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1 **Request IR-1:**

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3 **For the purpose of clarity, please confirm that NSPML position through filings and in**  
4 **technical conferences that the amount being requested to be assigned to ratepayers is**  
5 **approximately twenty percent (20%) of the total estimated project cost for the Muskrat**  
6 **Falls and Maritime Link project, and one hundred percent (100%) of the cost of the**  
7 **undersea cable and infrastructure between Newfoundland and Nova Scotia.**

8

9 Response IR-1:

10

11 The Application requests UARB approval of the Maritime Link Project, which includes Project  
12 Costs of \$1.52 billion plus a variance of up to \$60 million. The Project Costs are calculated as  
13 20 percent of the total estimated cost of the Lower Churchill Project Phase 1 (Muskrat Falls  
14 Generation Station, Labrador Island Link and Labrador Transmission Assets) plus 20 percent of  
15 the total capital cost of the Maritime Link facilities.

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1 **Request IR-2:**

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3 **For the purpose of clarity, please outline the amount of the Nova Scotia Block guaranteed**  
4 **to be delivered across the Maritime Link for use in Nova Scotia, and provide accounting**  
5 **for gross energy amount and net energy amount expected after line loss.**

6

7 Response IR-2:

8

9 The NS Block is based upon 20 percent of the output of Muskrat Falls. The output is 4.93 TWh  
10 annually at the facility, 20 percent of which is 986 GWh annually, delivered on the peak hours  
11 each day, which represents 168.84 MW per hour for 16 hours per day. The total system losses at  
12 peak are forecast to be 9.2 percent. The net electricity delivered to the Woodbine substation is  
13  $168.8 \text{ MW} \times (1 - 0.092) = 153.3 \text{ MW net.}$

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1 **Request IR-3:**

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3 **Emera Incorporated (parent company of the applicants) has suggested it may purchase and**  
4 **use the balance of energy which comes across the Maritime Link. The agreement appears**  
5 **to allow energy above the Nova Scotia Block to be purchased at market rate, possibly at**  
6 **first right of refusal. There appears to be no indication that energy beyond the Nova Scotia**  
7 **Block is guaranteed to be on the line at all times. Does the applicant have a guarantee that**  
8 **energy matching the full capacity of the line (minus line loss) will be available at all times**  
9 **for use in Nova Scotia?**

10

11 Response IR-3:

12

13 NSPML has contractual commitments relating to the NS Block based on the 20 For 20 Principle  
14 (please refer to Liberal IR-11) which does not equate to energy matching the full capacity of the  
15 Maritime Link transmission line.

16

17 NSPML does not require legal rights to the excess amount as the excess energy will be available  
18 to the market, for which NS Power is first in line providing them with economic advantage  
19 without the need for contractual commitments beyond the NS Block.

20

21 Please refer to CanWEA IR-26 (a) and (b). Please also refer to PC IR-1 (b).

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1 **Request IR-4:**

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3 **Nalcor has indicated that it will use Muskrat Falls power to replace the Holyrood Thermal**  
4 **Generating Station. The generating capacity of this station is 490MW. The rated capacity**  
5 **of Muskrat Falls is 824MW. After line loss and expected lower winter production, net**  
6 **remaining energy would be under 300MW. Newfoundland and Nova Scotia are both winter**  
7 **peaking utilities. How much energy (after line loss) does NSPML expect to land in Nova**  
8 **Scotia via the Maritime Link during winter months?**

9

10 **Response IR-4:**

11

12 **NSPML has a contractual right to approximately 153 MW during the winter months. Please refer**  
13 **to CanWEA IR-26 (a) and (b).**

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1 **Request IR-5:**

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3 **If Emera Incorporated does not have guaranteed access to energy on the line outside the**  
4 **times and limits of the Nova Scotia Block, what provisions has NSPI made to ensure**  
5 **sufficient reserves are available within Nova Scotia, or by import, to meet energy needs in**  
6 **Nova Scotia?**

7

8 **Response IR-5:**

9

10 NS Power maintains a planning reserve margin in accordance with NPCC requirements for Loss  
11 of Load Expectation of less than one day in ten years. This planning reserve margin provides the  
12 system with a degree of security in the event of the long-term loss of any particular firm capacity  
13 generator. Additionally, NS Power maintains operating reserves, both 10 and 30 minute, to be  
14 able to respond to the loss of generation or imports within the operating timeframe.

