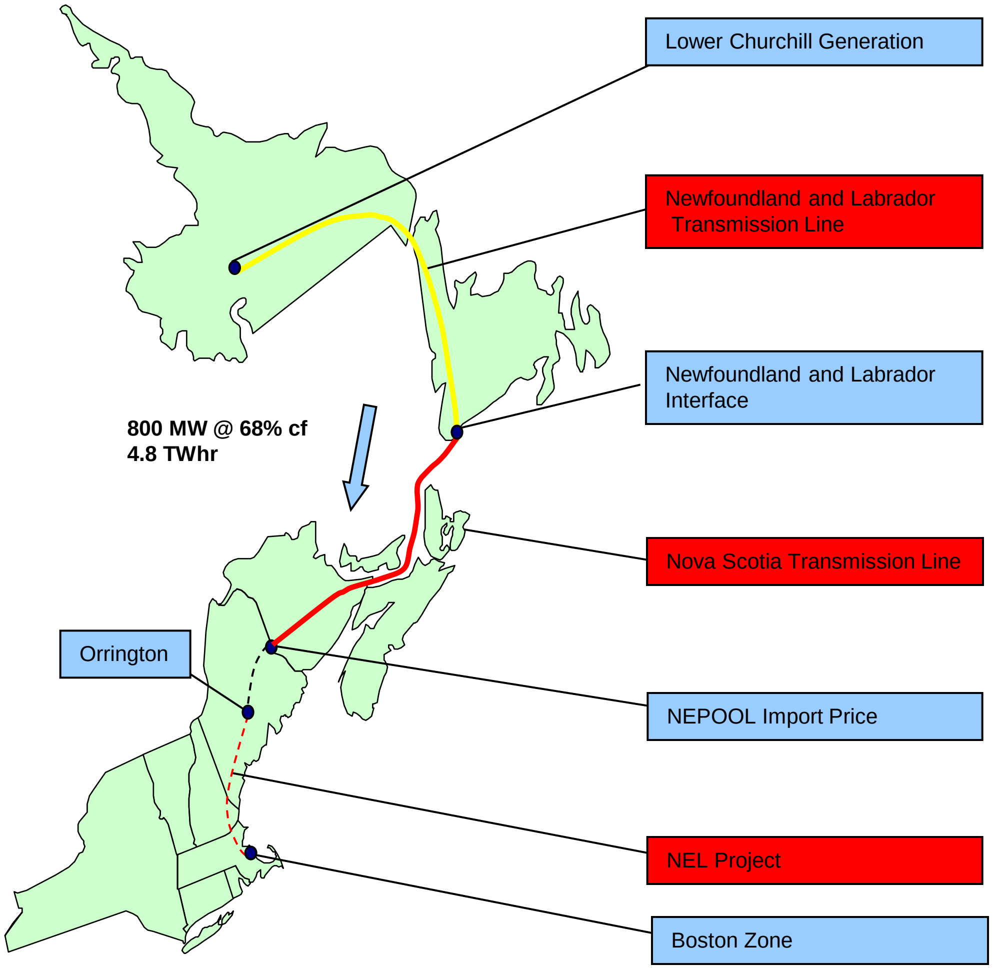
Netback Price: 91 – 104 $/MWhr

Pooled Facility

Total Revenue:
83 – 93 $/MWhr energy
11 – 14 $/MWhr capacity
94 – 107$/MWhr total

Summary of High-Level Economics – option (f)

- Based on DC transmission line to US border, New Brunswick routing, no connections to New Brunswick system on Nova Scotia system.



Maximum Cost of Generation: 35 - 48 $/MWhr

Tariff: 8 $/MWhr (based on $0.4 billion)

Netback Price: 43 – 56 $/MWhr

Tariff: 48 $/MWhr (based on $1.9 billion)

Netback Price: 91 – 104 $/MWhr

Pooled Facility

Total Revenue:
83 – 93 $/MWhr energy
<u>11 – 14 $/MWhr capacity</u>
94 – 107$/MWhr total

Northeast Energy Link Overview

- The Northeast Energy Link (NEL) is a proposed new DC transmission line between northern Maine and southern New England. The Project was conceived in mid-2007 and introduced to ISO New England in December of last year.

- The Project consists of the addition of a transmission upgrade interconnecting the NEMA/Boston and/or SEMA and South West Connecticut load zones with incremental energy and capacity resources located in Northern Maine, New Brunswick and other resources in Atlantic Canada. Phase 1 would extend to the Boston area, and Phase 2 would extend on to Connecticut.

- ISO-NE has already concluded that imports of renewable and low carbon-emitting resources from these regions are critical to meeting New England's energy objectives. This includes meeting the Renewable Portfolio Standards (RPS) and Regional Greenhouse Gas Initiatives (RGGI).

- **Project Participants**
- Emera and Bangor Hydro are the lead developing owners of the NEL Project. National Grid joined Emera and Bangor Hydro as a project partner in March of this year. Grid brings strong value to the project, especially with its extensive facilities and operations in southern New England. Spectra Energy is a participant in the project and is currently assisting the partners with ROW assessment along its pipeline corridor. Spectra brings significant expertise in underground linear projects, right-of-way, and permitting.

NEL Scope

- The project scope is being defined and modified based on emerging needs and opportunities. The following key alternatives are being considered:

- DC transmission line from Orrington to Boston; 660 MW capacity; 360 MW of new renewable and non-carbon sources from northern Maine and the Maritimes through the existing New Brunswick interface.

- DC transmission line from New Brunswick to Boston; 1,100 MW capacity; energy originates from northern Maine and Maritimes through an upgraded New Brunswick interface.

- DC transmission line from New Brunswick to Boston and Southwest Connecticut; 2,200 MW capacity; energy originates from northern Maine and Maritimes through an upgraded New Brunswick interface; 1,100 MW injected into Boston and 1,100 MW into southwest Connecticut.

Development Process

- Study was conducted by London Economics in the fall of 2007, and then updated in March, 2008. The results of modeling showed extensive economic benefits to all New England customers. Market clearing price reductions generated approximately $1.3B in savings. The project was presented to ISO-NE on December 18, 2007.

- The NEL was officially submitted to ISO on March 31 requesting an economic study as a Market Efficiency Transmission Upgrade (METU). Establishing the methodology and conducting the economic study is expected to take most of this year. BHE and Grid will present the study request to the PAC on April 30.

- An economic evaluation under Attachment N of the Tariff has also been requested to determine the total project production cost reductions.

- ISO-NE has formed Attachment K&N Working Groups to manage the economic study process and these groups kicked off their work on March 26. BHE and Grid are very active in this group.

- Other federal, state, and local permitting would begin after the ISO process is completed.

- The in-service target is 2012.

NEL Technical Components

- Underground DC cable (two conductors) extending approximately 240 miles
- Capacity range from 660 to 2200 MW at approximately 300kV
- Technology can support 1100MW per circuit
- Higher transfers may dictate an overhead extension to Pt. Lepreau, NB
- AC/DC converter stations on each end
- Considering DC Light/Plus technology
- The preferred project design at this point calls for a complete underground configuration between Orrington and Boston. Current planning also calls for a route utilizing existing gas and/or electric transmission corridors which parallel the Maine, New Hampshire, and Massachusetts coastline. An underground design results in a small project footprint and minimal new environmental disturbance. Spectra has prepared a preliminary right-of-way assessment report which will be share with the project team on April 8.

NSUARB IR-77 Attachment 2 has been removed due to confidentiality.

P3 Discussion –
An Atlantic Canada Opportunity

Context for today's discussion…

- Atlantic Energy Gateway discussion among the four Atlantic Provinces is at the formative stages.
- An Atlantic Energy Gateway can provide benefit to all Atlantic Canada.
- Important components of the Gateway could include a DC link between Lab/NL, NL/NS as well as upgrades to the NS/NB/PEI grid and interconnections.
- The NL/NS DC Link portion of the Gateway is a strong candidate for P3 funding – a discrete element that can be procured on a competitive basis by non-regulated entities.
- P3 funding deadline for the current round is June 30, 2010.
- Purpose of today's meeting is to discuss the structure and format of a P3 request, in the context of the Atlantic Energy Gateway to ensure clarity and consistency with the Atlantic vision for the Gateway process.

Public Private Partnerships (PPP) Canada

- Funding opportunity to enable the Atlantic Energy Gateway.

- PPP Canada is a Federal Crown agency established in 2009 to promote public-private partnerships in large infrastructure projects, including:

  "***reinforcement, expansion of existing and construction of new transmission grids to transmit clean energy***".

- Total fund is $1.2 billion. First round completed, challenges in finding projects. Preliminary expressions of interest for second round of funding are due June 30, 2010; at least $200 million available.
  - Eligible projects must be in the public interest.
  - Eligible projects must be competitively sourced from the private sector. Solicitation must include design, construction, financing, operation and maintenance. Performance-based bids are preferred.
  - Expansion or enhancement of existing regulated utility assets would not qualify.
  - P3 Canada could fund up to 25% of total project cost, through non-repayable contributions, repayable contributions and/or loans and loan guarantees.

- Funding from this agency does not impact eligibility of other provincial funding requests from other sources of federal funding.

