

**NON-CONFIDENTIAL**

---

1 **Request IR-1:**

2

3 **With regards to Emera's statement that up to 500 MW will be available for export from**  
4 **Newfoundland to Nova Scotia, GRK asks: What will be the scenario should Hydro Quebec**  
5 **decide NOT to generate at a time when Emera is in need of extra power?**

6

7 Response IR-1:

8

9 Please refer to Liberal IR-28.

**NON-CONFIDENTIAL**

---

1 **Request IR-2:**

2

3 **With regards to the same statement above of up to 500 MW will be available,**

4

5 (a) **please explain exactly WHEN 500 MW will be available for export, I.e. seasons/time**  
6 **of day etc.**

7

8 (b) **what the TOTAL loss of power will be on ALL lines, i.e. beginning at the Muskrat**  
9 **Falls site, down to the Strait of Belle Isle, from Belle Isle to Soldiers Pond, or**  
10 **Granite Canal, from Granite Canal to Bottom Brook, from Bottom Brook to the**  
11 **Cabot Strait sub sea crossing and into Nova Scotia.**

12

13 **Response IR-2:**

14

15 (a) The exact time of production will vary from year to year based upon many factors.

16

17 (b) The total losses from the generating plant to the Woodbine substation in Nova Scotia will  
18 be approximately 9.2 percent, which will vary with actual transmission flows.

**NON-CONFIDENTIAL**

---

1 **Request IR-3:**

2

3 **With regards to Emera's statement that it will be able to retire one or two coal fired**  
4 **generating plants, please advise:**

5

6 (a) **exactly which plants would be retired?**

7

8 (b) **what criteria would determine whether it is one or two plants that might be retired?**

9

10 (c) **what is the output of each of the two plants proposed to be retired?**

11

12 (d) **what is the current GHG releases of each of these plants?**

13

14 **Response IR-3:**

15

16 (a) Currently it is expected that Lingan units 1 and 2 would be the units that would retire.

17

18 (b) The main criteria to be used would be to deliver the best value to the Nova Scotia  
19 customer. Underlying this would be the condition of the asset, need for investment, value  
20 as backup capacity, and planning reserve.

21

22 (c) The two Lingan units are 150 MW units.

23

24 (d) The amount of GHGs released by each unit is dependent on the utilization. In a base load  
25 year, the units can emit approximately 1 mega tonne of CO2 each.

**NON-CONFIDENTIAL**

---

1 **Request IR-4:**

2

3 **The Proponent states in the application that at some times the sub-sea cables will operate in**  
4 **“monopolar” rather than bipolar mode and that a full load current of 1,250 A may flow**  
5 **through the return path and must be maintained during planned or unplanned outages.**

6 **Please answer the following:**

7

8 **(a) What are the specific scenarios that would require monopolar operation?**

9

10 **(b) What are the specific scenarios that would require monopolar operation for long**  
11 **periods of time?**

12

13 **(c) What would be the longest time Emera estimates the monopolar line would operate**  
14 **and during which scenario?**

15

16 **(d) What studies have been done on the effects of dumping energy into surrounding**  
17 **marine environments at short intervals and at long intervals?**

18

19 **(e) What are the effects on marine life and on which marine life?**

20

21 **(f) Has the Proponent investigated a different, more advanced type of cable that has**  
22 **both the negative and positive poles inside one cable? (twinning cables)**

23

24 **(g) What are the environmental effects of this type of (twinning) cable?**

25

26 **Response IR-4:**

27

28 **(a) Monopolar operation is required when one pole is out of service for maintenance or if**  
29 **one pole experiences an unplanned outage due to a cable failure, converter failure, or**  
30 **overhead transmission line failure.**

**NON-CONFIDENTIAL**

---

- 1 (b) The system is designed with switching capability so that one of the cables can be used for  
2 metallic return during monopole operation. For monopole operation where the cable is  
3 not faulted, any extended periods of monopole operation will use the cable as the current  
4 return path. The sea electrodes would be used as the return path for extended periods  
5 during monopole operation only when one of the sub-sea cables is faulted.  
6
- 7 (c) NSPML estimates the longest period during which the Maritime Link would operate in  
8 monopolar operation would occur if one of the cables becomes faulted or is unavailable  
9 for an extended period of time. Depending on the time of year the fault occurs, cable  
10 repair could take several months.  
11
- 12 (d-e) Environmental assessment is not part of this proceeding.  
13
- 14 (f) NSPML is aware of the cable and the application and relative costs and complexities of  
15 the bulkier cable installations.  
16
- 17 (g) Environmental assessment is not part of this proceeding.

**NON-CONFIDENTIAL**

---

1 **Request IR-5:**

2

3 **With regards to Regulations: the Application states that once the UARB has approved the**  
4 **Maritime Link Project, NSPML contemplates they will then be entitled to recover all costs**  
5 **in connection with the Project from Nova Scotia Power from time to time in accordance**  
6 **with the mechanism prescribed by the Regulations.**

7

8 **(a) What happens to the costs if the UARB does NOT approve the Project?**

9

10 Response IR-5:

11

12 (a) NSPML can only recover costs that are approved by the UARB for recovery from NS  
13 Power. If the UARB does not approve the Maritime Link Project, the costs of the project  
14 will not be recoverable under the Maritime Link Cost Recovery Process Regulations.

**NON-CONFIDENTIAL**

---

1 **Request IR-6:**

2

3 **With regards to the review of the UARB, It is currently making decisions based on DG2**  
4 **figures and apparently DG 3 figures will not be available before the UARB must make its**  
5 **determination:**

6

7 **(a) If DG 3 figures are much larger than the Proponent and NS Power have estimated,**  
8 **will the UARB have the ability to re-assess the Application.**

9

10 Response IR-6:

11

12 (a) NSPML has requested approval for the Maritime Link Project cost of \$1.52 billion, plus a  
13 variance amount of \$60 million, for a maximum project cost of \$1.58 billion. This  
14 amount is anticipated to be sufficient to complete the Project without further applications  
15 and approvals from the UARB.