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1 **Request IR-6:**

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3 **What is the cost estimate for duplicate power needs that seem to be required in IR-5?**

4

5 Response IR-6:

6

7 Planning reserve margin and operating reserve are well established planning and operating  
8 practices within the industry and are not considered “duplicate power”, as the electricity and  
9 capacity are typically separately priced. When NS Power purchases firm electricity, it includes  
10 the capacity, as is the case in each alternative, and non-firm electricity is not capacity backed  
11 which means NS Power must retain the capacity. The NS Block is firm capacity and does not  
12 require any additional planning or operating reserves beyond what is utilized today.

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1 **Request IR-7:**

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3 **In 2008 and 2009 NSPI participated in engineering studies with the Nova Scotia**  
4 **government that ultimately recommended several options to supply energy in Nova Scotia**  
5 **and improve grid stability to deliver future energy needs. This did not presume a Maritime**  
6 **Link project. This included a combination of NB imports, NE imports, HQ imports, NB**  
7 **nuclear, and new available green technologies like solar and storage. (SNC Lavalin report).**  
8 **Why did NSPI not begin pursuing this plan after 2008 and why has it been superceded by**  
9 **the Maritime Link project?**

10

11 Response IR-7:

12

13 NSPI did pursue items in this plan and more, such as tidal. The referenced analysis considered a  
14 sub-sea cable link to Newfoundland to support the Lower Churchill development. The  
15 Integrated Resource Plan update which was undertaken by NS Power with stakeholders in 2009  
16 endorsed the enhancement of efficiency programs, the development of wind and biomass and  
17 consideration of a large import. NS Power has advanced the development of renewables and  
18 Efficiency Nova Scotia Corporation is operating energy efficiency programs.

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1 **Request IR-8:**

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3 **NSPML has indicated the cost estimates filed with the board are Decision Gate 3 estimates.**

4 **Is this accurate?**

5

6 Response IR-8:

7

8 Please refer to Section 4.3 of the Application. Maritime Link cost estimates are Decision Gate 2

9 estimates. Nalcor's project cost estimates are Decision Gate 3 estimates.



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1 **Request IR-9:**

2

3 **Decision Gate 3 estimates have a variance of plus or minus twenty percent (+/-20%). Why**  
4 **does NSPML believe that this level of estimate is sufficient for board approval of the**  
5 **project?**

6

7 Response IR-9:

8

9 See Figure 4-2 – Total Maritime Link Project Estimated Capital Costs (before AFUDC). The  
10 estimate for the Maritime Link facilities, as presented in the application, are DG2 numbers.  
11 Nalcor Energy's estimates for Phase I of Lower Churchill are at Decision Gate 3 and those costs  
12 are now set due to the contractual arrangements so there is no further variance in these costs.

13

14 The request in the Application for \$1.52 billion plus a variance of \$60 million, which is intended  
15 to cover NSPML's 20 percent of the cost of any potential cost overruns on the Maritime Link  
16 facilities. NSPML has appropriately provided the potential range of costs for the UARB.

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1 **Request IR-10:**

2

3 **We understand Emera Incorporated has indicated additional estimates will be available in**  
4 **the fall of 2013. This would be after the regulatory timeframe by which the board is**  
5 **required to make a decision. Why did NSPML not wait to file for approval of this project**  
6 **until the more accurate estimates are ready?**

7

8 Response IR-10:

9

10 Please refer to Section 4.3, Current Capital Cost Estimate. Nalcor's LCP Phase I DG3 capital  
11 cost estimate of \$6.2 billion is fixed and NS customers are not responsible for any increases in  
12 actual costs beyond that amount. NSPML expects that the DG3 capital cost estimate for the  
13 Maritime Link facilities will be in the range outlined in the Application (between \$1.4 and  
14 \$1.7 billion). If the actual capital costs of the Maritime Link facilities exceed the amount  
15 approved by the UARB in this Application, NSPML will seek recovery of such prudently  
16 incurred costs. The regulatory process required by the Maritime Link Cost Recovery Process  
17 Regulations provides for sufficient information to be available to the UARB to make a  
18 determination about whether the Maritime Link Project is the lowest long-term cost alternative  
19 that achieves the legislative and regulatory environmental requirements of the federal and  
20 provincial governments. The regulatory process also provides for the UARB to be properly  
21 informed of the DG3 costs and, if necessary, for the UARB to make informed decisions about  
22 the effect of the DG3 costs and application of the 20 For 20 Principle (Please refer to Liberal  
23 IR-011). Please refer to section 7.5 of the Application for a description of the UARB processes  
24 anticipated by NSPML.