Regional Transmission Transformation

1. Lab-NF Island HVDC Link
2. NL-NS HVDC Interconnect Link
3. NS Grid Reinforcements
4. NB-NS Interconnect Reinforcements
5. NB-PE Interconnect & PE Grid Reinforcements
6. NB Grid Reinforcements
7. NB-NE Energy Corridor Capacity Upgrades

PPP Canada – Funding Opportunity

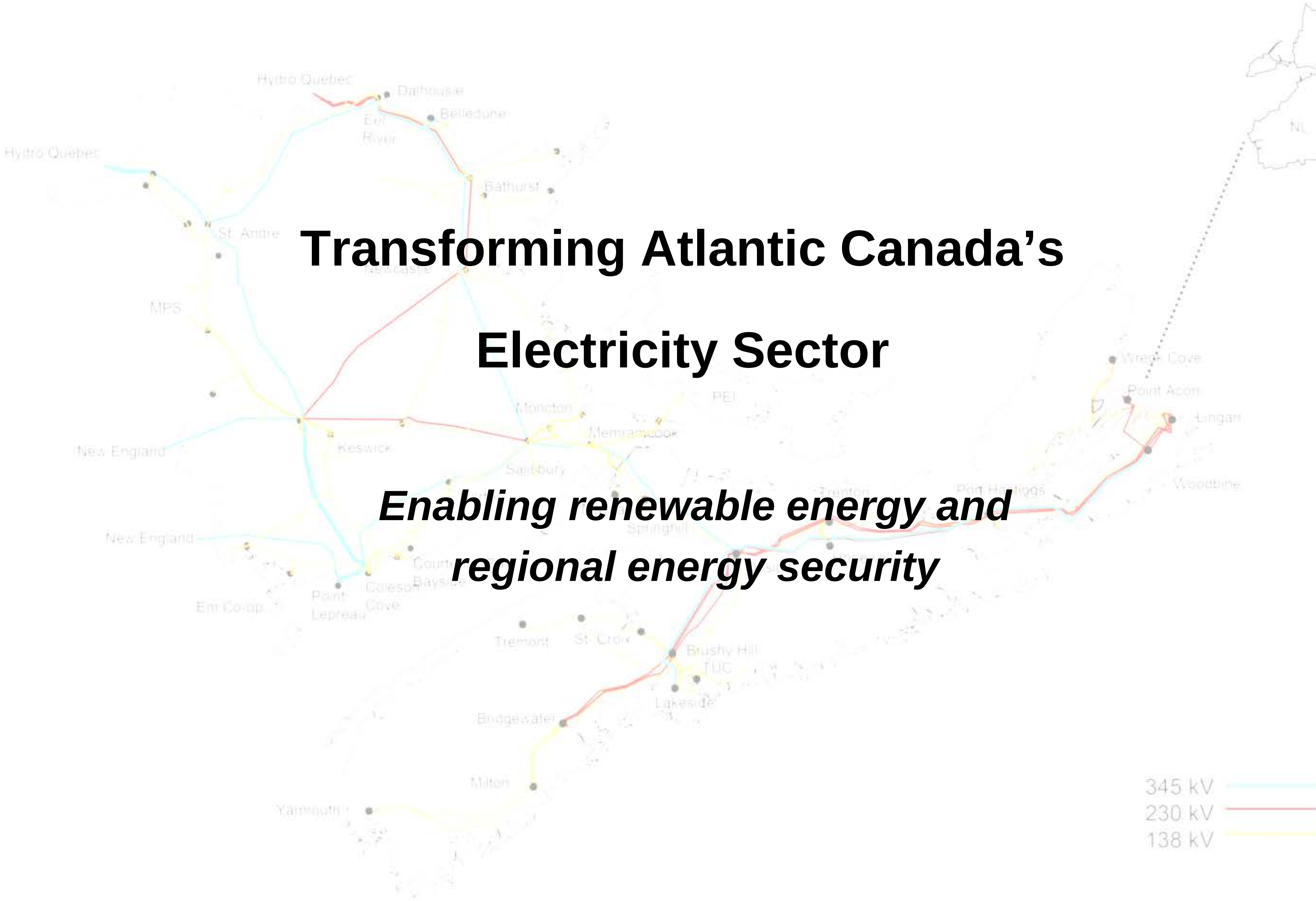
- The subsea transmission interconnection between Nova Scotia and Newfoundland is an ideal candidate for P3 Canada funding:
  - Project cost within P3 Canada program budget
  - Subsea cable ideally will be procured on a competitive basis by non-regulated entities – a pre-requisite for P3 Canada funding.
  - HVDC converter stations (onshore facilities) in Nova Scotia and Newfoundland could be built and maintained by the regulated monopolies.

- Project to be brought forward by the Newfoundland & Labrador and Nova Scotia governments as a regional energy enabler.

- Regional benefits:
  - Increased flexibility and efficiency in Atlantic Canada's energy market
  - Provides regional market access to Lower Churchill supply
  - Supports legislative requirements for carbon reductions
  - Enables development of significantly more renewable energy
  - Improves reliability of the bulk power system in Atlantic Canada
  - Enhances access to the northeast North American energy market

PPP Canada – Funding Opportunity

- Next steps



Transforming Atlantic Canada's Electricity Sector

Enabling renewable energy and regional energy security

Benefits

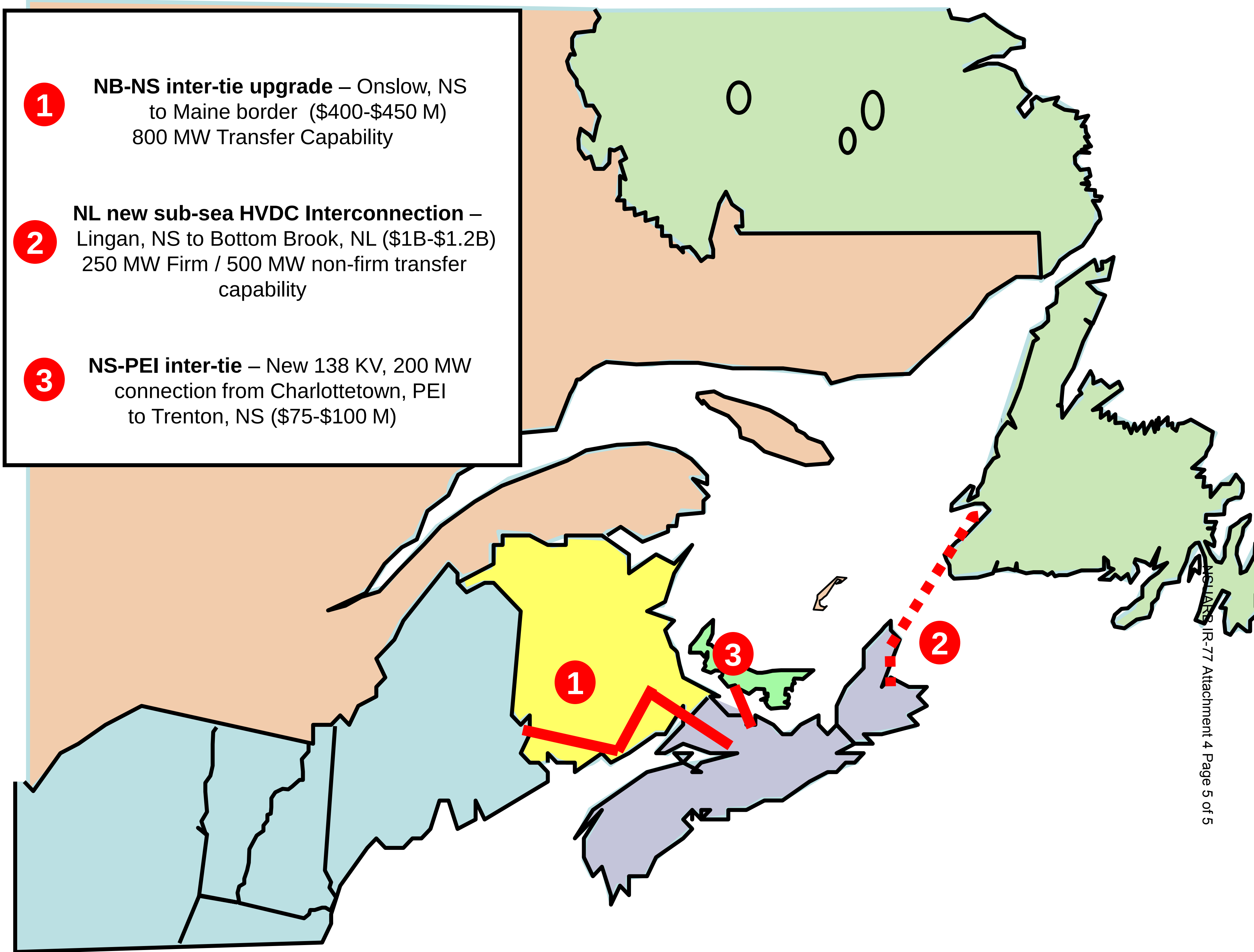
- Aligns with provincial energy strategy
- Opportunity to displace expensive oil-fired generation from Holyrood
- Enables potential to integrate significantly more, lower-cost wind generation in Newfoundland
- Opportunity to re-time / re-value NL hydro resources
- New access to Nova Scotia, Atlantic Canada and northeastern U.S. markets
- Enables backhaul of Upper Churchill recall energy
- Provincial reliability and regional flexibility improvements
- Creates jobs during 5-7 years of design, construction, operationalization
- Future path for Lower Churchill generation; additional leverage in negotiating transmission path through Quebec

Why now?

- Regional cooperation alignment
  - Regional system reliability, flexibility, energy security
  - NL goals re: Holyrood, connection to mainland and future Lower Churchill development
  - Regional "response" to failed NB Power-Hydro Quebec deal and Régie de l'énergie decision on Lower Churchill transmission through Quebec
  - NB election timing (desire for energy announcement by July)
  - Enables new PEI tie to the mainland (reliability, redundancy, wind exports and balancing)
  - Optimal renewables development requires a stronger grid
  - Atlantic provinces "transformation" re: fossil fuel generation sources
- PPP Canada funding option
  - June 30 deadline for initial expression of interest in 2010 funding round
- Federal agenda re: fossil fuel generation
- Aligned interests between jurisdictions
- Emera is ready to lead … and invest

What will it take?

