

NON-CONFIDENTIAL

1 **Request IR-7:**

2

3 **Emera and the Province of Nova Scotia entered into an agreement titled the Stability**
4 **Agreement. Please explain the timeline and end dates of the stability agreement and its**
5 **purpose.**

6

7 Response IR-7:

8

9 Please see Liberal IR 23.

NON-CONFIDENTIAL

1 **Request IR-8:**

2
3 **The application states that Emera and NALCOR plan to export excess power capacity**
4 **through the Nova Scotia transmission system to other jurisdictions such as New Brunswick**
5 **and the Northeastern United States. Please explain why Nova Scotian ratepayers are being**
6 **asked to pay for 100% of the costs of these transmission upgrades when they are not the**
7 **sole recipients/users of the power?**

8
9 **Response IR-8:**

10
11 Any energy beyond the NS Block will be Nalcor's to export, not Emera's, and Nalcor will pay
12 transmission tariffs to NS Power for the use of transmission in Nova Scotia. With respect to
13 transmission upgrade costs, please refer to the response to CA IR-64. It is NS Power's
14 expectation that the transmission revenue it receives from Nalcor will offset the cost of the
15 upgrades in question. In addition, the Maritime Link interconnection to NL provides Nova Scotia
16 with first in line access to Nalcor's surplus energy. The Nova Scotia upgrades are required as
17 part of the complete transaction and any improvements to the Nova Scotia transmission system
18 will benefit Nova Scotia customers. This occurs either directly by ensuring Nalcor will deliver
19 energy via the Nova Scotia system creating a strategic economic opportunity for Nova Scotia or
20 indirectly by benefiting from the improved system attributes and the utilization of the Nova
21 Scotia transmission assets. Coal plants will use less of the transmission system in the future.
22 Use of the system avoids the possibility of stranded assets.

23
24 Also, please refer to response to Liberal IR-12.

NON-CONFIDENTIAL

1 **Request IR-9:**

2

3 **The application states that Emera and NALCOR plan to export excess power capacity**
4 **through the Nova Scotia transmission system to other jurisdictions such as New Brunswick**
5 **and the Northeastern United States. Please explain why Nova Scotian ratepayers are being**
6 **asked to pay for 100% of the costs of these transmission upgrades when they are not the**
7 **sole recipients/users of the power?**

8

9 **Based on the above scenario, please explain why Nova Scotia does not earn transmission**
10 **tariffs for any energy passing through Nova Scotian transmission lines to other markets?**

11

12 Response IR-9:

13

14 Please refer to PC IR-8.

15

16 NS Power will earn transmission revenue pursuant to the Nova Scotia Transmission Utilization
17 Agreement on the energy that flows through Nova Scotia. These revenues are expected to meet
18 or exceed the corresponding costs of providing the associated Transmission Facilitation Service,
19 including the costs of the transmission upgrades.

NON-CONFIDENTIAL

1 **Request IR-10:**

2

3 **NSPML response to Liberty IR-4**

4

5 **Stated that NYMEX was not used for long term pricing forecasts, as they do not have**
6 **prices for the term required. Has NSPI/Emera used NYMEX for forecasts in the past? If**
7 **so, when?**

8

9 Response IR-10:

10

11 The NYMEX gas contract only goes out as far as December 2025. Trade volume drops off
12 materially beyond 2018; prices would need to be derived out past this point. NS Power uses
13 NYMEX for terms that are in the liquid (that is, trades are taking place) part of the NYMEX
14 curve.

NON-CONFIDENTIAL

1 **Request IR-11:**

2

3 **NSPML response to DOE IR-8 (a)**

4

5 **(a) Why have only high level estimates been done for the “potential transmission**
6 **upgrades”?**

7

8 **(b) Why won’t these studies be done before 2014? Why weren’t they done prior to the**
9 **application being submitted?**

10

11 **Response IR-11:**

12

13 **(a)** These transmission upgrades will increase the amount of import that can remain in Nova
14 Scotia (including the NS Block) from 300 MW to 500 MW. It is a future potential
15 optimization and therefore only high level estimates have been done at this time. The
16 interconnection requirements with New Brunswick have been studied on multiple
17 occasions, including the Atlantic Energy gateway, and would be better understood once
18 the Maritime Link is in service.

19

20 **(b)** These studies are not required before 2014 because they are for potential work to be
21 completed prior to 2025. They were not required before submitting the application
22 because the application is based on up to 300 MW of import remaining in Nova Scotia
23 (including the NS Block). The enhancement of up to 500 MW of import remaining in
24 Nova Scotia (including the NS Block) was a sensitivity run to determine how much
25 value there could be if the transmission upgrades were completed.