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1 **Request IR-11:**

2

3 **Why does NSPML believe Nova Scotia ratepayers should pay 100% of the cost of the**  
4 **Maritime Link but only have a guarantee of 20% of the energy?**

5

6 Response IR-11:

7

8 Nova Scotia customers are being asked to pay for 20 percent of the cost of the Maritime Link  
9 Facilities and Phase 1 of the Lower Churchill Project (that is, Muskrat Falls Generation Facility,  
10 Labrador Transmission Assets and the Labrador Island Link). Referred to as the 20 For 20  
11 Principle, this specifies that NSPML (and therefore the customers of NS Power) will receive 20  
12 percent of the renewable energy produced by Muskrat Falls in exchange for the 20 percent  
13 investment.

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1 **Request IR-12:**

2

3 **Please demonstrate how, by paying the full cost of the undersea link, that ratepayers in**  
4 **Nova Scotia are not therefore subsidizing any energy which comes across the line and is**  
5 **exported to other provinces or the United States.**

6

7 Response IR-12:

8

9 The basis of the Application is the 20 For 20 Principle (Please refer to Liberal IR-11). Nova  
10 Scotia customers will receive the NS Block (for paying 20 percent cost of projects) of renewable  
11 energy at Woodbine, at the same cost as Newfoundland and Labrador (for paying 80 percent cost  
12 of projects) will receive their energy. Any economy energy which could come in addition to the  
13 NS Block will either be purchased at economic prices by NS Power or Nalcor will pay a toll to  
14 transmit that energy through Nova Scotia, to the benefit of NS Power customers. Therefore Nova  
15 Scotia is not subsidizing the project.

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1 **Request IR-13:**

2

3 **Please demonstrate how corporate associations in the Maritime Link project comply with**  
4 **Nova Scotia Power's Code of Conduct, specifically related to affiliate transactions, and the**  
5 **board decisions regarding these.**

6

7 Response IR-13:

8

9 Please refer to NSUARB IR-91 and NSDOE IR-1.

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1 **Request IR-14:**

2

3 **If the project is not approved as filed by NSPML does the applicant or parent company still**  
4 **plan to proceed with the project?**

5

6 Response IR-14:

7

8 In the scenario described, NSPML would carefully review the UARB Decision before deciding  
9 what appropriate action would be taken.

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1 **Request IR-15:**

2

3 **Why do Nova Scotia ratepayers not retain ownership of the undersea cable in perpetuity?**

4

5 Response IR-15:

6

7 After 35 years, the ongoing operation and maintenance of the Maritime Link will be Nalcor's  
8 responsibility, but the interconnection will remain in place to transmit electricity and NS Power  
9 will remain first line to purchase surplus energy at market prices. Had NSPML retained  
10 ownership of the Maritime Link, Nova Scotia customers would be responsible for the ongoing  
11 operating and maintenance costs and sustaining capital investments. The customers of NS Power  
12 will retain the ability to acquire electricity from the Maritime Link for as long as the transmission  
13 system is in existence and energy is economically available in the market.

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1 **Request IR-16:**

2

3 **Does the OATT need to be amended to meet the obligations of the Nova Scotia**

4 **Transmission Utilization Agreement?**

5

6 Response IR-16:

7

8 No.



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1 **Request IR-17:**

2

3 **NSPML has filed comparisons to other energy alternatives. Have the cost comparisons**  
4 **against the project as filed been updated to reflect the increased costs of the Maritime Link**  
5 **project announced prior to the filing with the board? If not, please file updated**  
6 **comparisons.**

7

8 Response IR-17:

9

10 Yes.

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1 **Request IR-18:**

2

3 **According to information provided by NSPML, a capital interest rate is assumed of four**  
4 **percent (4%) on the project as filed, but five percent (5%) on alternatives. Is this because**  
5 **of projected savings resulting from the federal loan guarantee?**

6

7 Response IR-18:

8

9 Yes.

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1 **Request IR-19:**

2

3 **The federal loan guarantee is available for projects which result in infrastructure projects**  
4 **between provinces. Why has NSPML and NSPI assumed a similar loan guarantee would**  
5 **not be available for projects such as upgraded transmission infrastructure for imports**  
6 **between Quebec, New Brunswick, and Nova Scotia? Please provide any correspondence or**  
7 **other information from the federal government indicating that such a loan guarantee**  
8 **would not be available as well as the dates and copies of requests made by Emera**  
9 **Incorporated or any of its subsidiaries making such a request.**

10

11 Response IR-19:

12

13 The Maritime Link project received support in principle from the Federal government in 2011  
14 following an agreement being reached between Nalcor Energy and Emera. The Government of  
15 Canada then required definitive agreements to be in place before confirming the loan guarantee.