- Federal investment
  - PPP Canada
  - GHG “transformation” (Environment Canada desire to close coal units)
  - Possible new green infrastructure tax incentives
- Newfoundland government decision to move on mainland transmission link in advance of a final decision on Lower Churchill
- Regional political co-operation
- Quick action based on opportunities that exist <u>now</u>


1
NB-NS inter-tie upgrade – Onslow, NS to Maine border ($400-$450 M)
800 MW Transfer Capability
2
NL new sub-sea HVDC Interconnection – Lingan, NS to Bottom Brook, NL ($1B-$1.2B)
250 MW Firm / 500 MW non-firm transfer capability
3
NS-PEI inter-tie – New 138 KV, 200 MW connection from Charlottetown, PEI to Trenton, NS ($75-$100 M)
1
3
2

NON-CONFIDENTIAL

Request IR-78:

During testimony at the 2013 ACE Hearing NSPI indicated all capital decisions are being made based on projections of load and requirements that do not include the Pacific West Commercial Corp Port Hawkesbury (PH) load.

(a) Does the load forecasts provided include the PH load? If so, please restate the future requirements, including 2020, based on the revised, no PH load forecast.

(b) Would all the energy from the Maritime Link be required, if not for the PH load?

(c) Would the NS Block of energy be required, if not for the PH load?

(d) Will this investment require a revision to the fixed capital contribution of the PH customer?

Response IR-78:

(a) The base load cases include a large industrial load equivalent to the PH load and the low case excludes such a load after 2019. NS Power does not plan generating capacity developments to serve the interruptible load of PH. In serving the energy requirements of PH, compliance with federal GHG requirements and provincial RES requirements (40 percent of energy sales) will require actions to be taken. All three alternatives considered address the needs to serve PH energy within the context of the hard cap on mercury and the RES.

(b) NS Power would only purchase available energy on the Maritime Link based on economic opportunity.

NON-CONFIDENTIAL

(c) PH load is not factored into capacity planning. The firm renewable energy of the NS Block supports unit retirement and therefore GHG compliance and it also supports RES compliance which is measured against energy sales.

(d) The term of the PH load retention tariff and the reopener provision are described in the tariff. The reopener is dependent on contribution to fixed costs achieving a level of $20 million by December 31, 2017. It is not dependent on invested capital.

NON-CONFIDENTIAL

Request IR-79:

With respect to the purchase of the Supplemental Energy Block, please explain the following:

(a) **If the purchase of this energy is not beneficial to NS ratepayers due to a scenario where NSPI can buy energy elsewhere at better prices, is it reasonable to expect that this energy can be offloaded? Please explain.**

(b) **What assurances are there that will be no negative consequences to NS ratepayers associated with the risks related to reselling the energy?**

Response IR-79:

(a) The Supplemental Energy will be included in the NS Block and delivered with no incremental cost, which allows NS Power to avoid variable fuel and operating costs, which will directly reduce the cost to customers. There are no restrictions on NS Power selling or exporting power, however, the GHG Credits associated with the NS Block may not be resold.

(b) NSPML is not aware of any negative consequences, subject to the restriction on selling GHG Credits associated with the NS Block noted above.

NON-CONFIDENTIAL

Request IR-80:

It appears that the cost of the other import option included reinforced ties between NS/NB as well as NB/Quebec.

a) Please explain why that would be required.

b) Would such costs for tie reinforcement be required on this project as well?

c) Are such costs included in the request for approval or analysis?

d) Were they included in the Link option when compared to other options?

Response IR-80:

(a) As shown in Figure 2 of the WKM Energy report (Appendix 6.05 page 8), there is insufficient firm transmission available through, or from, New Brunswick to Nova Scotia to deliver a 165 MW firm purchase and to guarantee access to economic supplemental energy purchases up to a 500 MW total. In order to allow import capacity and energy quantities in the "Other Import" such that it was able to deliver the most economic benefit, it is necessary to enhance the New Brunswick interties with both Nova Scotia and Quebec. The transmission upgrades required and the range of cost attributable to NS Power, using cost sharing assumptions are detailed in Figures 5 and 6 of the WKM Energy report.

(b) No, the current and projected transfer capacity from Nova Scotia to New Brunswick for export is 350 MW. It is sufficient, without enhancement, to accommodate the 335 MW of the Maritime Link project that may be destined for market sales into, or through, New Brunswick.

NON-CONFIDENTIAL

(c-d) No, please see response to part (b) above.

NON-CONFIDENTIAL

Request IR-81:

The Application and presentations on February 14, 2013 have indicated an expectation of improved reliability:

(a) Given the Link will have Nova Scotia retiring its own assets and placing reliance on Newfoundland; how have concerns with respect to the potential decrease of reliability been responded to?

(b) Does the increase in reliability only occur once further upgrades are complete on the NB intertie?

(c) Are there other investments required to reduce the risk of decreasing reliability?

Response IR-81:

(a-c) Reliability increases with HVDC; there is no decrease in reliability. HVDC transmission facilities are noted for high reliability (approximately 95-98 percent availability), higher than the typical coal plant which it will be replacing in Nova Scotia (approximately 85-92 percent availability). No further investments are required. Additionally, by adding the second connection for Nova Scotia's electricity transmission system, there is increased reliability from having a connection to a new market as well through NB.

NON-CONFIDENTIAL

Request IR-82:

Please identify what the maximum wind capacity on the system is before there is an issue related to maintaining sustainable system operations?

Response IR-82:

There are issues related to maintaining a sustainable system operation today with the amount of wind on the system , the costs and issues associated with these are represented in Appendix 6.02 of the Application. The capital and operating costs associated with integrating more intermittent sources beyond the 2015 level are expected to increase even more with each additional MW added.

The Nova Scotia Wind Integration Study conducted by Hatch Ltd. for the Nova Scotia Department of Energy in 2008 (http://www.gov.ns.ca/energy/resources/EM/Wind/NS-Wind-Integration-Study-FINAL.pdf) demonstrated that there are incremental issues relating to maintaining sustainable system operations. Appendix 6.02 of the Application highlights the challenges associated with wind integration and Section V states “Most of these challenges can be addressed and mitigated, but require appropriate (and sometimes substantial) investments in the power system as well as significant shifts in operating practices.” NS Power is in the process of completing its renewable energy integration study to allow a more complete understanding of the operational impacts of integrating substantial amounts of wind generation into the power system.

NON-CONFIDENTIAL

Request IR-83:

Are there any further costs such as other projects required to complete the business transactions as set out in the agreements that would be the responsibility of a party other than NSPML? If so, please explain.

Response IR-83:

NSPML and NS Power are not expected to fund any costs beyond those outlined in the Application. Costs relating to other aspects of the commercial agreements are the responsibility of parties other than NSPML or NS Power. Nalcor has the responsibility for LCP Phase I. Emera will make an investment in the Labrador Island Link project.

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Request IR-84:

How hydropower is counted toward renewable standards appears to vary by region, however, much of the value of the energy would be due to its renewable nature.

(a) Please provide the restrictions on the US Northeast markets with respect to what they may count as renewable.

(b) Would restrictions on claiming this is renewable energy reduce the value of the export?

Response IR-84:

(a-b) Since the value and cost of the Maritime Link for NS Power customers is not dependent upon the value of exports of Nalcor energy, NSPML did not undertake this research for the purpose of this application. The Muskrat Falls electricity has value in the New England market when that market requires electricity; whether a particular jurisdiction identifies that electricity as meeting domestic renewable energy standards could, presumably, change the value of that electricity.

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Request IR-85:

The Application, on p. 80, under Section 4.5 Capital Structure, indicates that the Federal Loan Guarantee requires a 70:30 debt to equity ratio and has indicated that up to 70% of the debt will be fully backed by the government of Canada.

(a) Please confirm the amount of debt approved for backing by the guarantee is limited to the lower of NSUARB approved ratio or 70%, and this 70:30 debt to equity ratio is not a requirement of the guarantor.

(b) Please quantify the impact of the expected earnings if Return on Equity was earned at 35% as opposed to 30% using this projects budget of $1.52 billion over the 35 years.

Response IR-85:

(a) Neither the Application nor the federal loan guarantee term sheet says that a 70:30 debt equity ratio is a requirement. This represents the maximum debt leverage that the federal loan guarantee will permit. As per the federal loan guarantee Term Sheet (section 3.1 of Appendix 4.03 of the Application), with respect to the Maritime Link, the financing to be guaranteed by Canada will be the lesser of the following:

(i) $1.3 billion,

(ii) The lower of the NSUARB approval (or 70 percent), or

(iii) The amount of debt that provides a minimum debt service coverage ratio of 1.40 times.

(b) NSPML has requested that, when revenue and rates are established in a future application, rates be set based upon a 30 percent equity level. NSPML has also requested flexibility to exceed this level for the purpose of calculating actual earnings, up to a maximum level of 35 percent equity. This flexibility would not change the rates recovered by NSPML, but it would allow NSPML to make necessary adjustments over time to equity levels without having to remain exactly at the established level, which is very difficult to accomplish. NSPML does not anticipate the scenario described in the question, of having 35 percent equity for the life of the project, however if that occurred, the calculation would result in an increase in net income over 35 years of approximately $190 million.