NON-CONFIDENTIAL

1 **Request IR-12:**

2
3 **NSPML response to DOE IR-8 (b)**

4
5 **(a) Please clarify what a sensitivity run is.**

6
7 **(b) Please provide any sources or quotes for the estimated \$70M cost of transmission**
8 **upgrades.**

9
10 **(c) Please provide any sources or quotes for the estimated \$565M benefit.**

11
12 **(d) If sources or quotes are unavailable, please explain the process or methodology used**
13 **in the high level analysis.**

14
15 **Response IR-12:**

16
17 (a) A sensitivity run means using the model to test the results by changing certain
18 assumptions and determining how the model results would change under those changed
19 assumptions. Using sensitivity runs is a way to test the robustness of the base case
20 results. The sensitivity run described in NSDOE IR-8 (b) was a run of the model where
21 the only change to the model was a change to the constraint on import energy remaining
22 in Nova Scotia (including the NS Block) from the Maritime Link whereby that
23 constraint was increased from 300 MW to 500 MW. The model determines how much
24 and when it is economical to purchase surplus energy. In this sensitivity run the model
25 was allowed to choose to import up to 500 MW (including the NS Block) versus
26 300 MW (including the NS Block) in the base runs.

27
28 (b) This is a high level estimate of the low end of the range of the upgrades described in
29 UARB-McMaster IR-25. It is based on internal experience and there are no sources or
30 quotes.

NON-CONFIDENTIAL

- 1
- 2 (c) The \$565 M benefit is the result of Strategist modeling resulting from the difference in
- 3 costs between the base run of up to 300 MW of import (including the NS Block) and the
- 4 sensitivity run of up to 500 MW of import (including the NS Block), described in (a)
- 5 above. Please also refer to CA-77 Attachment 1.
- 6
- 7 (d) Please refer to UARB-McMaster IR-25.

NON-CONFIDENTIAL

1 **Request IR-13:**

2

3 **Who has right of first access to any excess power, Newfoundland or Nova Scotia?**

4

5 Response IR-13:

6

7 NSPML owns the NS Block, while Nalcor owns the remainder of the energy from the Muskrat Falls
8 generating station. Due to the geographic position of Nova Scotia as first in line to the Newfoundland
9 source, Nova Scotia will have an economic advantage second only to Newfoundland and Labrador
10 itself. Please also refer to response to CanWEA IR-61.3-61.5.

NON-CONFIDENTIAL

1 **Request IR-14:**

2

3 (a) **Why is the NS Block considered Firm capacity?**

4

5 (b) **Is other additional electricity from the Maritime Link considered firm?**

6

7 (c) **Please outline, if any power is purchased over and above the NS Block, what**
8 **duplicate power needs will be required.**

9

10 Response IR-14:

11

12 (a) The NS Block is contracted and NSPML has contractual rights to the capacity as well as
13 the energy. It is the capacity which makes the energy product firm.

14

15 (b) An additional 80 MW of energy, above the NS Block, is considered firm capacity.
16 NSPML will have an opportunity to purchase this energy and capacity.

17

18 (c) No duplicate power needs are required for additional economy energy purchases. Energy
19 purchases offset in-province generation and the operating costs associated with that
20 generation.

NON-CONFIDENTIAL

1 **Request IR-15:**

2

3 **(a) Until 2009, NSPI and the government of Nova Scotia looked at many options to**
4 **diversify its energy portfolio including importing from other regional neighbours**
5 **including NE, NB and HQ. What makes an imports from Newfoundland and**
6 **Labrador different than an import from NB, NE or HQ?**

7

8 **(b) Why didn't NSPI/Emera put out an RFP for the lowest cost, long-term option to**
9 **import power?**

10

11 **Response IR-15:**

12

13 (a) Only the Maritime Link, as modelled, provides both new transmission and new
14 renewable generation. It is the lowest cost option, compared to other alternatives, for
15 meeting the federal and provincial environmental requirements and provides an
16 interconnection with a province with substantial undeveloped renewable energy potential.
17 Please refer to MPA IR-22.

18

19 (b) NSPML presented the alternatives which demonstrate the Maritime Link to be the lowest
20 long-term cost alternative. Emera was aware of the market opportunities through
21 discussions with potential parties and was aware of the complexity of transmission
22 constraints and investment requirements and did not deem these suitable for an RFP
23 approach. Please refer to NSUARB IR-51.

NON-CONFIDENTIAL

1 **Request IR-16:**

2

3 **Please explain why NS ratepayers should be expected to pay for costs of the Muskrat Falls**
4 **Generation Facility, Labrador Transmission Assets and the Labrador Island Link.**
5 **Shouldn't these costs be borne by Nalcor as they are the exporters of the energy?**

6

7 Response IR-16:

8

9 Pursuant to the 20 For 20 Principle, 20 percent of the total estimated capital costs of the
10 Maritime Link and LCP Phase I (including Muskrat Falls, the Labrador Transmission Assets and
11 the Labrador Island Link) will be recovered from NS customers and in exchange customers will
12 receive 20 percent of the estimated energy production from the Muskrat Falls generating station.
13 Similarly, Nalcor is paying 80 percent of the total estimated capital costs of the Maritime Link
14 and LCP Phase I and is entitled to 80 percent of the energy from Muskrat Falls.