16

17 Even if a Federal Loan Guarantee was added to the Other Import option, the Other Import option  
18 would still not be the lowest long term option. Furthermore, if the Federal Loan Guarantee is  
19 removed from the Maritime Link thus losing the benefit of the \$100 million dollars (present  
20 value) in savings attributable to the Federal Loan Guarantee, the Maritime Link still remains the  
21 lowest cost option.

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1 **Request IR-20:**

2

3 **Given that Hydro Quebec has vetoed a proposed agreement on water management to**  
4 **accommodate Muskrat Falls, what guarantee does NSPML have that Hydro Quebec will**  
5 **not exercise water rights over Muskrat Falls?**

6

7 Response IR-20:

8

9 Please see NSUARB IR-70.

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1 **Request IR-21:**

2

3 **If Hydro Quebec exercises water rights – or pursues the matter in court delaying the**  
4 **project – what backup plan does NSPML and NSPI have to deliver energy in Nova Scotia**  
5 **and what is the projected cost?**

6

7 Response IR-21:

8

9 Please refer to NSUARB IR-70.

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1 **Request IR-22:**

2

3 **What discussions has Emera Incorporated, NSPI, or NSPML had specifically with request**  
4 **to the Water Management Agreement for the Churchill watershed? Has NSPI, NSPML, or**  
5 **Emera Incorporated sought assurances on this issue directly from Hydro Quebec?**

6

7 Response IR-22:

8

9 Please refer to NSUARB IR-70.

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1 **Request IR-23:**

2

3 **Emera Incorporated and its subsidiaries have a so-called “Stability Agreement” with the**  
4 **Nova Scotia. This prevents regulatory change by the province of Nova Scotia which**  
5 **negatively impacts Emera Incorporated. This expires in 2015, two years prior to the**  
6 **projected start of the Maritime Link project. What provisions for risk have NSPML and**  
7 **NSPI incorporated into the project for changes after the 2015 expiry of this agreement?**

8

9 **Response IR-23:**

10

11 The Stability Agreement entered into between Emera Incorporated and the Province of Nova  
12 Scotia is in place while NSPML seeks the indicative investment grade credit rating required  
13 under the FLG Term Sheet. NSPML is required to obtain this rating pending regulatory  
14 approval, and the assurance of legislative and regulatory stability during this critical period is an  
15 integral part of obtaining the necessary ratings. The Stability Agreement terminates on achieving  
16 Financial Close, as that term is used in the FLG Term Sheet. During the period prior to Financial  
17 Close, and as a condition of Financial Close, the Province of Nova Scotia will negotiate and  
18 execute an agreement whereby Nova Scotia will indemnify Canada for any costs it may incur  
19 under the FLG as a result of a regulatory decision or a regulatory change (including through  
20 legislation or policy) that prevents a Borrower from recovering Project Costs and fully servicing  
21 Guaranteed Debt.

Maritime Link Project (NSUARB ML-2013-01)  
NSPML Responses to Liberal Caucus Information Requests

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1 **Request IR-24:**

2

3 **Please detail the reporting and accountability plan for the Maritime Link project including**  
4 **key milestones and any further points which will require board approval.**

5

6 Response IR-24:

7

8 Please refer to section of the Application with respect to key project milestones, and specifically  
9 section 7.5 for the UARB processes that are anticipated by NSPML.



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1 **Request IR-25:**

2  
3 **(a) If the project is approved and does not begin transmitting energy by 2017 will**  
4 **NSPML and NSPI accept responsibility for any costs related to replacement**  
5 **energy? Will NSPI guarantee that ratepayers will not be required to fund any costs**  
6 **or penalties associated with delays?**

7  
8 **(b) NSPML has indicated a net cost to ratepayers of \$1.50 per month. Please provide a**  
9 **detailed breakdown of costs – including all savings being attributed to this project –**  
10 **related to this calculation.**

11  
12 **Response IR-25:**

13  
14 (a) NSPML will be seeking recovery from NS Power, through the Maritime Link  
15 Assessment, of all project costs as approved by the UARB. There are no penalties  
16 associated with delays beyond 2017. Also, please see responses to Liberal IR-45 and  
17 NSUARB IR-76. In the unlikely event of a delay, there is no lost energy from the NS  
18 Block. The 35 year term does not start until certain criteria are met by Nalcor, therefore  
19 NSP will continue to produce or purchase electricity until first power from Muskrat.