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Request IR-86:

P. 82, of the Application, explains that NSPML is requesting a rate of return on equity for 2014, 2015, 2016, 2017, and 2018 based on a formula that links to the long-term-A-rated Canadian utility bond yield:

(a) **Please provide the expected Weighted Average Cost of Capital (WACC) under the first year of the Application as well as what the utility has projected for each year until a Board review is proposed.**

(b) **Many utilities have maintained returns significantly higher than bonds in a period of declining bond trends; if bonds begin an upward trend please explain why there should be an automatic increase associated with such increasing bond trends?**

(c) **Please demonstrate the additional costs this stepped increase attached to the bond will contribute to the total cost of the project.**

(d) **The formula approach to indexing the rate of return utilized in Ontario has been reasonably well accepted in other provinces; however, the Application appears to deviate from both this Ontario formula and current approaches in Nova Scotia. Please explain.**

Response IR-86:

(a) The pre-tax WACC for the construction period of the Maritime Link Project, assuming that the projected bond yield index becomes reality (that is, that the ROE component of WACC rises based upon market projections) is outlined below. Please note that in 2014, a WACC throughout the year is used to determine the rate given that during this year, debt financing is used almost exclusively to bring the project's debt:equity ratio from 0:100 at the beginning of the year to 70:30 by the end of the year (pursuant to the Federal Loan Guarantee Term Sheet).

Year	2011	2012	2013	2014	2015	2016	2017
Estimated Debt Rate	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Estimated Equity Rate	9.10%	9.10%	9.10%	9.40%	10.08%	10.53%	10.68%
Equity %	100%	100%	100%	38%	30%	30%	30%
Debt %	0%	0%	0%	62%	70%	70%	70%
Pre-tax WACC	9.10%	9.10%	9.10%	6.05%	5.82%	5.96%	6.00%

(b) NSPML's proposal to adjust the allowed ROE using a formula approach recognizes that the utility cost of equity and debt tend to move in the same direction. The use of a formula to recognize this relationship is for regulatory efficiency, that is, it removes the need to review the ROE if and when interest rates rise during the construction period.

(c) The proposed ROE formula approach is dependent upon changes in the market index being suggested. As such the impact of the ROE approach on the Project's cost is dependent upon the future changes in the market. If the benchmark being used does not change, the ROE will not change. There is no benchmark to which this ROE formula approach can be compared.

(d) For Nova Scotia Power, which is in commercial operation, the approach has been to review the cost of capital including the ROE in conjunction with general rate applications (GRAs). The Maritime Link Project will not be in commercial operation for an extended period and NSPML does not expect to file General Rate Applications during the construction period. As a result, NSPML concluded that a formula approach, rather than an estimated fixed ROE for the entire construction period to reflect currently forecast higher interest rates, will ensure that customers do not bear the cost of a higher ROE if the forecast increases in interest rates do not materialize, as has occurred recently. NSPML's proposed formula reflects its judgment that the requested initial ROE is conservatively low, coupled with its view that trends in the cost of equity over time should be more closely linked to trends in the corporate cost of debt than is implied by the OEB formula.

Request IR-87:

On p. 87, line 6, it states the support of the Government of Canada (via a loan guarantee) will directly benefit Nova Scotia Customers and reduce the Maritime Link by more than $250 million (more than $100 million on a net present value basis):

(a) Please provide an analysis of how the $100 million net present value was calculated for the federal loan guarantee.

(b) Please provide the data, electronically, supporting how the interest savings were derived.

(c) Please confirm the loan guarantee is what supports the AAA Bond rating, otherwise provide the reasoning.

(d) What would the impact be on this project if this debt rating was not achieved? Please provide the projected additional interest costs if this wasn't achieved or was downgraded?

(e) Please indicate the likelihood of this occurring through the following events:

(i) A downgrade of the Government of Canada's rating

(ii) A ring fencing effect of limiting the rating to that of the utility parent companies, Emera and Nalcor.

(f) What would be the effect on interest if the Maritime Link Project's debt was rated similar to Nalcor?

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(g) Please provide the interest savings, if the project's debt was rated similar to Emera.

(h) With approval of the higher equity cap would NSPI still ensure for purposes of return on equity the equity would not exceed 35%?

(i) Has NSPI ever not been able to issue or retract equity in order to meet their maximum capitalization ratios?

Response IR-87:

(a) To estimate the benefit to customers of the federal loan guarantee, NSPML solved for the revenue requirement under different interest rate assumptions and the requirements of the guarantee. Specifically NSPML calculated the estimated revenue requirement using interest rates of 4 percent, 5 percent, and 5.5 percent. Four percent is the current estimate of the interest rate a Federal Loan Guarantee will afford NSPML. NSPML's view is that the low end of the benefit of the Federal Loan Guarantee is between 1 and 1.5 percentage point savings. The yearly delta in revenue requirement for each of these scenarios was discounted using the average AFUDC rate in the financial model. The results of this analysis are attached to part (b). The analysis indicates that at the low end of the benefit range, customers will benefit between $100 million and $150 million on a present value basis as a result of the federal loan guarantee.

(b) Please see attachment that outlines this calculation (NSUARB IR -87 Attachment 1).

(c) The purpose of the federal loan guarantee is to achieve full credit substitution of the government of Canada, which is rated AAA. The Federal Loan Guarantee Term Sheet formalizes the Government of Canada's commitment to achieve this objective. Section 2.2 of Appendix 4.03 of the filing indicates that 'Canada, the Borrowers and the Proponents will work to agree on a Transaction Structure that in conjunction with the

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Federal Loan Guarantee Term Sheet will result in the project debt achieving Canada's AAA credit rating.'

(d) As stated in Section 2.2 of Appendix 4.03, Canada has agreed to work with the proponents to develop a Transaction Structure that will result in the project debt achieving Canada's AAA credit rating. For an estimate of project impact given no federal guarantee, please see parts (a) and (b).

(e) (i) NSPML is not in a position to comment on the likelihood of a downgrade of the Government of Canada's rating. Standard and Poor's as well as DBRS issue regular rating reports on the Government of Canada credit. S&P's most recent report was published on December 31st, and confirmed a Sovereign Credit rating of AAA/Stable/A-1+. DBRS most recent report was published on June 26th, 2012, and confirmed a Long-Term Local Currency rating of AAA/Stable.

(ii) The Borrowers, Proponents and Canada must work on a Transaction Structure that achieves the AAA rating. Given the foregoing, ring fencing that limited the achievement of this objective would not be permitted. As stated in Section 2.2 of Appendix 4.03, Canada, the Borrowers and the Proponents have agreed to work on a Transaction Structure that in conjunction with the Federal Loan Guarantee Term Sheet will result in the project debt achieving Canada's AAA credit rating. For an estimate of project impact given no federal guarantee, please see parts (a) and (b).

(f) Under the federal loan guarantee, Nalcor, as a proponent to the agreement, is committed to a Transaction Structure that in conjunction with the Federal Loan Guarantee Term Sheet results in its project debt achieving Canada's AAA credit rating.

(g) Please see part (a) and (b) of this question.

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(h) NSPML will work diligently to adhere to the capital structure approved by the UARB. As stated in the Application, NSPML will strive to maintain its equity close to the 30 percent level, assuming the UARB approves the structure requested.

(i) To the best of NSPML's knowledge, NS Power works diligently to stay within its capitalization ratios.

Revenue Requirement Summary

Discount Rate (Avg AFUDC rate) per filing: 6.22%

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Summary of Revenue Requirement (millions CAD)																					
Revenue Requirement (Interest Rate = 4.0%)	-	-	-	-	-	40	160	165	155	160	150	148	145	145	163	154	153	152	150	158	147
Revenue Requirement (Interest Rate = 5.0%)	-	-	-	-	-	44	174	178	169	173	163	160	157	154	167	166	164	162	160	168	156
Revenue Requirement (Interest Rate = 5.5%)	-	-	-	-	-	45	182	186	176	180	170	166	163	160	170	172	170	168	166	173	161
Increase in Revenue Requirement (4% to 5%)	-	-	-	-	-	3	14	14	13	13	13	12	12	9	4	11	11	11	10	10	9
Total Increase in Revenue Requirement (4% to 5%) (nominal dollars)	272																				
Present Value of Revenue Requirement Increase (4% to 5%)	98																				
Increase in Revenue Requirement (4% to 5.5%)	-	-	-	-	-	5	22	21	21	20	19	19	18	16	7	18	17	16	16	15	14
Total Increase in Revenue Requirement (4% to 5.5%) (nominal dollars)	424																				
Present Value of Revenue Requirement Increase (4% to 5.5%)	152																				

	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Summary of Revenue Requirement (millions CAD)																				
Revenue Requirement (Interest Rate = 4.0%)	145	143	141	150	137	135	133	130	140	126	123	121	118	129	113	111	108	106	119	73
Revenue Requirement (Interest Rate = 5.0%)	154	152	149	157	144	142	139	136	146	131	128	126	122	133	117	114	111	108	120	74
Revenue Requirement (Interest Rate = 5.5%)	159	156	154	162	148	146	143	140	149	134	131	128	125	135	119	115	112	109	121	75
Increase in Revenue Requirement (4% to 5%)	9	9	8	8	7	7	7	6	6	5	5	5	4	4	3	3	3	2	2	1
Increase in Revenue Requirement (4% to 5.5%)	14	13	13	12	11	11	10	10	9	8	8	7	6	6	5	5	4	3	3	1

Summary	5.0%	5.5%
Nominal Increase in Revenue Requirement from estimated FLG rate (4%)	272	424
Present Value Increase in Revenue Requirement from estimated FLG rate (4%)	98	152

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Request IR-88:

On p. 126, figure 6-5, in a comparison of the alternatives, the key assumptions for the Other Import alternative includes a ROE of 10%, 60% funded by debt, a capital cost including AFUDC.