NON-CONFIDENTIAL

1 **Request IR-17:**

2

3 **Please clarify the process for recovering any toll for energy that is transmitted through**
4 **Nova Scotia, and how it will benefit NS Power customers.**

5

6 Response IR-17:

7

8 The tolls for transmitting the energy through Nova Scotia would be collected through a monthly
9 billing process. The specific process and costing are described in the Nova Scotia Transmission
10 Utilization Agreement (Appendix 2.06) Articles 2 and 4.

11

12 NS Power customers will benefit in a number of ways. A transmission path through Nova Scotia
13 allows access to the firm renewable energy and surplus energy, and gives Nova Scotia a second
14 connection to the North America electrical grid. A further benefit will be a revenue stream from
15 the use of transmission assets that would otherwise be used much less as coal generation declines
16 in the future. The transmission revenue is expected to cover the operating costs and the capital
17 upgrades.

NON-CONFIDENTIAL

1 **Request IR-18:**

2
3 **(a) Please clarify if Nalcor will increase the cost of delivered power after 35 years, due**
4 **to the fact it is then responsible for the operating and maintenance costs.**

5
6 **(b) It can be assumed the economic value of the Maritime Link will be more than \$1**
7 **after 35 years, as it will still be operational. If NS does not purchase any or all of the**
8 **extra energy allotted in the first five years to compensate for the transfer of**
9 **ownership after 35 years, will the Maritime Link be sold for more than \$1?**

10
11 **(c) If yes to (b) what will be the amount and how will any additional proceeds be passed**
12 **on to NS ratepayers?**

13
14 **Response IR-18:**

15
16 **(a) The price of electricity that Nalcor may sell to NS Power after the existing commercial**
17 **arrangements expire will be based on market conditions at the time.**

18
19 **(b-c) The provision of Supplemental Energy from Nalcor to NSPML in the first five years is a**
20 **requirement contained in the commercial agreements (it is not optional). Similarly, the \$1**
21 **sale price of the Maritime Link from NSPML to Nalcor is part of the commercial**
22 **agreements between NSPML and Nalcor. The Supplemental Energy is part of the 20 For**
23 **20 Principle and does not result in any additional cost to NS customers, that is, no**
24 **additional cost per megawatt-hour. From NSPML's perspective, the Maritime Link will**
25 **be fully depreciated and all debt and equity repaid by the end of the 35 year term.**

NON-CONFIDENTIAL

1 **Request IR-19:**

2

3 **Yes or no, will payments paid to an Emera subsidiary, for the use of transmission**
4 **infrastructure in Nova Scotia be credited to NSPI ratepayers? Please explain.**

5

6 Response IR-19:

7

8 Yes. Please refer to Sections 3.1(b) and 3.3(a) of the Agency and Service Agreement, which
9 indicate that NS Power shall collect and retain the Nalcor Charges. As per Section 8.2.1 of the
10 Application, based on projections of Nalcor Surplus Energy it is expected that the transmission
11 fees paid by Nalcor during the term will offset the associated capital expenditure, redispatch and
12 system maintenance costs.

NON-CONFIDENTIAL

1 **Request IR-20:**

2

3 **The NSPML response to Liberal IR-29 states “any undelivered electricity is to be delivered**
4 **promptly after an interruption, as contractually defined.” However the response to IR-27**
5 **states “the Energy and Capacity Agreement with Nalcor provides for the delivery of the**
6 **energy at a later date.” Response also states “In the case of the NS Block the energy is not**
7 **lost and will be delivered at a comparable time in the future.”**

8

9 **(a) Please explain this discrepancy.**

10

11 **(b) If power is to be delivered immediately, then explain why in IR-6 duplicate power**
12 **costs are not needed.**

13

14 Response IR-20:

15

16 There is no discrepancy. Liberal IR-27 correctly identifies that in the event of an interruption of
17 supply, the NS Block energy is not lost but is delivered at a comparable time in the future, which
18 will avoid a future cost. The details of this delivery mechanism are set out in Schedule 5 of the
19 Energy and Capacity Agreement. This means, at the instantaneous time of the energy not being
20 delivered the energy will be replaced within Nova Scotia by energy from other sources. The cost
21 of the replacement energy will be incurred at the time, but an additional block of energy
22 representing the deferred energy will be delivered at a later time. It is intended, as per Liberal IR-
23 29, that the replacement energy cost and the avoided future cost at the time the deferred energy is
24 delivered will offset each other within the period.