20  
21 (b) See Response to MPA IR-18.

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1 **Request IR-26:**

2

3 **Manitoba Hydro has noted that the project may be at risk of outages for extended periods**  
4 **due to the geography and nature of the infrastructure. What contingency plans does NSPI**  
5 **and NSPML have in place to replace energy in the event of an outage?**

6

7 Response IR-26:

8

9 In the unlikely event of an interruption of supply, the Energy and Capacity agreement with  
10 Nalcor provides for the delivery of the energy at a later date. In the case of the NS Block, the  
11 energy is not lost and will be delivered at a comparable time in the future which will avoid a  
12 future cost.

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1 **Request IR-27:**

2

3 **Will ratepayers in Nova Scotia be responsible to cover additional electricity costs related to**  
4 **replacing Maritime Link energy in the event of a system or line outage?**

5

6 Response IR-27:

7

8 In the unlikely event of an interruption of supply, the Energy and Capacity Agreement with  
9 Nalcor provides for the delivery of the energy at a later date. In the case of the NS Block, the  
10 energy is not lost and will be delivered at a comparable time in the future which will avoid a  
11 future cost.

12

13 The prudent cost of replacement energy that may be required due to the loss of generation or  
14 transmission facilities is recoverable from customers. This is presently the circumstance in Nova  
15 Scotia and is not changed by the existence of the Maritime Link. Please also refer to CA/SBA  
16 IR-109 and CA/SBA IR-110.

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1 **Request IR-28:**

2

3 **NSPML and NSPI have indicated that importing power to Nova Scotia is limited largely by**  
4 **transmission infrastructure issues in New Brunswick. This being the case, why is it possible**  
5 **to import replacement energy in the event of a system or line outage on the Maritime Link**  
6 **system but the same transmission infrastructure is a hindrance at this time?**

7

8 Response IR-28:

9

10 While the NS-NB interconnection has limited firm transfer capability, today it is available for  
11 emergency import in the event any in-province generation fails. Once the Maritime Link is in  
12 service, the unused capacity of the NS-NB tie is therefore still available for emergency purposes  
13 in the event of an outage on the ML.

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1 **Request IR-29:**

2

3 **What is the projected cost of replacement energy in the event of a system outage on the**  
4 **Maritime Link system?**

5

6 Response IR-29:

7

8 Please refer to Liberal IR-26.

9

10 Since the supply of electricity is contractually preserved for Nova Scotia customers and any  
11 undelivered electricity is to be delivered promptly after an interruption as contractually defined,  
12 there is no replacement energy cost modeled.

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1 **Request IR-30:**

2

3 **What provisions are in place if the Muskrat Falls generating station does not produce its**  
4 **rated capacity of energy either due to technical issues or environmental issues such as**  
5 **lower than expected snow loads?**

6

7 Response IR-30:

8

9 Please refer to NSPML SBA IR-109 and NSPML SBA IR-110.

10

11 The lack of precipitation is not a Forgiveable Event under the Energy and Capacity Agreement.

Maritime Link Project (NSUARB ML-2013-01)  
NSPML Responses to Liberal Caucus Information Requests

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1 **Request IR-31:**

2

3 **Has NSPI, NSPML, or any Emera Incorporated subsidiary sought or requested a formal**  
4 **proposal for energy from Hydro Quebec? If so, please provide the dates and responses to**  
5 **such requests.**

6

7 Response IR-31:

8

9 Please refer to NSUARB IR-51.

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1 **Request IR-32:**

2  
3 **Hydro Quebec has reportedly agreed to sell electricity to the State of Vermont at**  
4 **approximately 5.8 cents a kilowatt hour (with an inflationary adjustment) for a twenty-five**  
5 **year term. If Hydro Quebec could provide a similar arrangement to NSPI would this rate**  
6 **cause rates to increase above what is projected with the Muskrat Falls project, or would**  
7 **this result in a lowering of rates? Please provide the details of the calculations.**

8  
9 **Response IR-32:**

10  
11 NSPML did not directly model the effects of the Vermont arrangement on NS rates.