(a) Please provide the source of information you utilized to establish assumptions related to this alternative option.

(b) Please provide a copy of the import entity's publicly available financial statements that demonstrates the entities' actual rate of return and actual capital structure.

(c) To improve comparability please quantify the impact of using the import entity's actual ROE and the actual capital structure.

(d) To improve comparability please quantify the impact of removing the entity's AFUDC from the alternative analysis or adding NSPML's.

Response IR-88:

(a-d) In setting assumptions for comparing the alternatives, NSPML used its judgement to select a capital structure and cost of capital for the Other Import assumption. A specific import entity was not identified. The 10 percent rate of return is consistent with the 10 percent rate of return used during the operating life of the Maritime Link Project. The 60:40 debt to equity capital structure is also reasonable compared to other Canadian utilities.

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Request IR-89:

Under the terms of the Federal Loan Guarantee in Appendix 4.03, under Section 3.1 – Part B, it states the guaranteed debt will include a rate of interest no greater than what would be offered to an entity with an AAA rating:

(a) **Is the debt still guaranteed if NSPML or Nalcor (or their subsidiary) cannot obtain such a favorable rate?**

(b) **It appears in the Federal Loan guarantee term sheet at Appendix 4.03, Section 3.1 that the Federal Loan Guarantee does not apply to additional debt requirements, indicating a fixed dollar cap applies to the Maritime Link portion of the project of $1.3 billion. What are the utility's expectations for the cost of further funding in the event costs increased exponentially?**

Response IR-89:

(a) Please see UARB IR 87 (c). All parties have committed in the Federal Loan Guarantee Term Sheet to structure the transaction to ensure that the AAA credit rating is achieved.

(b) NSPML does not expect costs to increase exponentially. Considerable time and effort has been spent on estimating the capital costs of the Project and ensuring it is managed to minimize such risks. In the unlikely event that increasing costs result in a requirement for additional debt that is not federally guaranteed, NSPML expects this debt would be more expensive than the federally guaranteed debt.

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Request IR-90:

Concerns have been raised in recent hearings that the economic analysis being performed by the NSPI for capital projects is not reflective of cost to NS ratepayers but cash flow to the company.

(a) Please provide the impact on revenue requirement for each year of the life of asset (50 years), based on known and foreseeable variables for each of the alternatives identified, please provide the electronic version of this analysis.

Response IR-90:

NSPML has forecasted the impact on revenue requirement to NS customers for each of the 35 years of the Maritime Link Project's forecast capital and O&M costs (Appendix 4.01). Attachment 1 to NSUARB IR-37 provides added information relating to the impact of purchasing Surplus Energy that is enabled because of the Maritime Link Project. Using a NPV analysis is reflective of cost to customers, not cash flow to the utility. The NPV reflects the most economic option and therefore the lowest rates for customers over time. The alternative analysis shows that when the NPV of revenue requirements is estimated, the Maritime Link Project is the lowest long term cost alternative for NS ratepayers.

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Request IR-91:

It appears NSPML is a newly formed entity for the purpose of responding to the federal loan guarantee requirements:

(a) Please confirm the entity will be subject to all affiliate requirements outlined in the NSPI Affiliate code of conduct.

Response IR-91:

Confirmed, other than paragraph 3.1. Please refer to NSUARB IR-12.

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Request IR-92:

What are the Generally Accepted Accounting policies the entity intends to follow?

Response IR-92:

Like NS Power, NSPML will follow US GAAP.

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Request IR-93:

Please indicate what cash will be flowing into the entity during the construction period.

Response IR-93:

During construction, cash flowing into the entity will come from equity and debt financing.

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Request IR-94:

Will the total cost of the Link project be deductible by NSPI for tax purposes through CCA, if not please explain:

(a) Are there any concerns related to ownership of the assets for tax purposes? If so, how are these responded to?

(b) Will there be any risks associated with negative tax consequences resulting from the investments or agreements for either NSPML or NSPI?

Response IR-94:

(a) Maritime Link costs will be tax deductible by NSPML, not NS Power as NSPML will have legal ownership of the assets.

(b) No such risks are anticipated.

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Request IR-95:

With respect to Exhibit M-2, P. 32, Line 17:

(a) Please explain whether or not the arrangement for NSPML (and ultimately Nova Scotia electricity customers via NSPI) to receive 20% of the energy from LCP1 in return for paying 20% of the combined costs of LCP1 and Maritime Link makes it somewhat irrelevant which specific facilities are included within the scope of the Maritime Link?

(b) Would the same apply for tax purposes?

Response IR-95:

(a) The phrase “somewhat irrelevant” may overstate the point, which is otherwise generally correct. While the specific capital assets that comprise the Maritime Link facilities may not directly equate to 20 percent of the combined costs of LCP1 and Maritime Link, the capital assets of the Maritime Link facilities, which NSPML will be accountable to design, construct, commission, and is responsible for the O&M costs, after true-up, are those being included in the scope of the Maritime Link.

(b) The income tax treatment of assets depends on their type and classification so the tax treatment of an asset could vary depending upon the nature of the asset.

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Request IR-96:

The NSPI Accounting Policy and Procedures Manual states, AFUDC is to be compounded semi-annually.

In the current Application, on P. 86, a request is made to permit the interest component to be estimated prior to the beginning of the year:

(a) Please explain the reasoning behind this treatment.

(b) Please quantify the differences that results from the change in accounting policy, for each year of the project, based on the financial projections put forward.

Response IR-96:

(a) In the model, AFUDC is being calculated by breaking it into its two individual components (debt and equity) instead of determining a single AFUDC rate using the total invested capital of the corporation. Unlike NS Power, an operating utility with an array of debt instruments and with both operating and construction activity, NSPML will have specific project debt that will be directly related to construction of the Maritime Link Project. This will enable NSPML to forecast the interest component on debt quite accurately.

Two important points to consider in the determination of AFUDC:

1) the frequency of interest compounding, and
2) the date on which the interest rate component of AFUDC is estimated.

With regards to compounding frequency, the model compounds interest on a monthly basis to be consistent with what is expected from the debt that will be raised by NSPML. If the debt that is raised compounds differently than monthly, the calculation of AFUDC can change to reflect that. The equity component of AFUDC has been compounded semi-annually, which is consistent with the NS Power Accounting Policy and Procedures Manual.

With regards to timing, the Application requests that the interest component be estimated prior to the beginning of each year. This is also consistent with current NS Power policy.

(b) NSPML does not view this approach as a fundamental departure from NS Power policy. The inherent policy should be the one that most accurately capitalizes actual interest and equity costs during construction. NSPML submits that the calculations included in the model are simply designed to do that.

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Request IR-97:

With respect to the taxation of the project:

(a) **Please explain the tax impact for both NSPML and Nalcor of the $1 transfer of assets from NSPML to Nalcor at the end of 35 years.**

(b) **Which company will be claiming the CCA deductions associated with the Link assets?**

(c) **Please provide the capital cost rates being applied to the various components of the project.**

(d) **Are there any additional tax benefits expected to accrue to NSPML or any other entity associated with this project? If so, please explain.**

Response IR-97:

(a) The response to NSUARB IR-98 explains the impact of the sale of the Maritime Link assets at the end of the term for $1 on the $12 million land balance. This will result in a capital loss. Under present tax law, this capital loss would not likely be able to be utilized by NSPML.

Any amounts remaining in the undepreciated capital cost allowance classes at the time the assets are sold to Nalcor (currently estimated at $85 million) should result in terminal losses which if not used in that year should be available for carryback (carryback currently estimated at $37 million) and enable a recovery of income taxes paid in prior years (which will be to the benefit of NS ratepayers).

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(b) NSPML.

(c) Please refer to response to NSUARB IR-106.

(d) No.

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Request IR-98:

Please explain the assumptions leading to the capital gain (loss) identified in Appendix 4.01, p. 4 that has been projected to occur in 2052.

Response IR-98:

Approximately $12 million of the Maritime Link Project capital cost estimate relates to land. Land is not a depreciable asset and therefore remains on the NSPML balance sheet throughout the 35 year project period at its $12 million book value. In year 36 when the Project reverts to Nalcor for $1, NSPML will record a capital loss on this asset.

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Request IR-99:

It appears the intent and primary benefit of the Link energy is its ability to replace non-renewable energy:

(a) Based on the plan outlined for retirements, will there be redundant or undepreciated assets remaining on the books after the planned retirement?

(b) If so, please quantify the known undepreciated balances.

Response IR-99:

(a-b) Retirements for Lingan units 2 and 1 were assumed to occur in 2015 and 2017 respectively. Please refer to Avon IR-6 from the 2013 GRA which shows these retirements to be the lowest cost option to customers.

The forecasted net book values are:

- Unit 1 - $23.1M at Oct. 31/17

- Unit 2 - $18.3M at Mar. 31/15

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Request IR-100:

Appendix 6.03, p. 14 and 15, indicates by scenario the current coal units or other generation expected to be taken off the system by 2020.

(a) Please outline how much generation will be retired with each of the options.

(b) Please identify all of NSPI's current coal units and their generation capacity.

Response IR-100:

(a)

	Maritime Link	Other Import	Indigenous Wind
Base Load	Lingan #2 Mar/2015 153MW Lingan #1 Oct/2017 153MW Coal Unit Jan/2030 153MW Coal Unit Jan/2035 153MW	Lingan #2 Mar/2015 153MW Lingan #1 Oct/2017 153MW Coal Unit Jan/2033 153MW	Lingan #2 Mar/2015 153MW Lingan #1 Jan/2019 153MW Coal Unit Jan/2026 153MW Coal Unit Jan/2030 153MW Coal Unit Jan/2035 152MW Coal Unit Jan/2039 150MW
Low Load	Lingan #2 Mar/2015 153MW Lingan #1 Oct/2017 153MW Gas/HFO Jan/2020 81MW Coal Unit Jan/2029 153MW	Lingan #2 Mar/2015 153MW Lingan #1 Oct/2017 153MW Gas/HFO Jan/2020 81MW Coal Unit Jan/2029 153MW	Lingan #2 Mar/2015 153MW Lingan #1 Jan/2019 153MW

(b) Please refer to McMaster IR-4 Attachment 1.

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Request IR-101:

For the Financial Projections in Appendix 4.01, pp. 3 and 4, it appears there will be no projected impact on revenue requirement until at least 2017. Please confirm or explain otherwise

Response IR-101:

Revenue requirement is expected to begin in 2017.

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Request IR-102:

It is indicated in Appendix 4.01, pp. 3 and 4, that the revenue requirement does not include the reduction in net fuel costs to be experienced in NSPI.

(a) Has NSPI projected the net fuel reduction? If so, please provide.

(b) What other cost changes would impact the revenue requirement?

(c) Has NSPI projected changes to revenue requirement in b)? If so, please provide.

Response IR-102:

(a) NS Power has projected approximately $100 million savings in fuel and purchased power requirements (includes impact on fixed and variable O&M costs relating to the thermal units) in 2018 resulting from the Maritime Link Project.

(b) All material cost impacts are reflected in (a).

(c) See (a).

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Request IR-103:

The financial projections in Appendix 4.01, p. 5, indicate Construction Work in Progress (CWIP) accumulating to $1.654 billion in 2016 and the 2017 Property Plant & Equipment (PPE) Balance of $1.744 billion. Please relate these balances back to the $1.52 billion request.

Response IR-103:

The difference is due to the capitalization of Allowance for Funds Used During Construction (AFUDC) - forecasted to be $230 million.

$1.514 billion capital cost (reflected as $1.52 billion in main body of Application) plus $230 million AFUDC = $1.744 billion in model.

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Request IR-104:

With respect to Appendix 4.01, p. 23, please identify what comprises the $12.2 million of land purchases.

Response IR-104:

NSPML is presently working on land matters and has been careful to avoid publicly identifying NSMPL's expectations for the costs of this work so as not to influence negotiations with suppliers. The components of this item include estimates for surveying, land purchases, land agents, roadside easements for grounding, and legal costs.

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Request IR-105:

With respect to Appendix 4.01, pp. 5 and 6, under liabilities there is a line item accumulating a liability that appears to change from a "Regulated liability" to "Interest". Please clarify and explain in either case what is making up this balance and what it's $1.7 million declining balance relates to.

Response IR-105:

The $1.7 million relates to the amortization of the regulated liability associated with the projected $58 million O&M true-up from Nalcor. The O&M expenses are discussed in the regulatory filing beginning on page 88 line 17.

NON-CONFIDENTIAL

Request IR-106:

With respect to Appendix 4.01, pp. 32-39, related to income taxes:

(a) Please confirm that tax losses, accumulating in early years, will be fully utilized for the benefit of NS ratepayers.

(b) Has an income tax asset and associated regulatory account been accounted for in these projections?

(c) The CCA classes projected are 8% and 7%. Please clarify if this is an average rate.

(d) Please identify what actual CCA categories the assets are expected to allocated to, with an approximation of the addition to each class.

Response IR-106:

(a) Tab 6 in Appendix 4.01 tracks the non-capital tax losses and their utilization within NSPML. These tax losses are primarily incurred during construction as a result of interest expense deductions, and cannot be used to reduce income tax while there is no revenue and therefore no taxable income. Once the project achieves a positive taxable income in approximately 2020, these losses are utilized for the full benefit of NS rate payers. The losses are fully utilized by 2025.

(b) No, NSPML has modeled cash taxes and not future income taxes, in the same way as NS Power.

(c-d) The majority of the NSPML depreciable capital property is expected to be allocated to Class 47 which has a CCA rate of 8 percent. The main exception is the possible 20 For 20

Principle true up payment which is expected to be treated as Eligible Capital Property which has a rate of 7 percent.

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Request IR-107:

Is any potential continued capital investment required to "maintain" or re-work these assets included in the economic model?

Response IR-107:

Yes, included in operations and maintenance costs.

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Request IR-108:

Please provide the breakdown of any tax deferrals and regulatory deferrals projected within NSPML or NSPI related to this project.

Response IR-108:

The O&M true-up is reflected in the financial model as a regulatory deferral. It is more fully discussed in NSUARB IR- 105.

The 20 For 20 Principle true up projected payment to Nalcor has been treated as a depreciable intangible asset which will be depreciated over the 35 year life of the Project. NSPML does not consider this a regulatory deferral but note it here for completeness.

There are no tax deferrals modeled or contemplated since NSPML expects to follow cash tax accounting (as does NS Power). This is more fully discussed in NSUARB IR-106.

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Request IR-109:

Do the agreements established with New Brunswick guarantee Nova Scotia and Newfoundland can sell beyond NS/NB border? What about beyond the New Brunswick borders?

Response IR-109:

No. There are no agreements with New Brunswick. Bayside Power L.P.'s transmission rights in New Brunswick, described in the NBTUA as the "Bayside Rights", provide transmission rights to Nalcor in New Brunswick. The MEPCO rights provide priority transmission rights in certain circumstances to facilitate energy sales by the holder into the New Engalnd market.

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Request IR-110:

With respect to the Joint Development Agreement, Appendix 2.02, p. 32, the Capacity Expansion is outlined.

(a) Please explain why Emera would want to expand capacity at its own cost if Nalcor would have ownership of all the upgrades?

(b) If Nalcor will own upgrades and Emera will be responsible for upgrades required for the interconnection of the Maritime Link, please explain how maintenance costs will be determined "required".

(c) In the event of property damage to the Maritime Link in the future and at the time of repair better technology exists to fix the link, to what extent will NS ratepayers be required to repair with advanced upgrades?

Response IR-110:

(a) Emera wished to reserve the commercial flexibility to negotiate investment in the expansion of the Maritime Link.

(b) This would be a part of the potential commercial consideration at the time.

(c) The Joint Operations Agreement identifies Good Utility Practice within the definition of Required Condition, which is the standard to which NSPML is required to maintain the Maritime Link. Ongoing repairs, including upgrades, will need to be economically justified as prudent expenditures. NSPML will seek recovery of all prudently incurred costs associated with the operation and maintenance of the Maritime Link.

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Request IR-111:

With respect to the Joint Development Agreement, Appendix 2.02, p. 33, Section 2.4, rights regarding Exclusivity are outlined.

(a) Will this exclusivity eliminate the opportunity of Nova Scotia to import other future energy from Newfoundland sources for the next 50 years?

(b) Please provide the details of the "exclusivity" and what the process would be if in the future a third party wanted to use access of the link.

Response IR-111:

(a) No. The exclusivity referred to is the agreement by each party, prior to the Financial Conditions Resolution Date ("FCRD"), not to enter any other arrangement that would prevent them from performing their obligation under the various Formal Agreements. If alternate sources in addition to the NS Block are available then Nova Scotia is free to pursue such alternatives.

(b) The exclusivity does not extend beyond the FCRD, and is not related to third party access to the Maritime Link once in operation. Third party use of the Maritime Link will require UARB approval of a Non Firm tariff for the Maritime Link.

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Request IR-112:

With respect to the Joint Development Agreement, Appendix 2.02, p. 34, Section 3.2 (b) indicates that in the event of an unresolved disagreement, Nalcor will have the final decision. Please provide the risks, if any, for NS ratepayers with giving Nalcor final decision powers.

Response IR-112:

If the JDC is unable to reach an agreement no matters required to be determined by it under the MLJDA, the matter can be referred to the respective CEO's of Emera and Nalcor for resolution, and if they are unable to resolve the issue, the Nalcor CEO is entitled to make the decision and it is binding on Emera for the purposes of the MLJDA.

In exercising his decision making power, the Nalcor CEO must use the guidleines set out in section 3.2 (b), and to the extent that his decision is not in accordance with such guidelines then Nalcor bears the resulting capital or O&M costs. The guidelines, which include the need for the decision to accord with, for example, "prudent construction, installation and operating criteria", ensures that the decision will respect good commercial practice.

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Request IR-113:

With respect to the Joint Development Agreement, Appendix 2.02, p. 40, Section 4.2 notes that Nalcor shall appoint the project Director.

a) Please define the duties, responsibilities and accountabilities of this role.

b) What are the risks to NS ratepayers in having Nalcor control over the project Director?

Response IR-113:

(a) Pursuant to Section 4.2 of the Maritime Link Joint Development Agreement (MLJDA), Nalcor both appoints the Project Director and defines the duties, responsibilities and accountabilities of this position.

The MLJDA sets out certain areas of accountability and responsibility of the Project Director with respect to the Maritime Link. See, in particular, sections 3.4(a) (i), 4.1(a), 4.3(b), 4.5(b), 5.1(a), 6.1, 6.2 and 7.8.

The establishment of the JDC-ML and the roles , responsibilities and accountabilities of JDC and the ML Project Manager are clear with respect to the Maritime Link project management, the Project Director and Project Manager consult with each other and strive for consensus on matters, when this cannot be achieved the JDC-ML may intervene and ultimately the CEO's.