- 12
- 13 • NSPML did not model this specific proposal, because no such proposal has been  
14 provided to NS Power or Emera, and therefore it is not a reliable option for long term  
15 planning to meet legal obligations on the utility.
  - 16
  - 17 • The proposal is for 25 years, not 35 or 50 years, and therefore is not reasonably  
18 comparable to the Maritime Link.
  - 19
  - 20 • The proposal would require transmission capital investments comparable to the Other  
21 Import alternative that was modelled for this application.
  - 22
  - 23 • Based upon the noted publicly available power purchase information, the levelized cost  
24 of the energy would not include the representation of any possible interruption clauses or  
25 determination of the security of supply or other cost implications for on-peak only,  
26 capacity, renewable attributes, dispatchability or other features.
  - 27

28 Therefore NSPML suggests that the cost to customers would be expected to be the same as or  
29 exceed the cost as modelled in the Other Import alternative for this application.



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1 **Request IR-33:**

2

3 **What is the cost of energy through the Maritime Link project after the line reverts to Nalcor and**  
4 **the current agreement expires?**

5

6 Response IR-33:

7

8 It is expected that the market will determine the value of the electricity in the future and that both  
9 parties would consider their alternatives. With the Maritime Link in place, NS Power will be  
10 well positioned to obtain prices which are preferential to both Nova Scotia and Nalcor in the new  
11 market created by the Maritime Link. The parties will negotiate in good faith to reach an  
12 agreement.

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1 **Request IR-34:**

2

3 **What provisions for generation or imports have been made by NSPI to replace the energy**  
4 **on the Maritime Link after the expiry of the agreement should the energy on the line not be**  
5 **cost effective for Nova Scotia ratepayers?**

6

7 Response IR-34:

8

9 Consistent with good utility practice, NS Power will continue to assess long term needs and plan  
10 to address reserve and supply issues well in advance of the end of term. NS Power makes similar  
11 planning decisions in respect of all of its assets, including existing generation plants and  
12 transmission lines.

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1 **Request IR-35:**

2

3 **What is the timeline for negotiating or opening for bids provision of energy both across the**  
4 **Maritime Link and from other suppliers after the expiry of the agreement?**

5

6 Response IR-35:

7

8 Completing a market request for proposals for supply of renewable electricity and capacity can  
9 take anywhere from several months to multiple years.

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1 **Request IR-36:**

2

3 **For projects which NSPML and NSPI have filed as comparisons it appears the ROI has**  
4 **been estimated at ten percent (10%) for alternatives and approximately nine percent (9%)**  
5 **for the Maritime Link project. Why?**

6

7 Response IR-36:

8

9 In the alternatives analysis, both the Maritime Link Project and the Other Import alternative  
10 assume a 10 percent ROE during the operations period.

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1 **Request IR-37:**

2

3 **It appears NSPML and NSPI assume for all alternatives that the applicants or another**  
4 **Emera Incorporated company would own all or some of the infrastructure rather than the**  
5 **energy being purchased via a power purchase agreement or some arrangement where**  
6 **NSPI simply purchases energy rather than constructing infrastructure of its own. Why**  
7 **were options where Emera Incorporated was not involved in construction not considered**  
8 **or compared?**

9

10 Response IR-37:

11

12 The assumption represented in this question is not correct; there is no assumption of ownership  
13 in the other alternatives. NSPML has represented financial conditions which are representative of  
14 market conditions today. In the Other Import and Indigenous Wind, the ownership is not  
15 specified. The cost of capital infrastructure for Indigenous Wind has been based upon costs  
16 similar to utility built wind since utility built wind projects provide the lowest long term cost for  
17 customers. Higher cost assumptions would make the alternatives even less competitive compared  
18 to the Maritime Link. The other import options assumes a market-based electricity price, and  
19 transmission construction costs. It does not presume ownership of the transmission assets by NS  
20 Power, NSPML or Emera.

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1 **Request IR-38:**

2

3 **Emera Incorporated has been aware of a number of private proposals to deliver similar**  
4 **amounts of energy as included in the Nova Scotia Block (for example a proposal from Cape**  
5 **Breton Explorations). Why were these alternatives excluded from consideration as**  
6 **alternatives for the board and interveners to consider?**

7

8 Response IR-38:

9

10 The Alternatives Analysis was robust and allowed for consideration of a wide variety of options,  
11 leading to modelling of three options that would meet the long term needs of Nova Scotia  
12 customers while allowing NS Power to achieve compliance with federal and provincial laws.  
13 Proposals for power arrangements that NS Power or its affiliates might receive from time to  
14 time, whether unsolicited or through a competitive solicitation process, will continue to be  
15 considered and pursued when they are in the best interests of the customers of NS Power. The  
16 Alternatives Analysis was not affected by whether formal proposals had been received by NS  
17 Power or any affiliate of NS Power. Neither the Other Import option nor the Wind option is  
18 supported by formal proposals that could be commercially contracted and executed.