From a Maritime Link cost perspective it is in both Nalcor's and Emera Newfoundland and Labrador's financial interests to apply effective project cost controls, following best practices. For example to calculate the capital cost true up with respect to the 20 For 20 Principle, the Nalcor project scope has been formally sanctioned at $6.2 billion and this number is fixed and firm for the purposes of the true up calculation. After Financial Conditions Resolution Date, should any cost overruns of the Maritime Link occur that are not approved by the UARB, the first 5 percent will be to NSPML, the next 5 percent to Nalcor and thereafter 50:50. Consequently effective project cost controls will be a common priority for both the Project Director and the Project Manager.

(b) NSPML does not perceive risk to NS Power ratepayers in the appointment by Nalcor of the Project Director. There are sufficient provisions in place for the Project Manager and Project Director to execute their respective responsibilities with project excellence in mind. A summary of these as they relate to the Project Director follows:

Lower Churchill Project Director, as it relates to the Maritime Link Duties include the following:

- To attend the regular meetings and any special meetings of the JDC-ML.

- The Project Manager and Project Director shall consult with each other and work together in good faith to achieve project excellence and execution.

- The Project Manager and the Project Director are expected to find consensus on project execution matters- if consensus cannot be achieved then the matter will be referred to the JDC-ML for resolution.

- The Project Manager, in consultation with the Project Director shall establish policies, processes and procedures applicable to the conduct of the project.

- To fulfill the duties as stipulated in JDC-ML and the Maritime Link Formal Agreements.

Responsibilities include the following:

- To review and approve Maritime Link contract strategies which identify third party costs which are 50 percent attributable to Nalcor prior to Financial Close.
- To review and approve Maritime Link budget proposals (Nalcor portion).
- To ensure project execution best practices are employed across all parts of the Lower Churchill Project working with the ML PM to achieve synergies and benefit from lessons learned.
- To provide guidance and leadership to Project Managers to achieve the project safety, environmental, cost and schedule goals and objectives.
- To ensure compliance with the NL-NS Benefits Agreement.
- To fulfill the responsibilities as stipulated in the JDC-ML and the other Maritime Link Formal Agreements.

Accountabilities include the following:

- Financial accountability and authority for Nalcor related costs to the Maritime Link.
- To bring forward to the JDC-ML any matters that have not achieved consensus.
- Accountable for approving Nalcor’s portion (50 percent) of requisitions up to the assigned financial authority for Maritime Link third party costs.

- Project Benefits Reporting in accordance with the Benefits Agreements.

- To fulfill the accountabilities as stipulated in the JDC-ML and the other Maritime Link Formal Agreements.

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Request IR-114:

With respect to the Energy and Capacity Agreement, Appendix 2.03, p. 25, Section 1.5:

(a) Please confirm this indicates that the NS Block will be generated only at the Muskrat Falls Plant.

(b) Please explain what safeguards are in place to protect NS ratepayers in the event there is a malfunction at Muskrat Falls.

(c) Is it possible if future energy sources become available, produced by Nalcor or another party in Newfoundland, that the Maritime Link can deliver that energy? Please provide the details of this potential process.

Response IR-114:

(a) Section 1.5 specifically provides that the Nova Scotia Block may include Stored Energy (as defined in the Energy and Capacity Agreement).

(b) Please refer to CA-SBA IR-109, IR-110 and IR-114.

(c) It is possible that the Maritime Link could deliver energy from future energy sources. Of significance to this possibility is that Nalcor owns the firm transmission rights on the Maritime Link in excess of those necessary to deliver the Nova Scotia Block. Nalcor may use these rights to transmit energy from any source. The parties will put in place a non-firm tariff to allow for non-firm use of the Maritime Link by other parties, but there will be no ability to use firm transmission capacity without the consent of Nalcor.

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Request IR-115:

With respect to the Energy and Capacity Agreement, Appendix 2.03, p. 27, Section 2.3 (a):

(a) Please confirm that the Nova Scotia Block is intended to enable NSPI to satisfy obligations arising pursuant to the RES and/or legislation regarding greenhouse gas emissions.

(b) Please confirm that for the purposes of RES and greenhouse gas compliance, NSPI will own the GHG Credits related to the Nova Scotia Block. It appears to state Emera, and not NSPI shall own, and shall not sell these GHG Credits. Please explain.

(c) What assurances exist that the NS Block GHG Credits be assigned to ensure NSPI meets renewable energy targets?

(d) Other than the GHG Credits associated with the Nova Scotia Block, all other credits associated with greenhouse gas emissions will be owned by Nalcor or an Affiliate of Nalcor. Does this mean the additional block of energy available to Nova Scotia does not further assist Nova Scotia in meeting renewable energy targets?

(e) Please provide the value of the GHG credits that would normally accompany a renewable energy resource like this.

(f) Was the value of GHG credits used in the comparison with other alternatives? If so, please provide the details of how it was determined?

(g) What assurances exist that the Nova Scotia Block GHG credits be assigned to ensure NSPI meets renewable energy targets?

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Response IR-115:

(a) Confirmed. The Nova Scotia Block is intended to enable NS Power to satisfy obligations arising pursuant to the Federal GHG legislation regarding greenhouse gas emissions and the RES. Sections 1.5 and 2.3 of the Energy and Capacity Agreement state this intent.

(b) Confirmed. NS Power will own the GHG Credits related to the Nova Scotia Block. The GHG Credits are assigned to NS Power under Section 2.3 of the Agency and Service Agreement.

(c) Pursuant to Section 2.3(b) of the Energy and Capacity Agreement, Nalcor is contractually required to assign the GHG credits.

(d) The sale and purchase of additional Energy and GHG credits and any other renewable energy characteristics will be subject to future negotiations with Nalcor. The answer depends both on the outcome of those negotiations and the legislative requirements of Nova Scotia at the time of the negotiations.

(e) The value of the GHG or similar credits is their ability to help meet legal obligations arising pursuant to the Federal GHG legislation regarding greenhouse gas emissions and the RES.

(f) As all alternatives enabled compliance, the value of such credits were treated the same for each alternative.

(g) Please refer to Section 6A(2)(c) of Nova Scotia's *Renewable Electricity Regulations.*

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Request IR-116:

With respect to Maritime Link (Nalcor) Transmission Service Agreement, Appendix 2.04, p. 22, Section 3.1(a):

(a) Please confirm Emera will arrange for and coordinate the operation and maintenance of the Maritime Link.

(b) Please confirm Section 3.3(e) indicates Nalcor shall be responsible for Transmission losses over the Maritime Link.

(c) If Emera is responsible for O&M and Nalcor is responsible for transmission losses, please provide the details of what minimum maintenance Nalcor will require for the Maritime Link. Is there a maximum level of transmission losses that will be acceptable?

(d) Is it intended those revenues and expenditures will flow through to NS ratepayers?

(e) If so, please explain how NS ratepayers are being rewarded adequately for taking the responsibility of O&M when they only receive limited benefit of the transmission capacity of the Link.

(f) With Emera taking on all O&M costs of the Maritime Link, could they be subsidizing energy sales outside of Nova Scotia?

Response IR-116:

(a) Section 2.1(b) of the Joint Operations Agreement confirms Emera's obligations to, among other things, "perform or cause to be performed all O&M Activities" with respect to the Maritime Link.

(b) Confirmed.

(c) Emera is required under the Joint Operations Agreement to maintain the Maritime Link in the Required Condition, which is defined as:

> "**Required Condition**" means, with respect to the Maritime Link, in good operating condition to a standard consistent with having been operated and maintained throughout the Term in accordance with
>
> (i) Good Utility Practice for a long-term, low cost, reliable transmission facility with a Service Life equal to the Initial Service Life while maintaining reliable operation consistent with the ML Basis of Design,
>
> (ii) the Long Term Asset Management Plan for the Maritime Link, and
>
> (iii) the O&M Standards
>
> The Transmission Losses to be contributed by the Transmission Customers over the Maritime Link are the actual transmission losses experienced, calculated in accordance with the formula set out on Schedule 1 to each of the Maritime Link (Nalcor) Transmission Service Agreement and the Maritime Link (Emera) Transmission Service Agreement.

(d-e) The O&M expenditures in respect of the Maritime Link will be recovered, after the true-up, through the Maritime Link Assessment contemplated under the Maritime Link Act and Regulations. There are no revenues anticipated to be received from Nalcor in respect of its transmission rights over the Maritime Link. To the extent that revenues are received by NSPML, any such revenues would be credited against the Maritime Link Assessment.

(f) No. Payment of the Maritime Link O&M costs, including the true-up, is an integral part of the overall transaction which provides Nova Scotia with the first-in-line advantage to access Surplus Energy. Similarly, Nova Scotia customers will not be responsible for the O&M costs, after true-up, on the Muskrat Falls plant, the Labrador Transmission Assets or the Labrador Island Link.

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Request IR-117:

With respect to the Maritime Link (Nalcor) Transmission Service Agreement, Appendix 2.04, p. 23, Section 3.2(b):

(a) Please confirm Emera will be responsible for and hold Nalcor harmless in respect of all liabilities for any Tariff Charges or other fee or charge related to all Transmission Rights on the Maritime Link.

(b) Please identify the risks and the associated costs of taking responsibility for all tariff charges or other fees related to transmission over the Maritime Link.

(c) Please provide the estimated value associated with charging Nalcor for these tariff charges or fees.

(d) Is it intended these revenues and expenditures will flow through to NS ratepayers?

(e) With Emera taking on these risks could they be subsidizing the sale of Nalcor's energy outside of Nova Scotia?

(f) If so, please explain how NS ratepayers would be adequately compensated for such risks when they receive limited benefit of the transmission capacity of the Link.

Response IR-117:

(a) Confirmed.