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1 **Request IR-39:**

2

3 **Since the filing for this application, NSPI has publicly discussed the possibility of**  
4 **constructing a second natural gas line into Nova Scotia to help deal with shortages from the**  
5 **Nova Scotia offshore and to access shale gas reserves. Please provide updated comparisons**  
6 **for increased natural gas generation as an alternative, assuming NSPI will build a line**  
7 **anyhow and thus this cost would not be part of the comparison (given that it appears a line**  
8 **could be built with or without Muskrat Falls).**

9

10 Response IR-39:

11

12 As indicated on page 123, lines 5-7, of the Application, the costs associated with new or  
13 enhanced natural gas infrastructure (such as second natural gas line into Nova Scotia) are not  
14 included in the alternative comparison.

15

16 NS Power has not undertaken any cost analysis and has no plans to construct a second natural  
17 gas pipeline to access shale gas reserves.

**NON-CONFIDENTIAL**

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1 **Request IR-40:**

2

3 **For comparisons filed by the applicant, how much energy did NSPML and NSPI assume**  
4 **would be purchased via each option and how does this compare with the guaranteed**  
5 **amount in the Nova Scotia Block?**

6

7 Response IR-40:

8

9 For the Maritime Link Alternative, the model was offered up to 300 MW less the NS Block  
10 (153.3 MW plus supplemental energy) of imports over the Maritime Link and up to 100 MW of  
11 imports over the tie between Nova Scotia and New Brunswick. For the Other Import Alternative,  
12 the model was offered up to 500 MW less the firm import (159.6 MW) for imports over the tie  
13 between Nova Scotia and New Brunswick. There were no imports in the Indigenous Wind  
14 Alternative.



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1 **Request IR-41:**

2

3 **If the amount of energy assumed to be purchased under the comparisons provided in the**  
4 **application exceed the amount guaranteed in the Nova Scotia Block please explain why.**

5

6 Response IR-41:

7

8 The comparisons included economy energy purchases in addition to the NS Block. This is  
9 reflective of the enhanced access to competitive markets.

**NON-CONFIDENTIAL**

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1 **Request IR-42:**

2

3 **NSPI has previously provided estimated per kilowatt hour costs for wind energy and other**  
4 **renewables. Please provide the estimated per kilowatt hour price for electricity landed in**  
5 **Nova Scotia across the Maritime Link for the years 2017 through to the end of the**  
6 **contractual term and for five years beyond that term.**

7

8 Response IR-42:

9

10 Please refer to NSUARB IR-37.

11

12 The amounts presented are to 2040, as the Planning Period amounts of Surplus Energy extend to  
13 that year.

**NON-CONFIDENTIAL**

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1 **Request IR-43:**

2

3 **Has Nalcor/Newfoundland and Labrador Hydro and/or the Government of Newfoundland**  
4 **and Labrador agreed to indemnify Emera Incorporated, NSPI, or NSPML, for any liability**  
5 **to deliver electricity pursuant to the contract into Nova Scotia? If so, what are limits if any**  
6 **of that indemnification? And how does that Indemnification pertain to affected residential**  
7 **and commercial customers of NSPI.**

8

9 **Response IR-43:**

10

11 Nalcor is a party to the Energy and Capacity Agreement (ECA) and is therefore fully liable for  
12 damages arising from a failure to deliver the NS Block in accordance with the terms of the  
13 agreement. The Province of Newfoundland and Labrador has guaranteed to Emera the payment  
14 of damages or compensation payable under the ECA, if Nalcor's failure to deliver is as a result  
15 of a Government Action.

**NON-CONFIDENTIAL**

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1 **Request IR-44:**

2

3 **Will any Emera Incorporated subsidiary (including NSPML and NSPI) receive payments**  
4 **for use of transmission infrastructure in Nova Scotia as a result of energy transmitted**  
5 **across the Maritime Link? If so how much and under what conditions? And if so, will these**  
6 **payments be credited to NSPI ratepayers?**

7

8 Response IR-44:

9

10 Please refer to the Application page 145, lines 4 to 18:

11

12 The NSTUA requires Nalcor to pay the applicable NSTUA tariff rate for  
13 transmission of the Nalcor Surplus Energy, which tariff rate is a proxy for the NS  
14 Power OATT tariff rate, but billed on an as used basis. Based on projections of  
15 Nalcor Surplus Energy, it is expected that the transmission fees paid by Nalcor  
16 (which will be provided to NS Power pursuant to the NS Power-NSPML  
17 Agreement) during the term will offset the associated capital expenditures,  
18 redispatch costs, and anticipated system maintenance costs resulting from the  
19 Nalcor Surplus Energy flowing through Nova Scotia. Due to transmission  
20 constraints in the early years of the transactions, the costs of providing the  
21 transmission services may not initially be fully covered by the transmission  
22 revenues, though they are expected to cover the capital expenditures, redispatch  
23 costs, and anticipated system maintenance costs over the term of the agreement.  
24 In the event that the revenue from the Nalcor transmission fees does not fully  
25 cover capital expenditures, redispatch and system maintenance costs, NS Power  
26 will charge NSPML for those costs and NSPML will incorporate those costs into  
27 its assessment to NS Power. The NS Power-NSPML Agreement contemplates  
28 that this true-up will be calculated every 60 months.

**NON-CONFIDENTIAL**

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1 **Request IR-45:**

2

3 **If the Government of Newfoundland and Labrador and/or Nalcor are unable to finance the**  
4 **Muskrat Falls project or anticipated cost overruns and cannot complete the project or**  
5 **must delay the project, how is NSPML, NSPI, and Emera Incorporated to be indemnified?**

6 **How are NSPI ratepayers indemnified?**

7

8 Response IR-45:

9

10 Please refer to NSUARB IR-76.

**NON-CONFIDENTIAL**

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1 **Request IR-46:**

2

3 **Has Emera or NSPI agreed to transmit any electricity into Newfoundland and Labrador if**  
4 **that province has an outage? If so please provide any correspondence or agreements which**  
5 **pertain to that issue and explain how Nova Scotia ratepayers be indemnified for**  
6 **transmissions if that occurs?**

7

8 Response IR-46:

9

10 No; however, the interconnection will be capable of transmitting electricity to Newfoundland  
11 and Labrador which can provide benefits to Nova Scotia customers.

**NON-CONFIDENTIAL**

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1 **Request IR-47:**

2

3 **Bill 61 in Newfoundland and Labrador precludes Hydro Quebec from selling energy to the**  
4 **island of Newfoundland. This potentially precludes Nalcor from selling energy into the**  
5 **United States. Does Emera Incorporated, NSPML, or NSPI consider that the partnership**  
6 **with Nalcor, as a result of this bill or other factors, potentially puts their export abilities to**  
7 **the United States at risk?**

8

9 **Response IR-47:**

10

11 **No.**

**NON-CONFIDENTIAL**

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1 **Request IR-48:**

2

3 **In their emergency planning Nalcor state they are planning to import up to 300 MW of**  
4 **energy from Nova Scotia in the event that the Labrador Island Link is unable to deliver**  
5 **energy to Newfoundland. Where will this 300 MW come from?**

6

7 Response IR-48:

8

9 Please refer to Liberal IR-46. NSPML is not aware of Nalcor's plan to source such supply at this  
10 time.



**NON-CONFIDENTIAL**

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1 **Request IR-49:**

2

3 **If NSPML or NSPI sell energy into the island of Newfoundland will it pay a tariff to the**  
4 **Maritime Link Development Corporation? If so, who will benefit from that tariff?**

5

6 Response IR-49:

7

8 Pursuant to the Maritime Link (Nalcor) Transmission Service Agreement, Nalcor holds firm  
9 bi-directional transmission rights on the Maritime Link in excess of those necessary to allow the  
10 delivery of the NS Block. The parties will put in place a non-firm tariff to allow for non-firm use  
11 of the Maritime Link but there will be no ability to use the firm transmission capacity without the  
12 agreement of Nalcor. Rates for any non-firm transmission service would be as approved by the  
13 UARB and would be payable to NSPML and could potentially offset other operating costs  
14 considered by the UARB.

**NON-CONFIDENTIAL**

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1 **Request IR-50:**

2

3 **Who is responsible for the repairs and maintenance on the island transmission from**  
4 **Granite Canal to Cape Ray?**

5

6 Response IR-50:

7

8 Consistent with the 20 For 20 Principle (please refer Liberal IR-11), NSPML is responsible for  
9 20 percent of the O&M costs. NSPML will be responsible for these costs during the term of the  
10 commercial agreements. Nalcor will be responsible afterward.