(b) NSPML is obligated to pay all capital and operating and maintenance costs of the Maritime Link (subject to the adjustment of O&M Costs at the commencement of commercial operation). There are minimal risks in NSPML taking the responsibility for

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the tariffs and charges since the capital costs are based upon the 20 For 20 Principle, the O&M costs are subject to the true-up at commercial operation, and transmission losses are assigned to Nalcor for their transmitted electricity. There is no tariff charge associated with the transmission rights over the Maritime Link. All costs which might be recovered through a tariff, set using a cost of service methodology, are being recovered through delivery of the NS Block (including Supplemental Energy).

(c) As stated above there are no tariff charges or fees.

(d) There are no anticipated revenues, and all expenses will be recovered in the Maritime Link Assessment contemplated by the Maritime Link Act and Regulations. If revenues are realized by NSPML, then any such revenues will be credited against the Maritime Link Assessment.

(e) No.

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Request IR-118:

With respect to Maritime Link (Nalcor) Transmission Service Agreement, Appendix 2.04, p. 28, Section 3.4(b) outlines Reactive Supply and Voltage Control:

(a) Please confirm that, in order to maintain transmission voltages within acceptable limits, the production or absorption of reactive power may be required.

(b) Please confirm Emera will be responsible for the provision and payment of such Supply and Reactive Control.

(c) Please provide the estimated annual expenses of Reactive Supply and Voltage control?

(d) Are Reactive Supply and Voltage control expenses included in Operation and Management expenses?

(e) Is it intended these expenditures will flow through to NS ratepayers when only a portion (Nova Scotia Block) is received for Nova Scotia?

(f) With the transmission provider being responsible for all Reactive Supply and Voltage control, could Emera be subsidizing Nalcor Energy sales outside of Nova Scotia?

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Response IR-118:

(a) Confirmed as a general requirement. In this case, the NLH transmission system into Bottom Brook upon completion of this project will consist of three 230-kV lines. At maximum design loading on the Maritime Link, the transmission system between Bay D'Espoir and Bottom Brook will be loaded to 1.25 times its Surge Impedance Loading (SIL). At this loading, the reactive power requirements will be quite low and can easily be supplied by the generators at Bay D'Espoir and the Maritime Link Converter at Bottom Brook. At 400 MW loading, the reactive power requirements of the 230-kV system (due to the transfer of 400 MW) will be supplied by the 230-kV lines. A reactor is being installed at Granite Canal to negate the additional reactive power being supplied by the new Granite Canal to Bottom Brook line. The most significant reactive support requirement is the need to provide dynamic reserves to maintain voltages and stability through disturbances (faults and line trips), which has been accommodated in the design of the Bottom Brook converter and is available from the generators at Bay D'Espoir.

(b) These provisions do not apply to the NS Block.

(c-e) Please refer to part (b).

(f) The Bottom Brook converter employs VSC technology which can absorb and provide significant reactive power, both static and dynamic. This, together with the shunt reactor at Granite Canal and the generators at Bay D'Espoir, are adequate to cater for all transmission loadings and contingencies. NSPML will not be subsidizing Nalcor energy sales.

Request IR-119:

With respect to the Maritime Link (Nalcor) Transmission Service Agreement, Appendix 2.04, p. 29, Section 3.7 explains the Maritime Link Capacity Expansion:

(a) Please confirm if Emera develops any capacity expansion, it will be owned by Nalcor and parties shall agree upon Additional Transmission Rights.

(b) In such an event, with increased energy capabilities, would the costs to maintain and operate the link increase?

(c) How will NS ratepayers be assured no incremental operating risks or costs will be passed to them?

Response IR-119:

(a) Unless the parties agree otherwise, the Transmission Rights associated with any such additional Capacity will be owned by Nalcor.

(b) The extent of increased costs, if any, to operate a Maritime Link with additional capacity is not known at this time.

(c) To the extent that the operating and maintenance costs of the Maritime Link are increased as a result of additional capacity, the owner of the Transmission Rights over such additional capacity would be expected to pay for such additional operating and maintenance costs.

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Request IR-120:

With respect to the Maritime Link (Nalcor) Transmission Service Agreement, Appendix 2.04:

(a) Does this mean Nalcor would own all of the transmission rights outside of the Nova Scotia Block?

(b) Please provide all O&M costs, service charges, and any other cost associated with transmitting energy allocated to the Nalcor's transmission portion in comparison with the Nova Scotia Block portion.

(c) Please confirm the Nalcor proportion of electricity transmission across the Maritime link is approximately 4 times the size of Nova Scotia Block.

(d) Please explain how NS ratepayers will be appropriately compensated for bearing more responsibility of operating and maintenance costs while only receiving a portion of the electricity transmitted.

Response IR-120:

(a) Yes.

(b) Through the 20 For 20 principle for O&M costs, Nalcor is contributing its O&M costs associated with the Maritime Link for Nalcor’s transmission portion.

(c) Nalcor will hold firm transmission rights for approximately 80 MW of transmission capacity (250 MW less the NS Block associated rights), and 250 MW of conditional firm transmission service. NSPML will hold, through an affiliate, sufficient rights to provide

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firm transmission service over the Maritime Link for the NS Block. Nalcor holds about two times the amount allocated to the NS Block, for transmission of electricity from Newfondland to Nova Scotia. Nalcor holds all rights to transmit energy over the Maritime Link from Nova Scotia to the island of Newfoundland.

(d) Please see the response to UARB IR-116(e).

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Request IR-121:

With respect to the Joint Development Agreement, Appendix 2.02, p. 66, Section 8.6 (b):

(a) Please provide the rationale for Emera providing a Power Purchase Agreement Option, at the option of Nalcor, in the event Emera does not sanction.

(b) To what extent, if any, could the provisions in the Power Purchase agreement be charged to NSPI?

(c) Please provide the potential costs, if any, that will flow through to NSPI if Nalcor exercises the PPA option.

Response IR-121:

Nalcor's ability to exercise the PPA Option has been removed by the Sanction Agreement. The provisions in the Maritime Link-Joint Development Agreement which contemplate and govern the exercise of the PPA Option will be deleted pursuant to Section 6(b)(ii) of the Sanction Agreement.

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Request IR-122:

With respect to the New Brunswick Transmission Utilization agreement, Appendix 2.07, p. 26, Section 3.2, related to the provision for the Unavailability of Transmission rights.

(a) Please provide the associated costs, if any, that would flow through to NSPI in the event of Emera having to purchase 260 MW of Energy at the Delivery Point from Nalcor.

Response IR-122:

The only costs which would be borne by NS Power would be the cost of purchasing energy as outlined in Article 6 (Purchase of NB Backstop Energy) of the Agency and Services Agreement (Appendix 8.01). Such cost would equal NS Power's Avoided Cost.

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Request IR-123:

With respect to the MEPCO Transmission Rights Agreement, Appendix 2.08, p. 18, Section 2.4:

(a) **Please confirm there is a provision for the Absolute Assignment of MEPCO Transmission.**

(b) **What are the risks and costs to NS Ratepayers of giving Nalcor the option to request for MEPCO Transmission Rights?**

(c) **What are the risks and costs to NS Ratepayers of allowing Nalcor to change its decision and re-assign transmission rights back to Emera?**

Response IR-123:

(a) Confirmed.

(b-c) NSPML is not aware of any risks or costs to NS Ratepayers of giving Nalcor the option to request an absolute assignment from Bayside LP of the MEPCO Transmission Rights or to subsequently reassign those rights to Bayside LP.

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Request IR-124:

With respect to Appendix 2.03, pp. 44-45, Section 8.3 and 8.4 make reference to Block A Undelivered Energy and Block B Undelivered Energy.

Please provide an explanation of the difference between Block A Undelivered Energy and Block B Undelivered Energy.

Response IR-124:

Block A Undelivered Energy encompasses any Energy that Nalcor is unable to deliver as a result of a Forgiveable Event. Forgiveable Events include Force Majeure, Planned Maintenance Periods, Safety Events or an action required to be taken by a Party to comply with Good Utility Practice. Block B Undelivered Energy is Energy which has not been delivered by Nalcor, and for which there is no prescribed Forgiveable Event which has excused Nalcor from delivering the energy.

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Request IR-125:

With respect to Maritime Link Appendix 3.01, p. 29, figure 2-3 show where new transmission components will be constructed in Newfoundland.

(a) What are the benefits to Newfoundland of having these new transmission assets in Newfoundland?

(b) How does Newfoundland pay for the benefits they receive from the new assets?

(c) Are Maritime Link transmission components in Newfoundland being paid for through rates by Nova Scotians? If so, please provide an estimate of Newfoundland components being covered by NS ratepayers. Please also provide an estimate of the annual operation and maintenance costs, of the Newfoundland transmission assets.

Response IR-125:

(a-c) The benefit to Newfoundland and Labrador of the Maritime Link is access to the North American grid through Nova Scotia. The HVDC components will allow electricity to flow in either direction, which provides opportunity for both provinces equally.

All components of the Maritime Link Project, regardless of geographic location, are necessary for the Maritime Link to operate to deliver the NS Block. The AC portion of the Maritime Link, between Granite Canal and Bottom Brook, is solely for the purpose of servicing the substation in Bottom Brook in an efficient and reliable manner to meet the capacity of the Maritime Link. The additional substation and line terminations at Bay d'Espoir are required to reduce the otherwise higher cost of reliability improvements to meet the system requirements serving the Maritime Link flows.

Nalcor contributes to the costs through the 20 for 20 calculations, with Nalcor paying 80 percent of all costs. Nova Scotia will pay for 20 percent of all components in the project costs as well as 20 percent of operating costs. This 20 percent amount pays for the construction and operation of all assets that comprise the Maritime Link facilities, including those located in Newfoundland, without which the project could not proceed.