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BY EMAIL AND COURIER

25 September 2017

Ms. Cheryl Blundon
Director Corporate Services & Board Secretary
Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL A1A 5B2
email: cblundon@pub.nl.ca

**Re: Request for information #1 of Iron Ore Company of Canada ("IOC") to
Newfoundland and Labrador Hydro ("NLH")**

Dear Ms. Blundon:

Please find enclosed the original and 13 copies of IOC's Request for information in the matter of a General Rate Application by Newfoundland and Labrador Hydro to establish customer electricity rates for 2018 and 2019.

Best regards,

A handwritten signature in blue ink, appearing to read "mcdupont", is written over the typed name.

Marie-Christine Dupont
Senior Legal Counsel

Encl.

1 **IN THE MATTER OF** the *Electrical Power Control*
 2 *Act, 1994*, SNL 1994, Chapter E-5.1 and the *Public*
 3 *Utilities Act*, RSN 1990, Chapter P-47;

4
 5 **AND IN THE MATTER OF** a General Rate
 6 Application by Newfoundland and Labrador Hydro
 7 to establish customer electricity rates for 2018 and
 8 2019 (« *NLH 2017 GRA* »).

11 **Request for information #1 of the Iron Ore Company of Canada (« IOC »)**
 12 **to**
 13 **Newfoundland and Labrador Hydro (« NLH »)**

17
 18 **REGULATORY COMPOUND & RATE INCREASE**

- 19
 20 **References:** (i) NLH 2017 GRA, Evidence, chapters 1 & 5, pages 1.7 & 5.16, tables 1-1 & 5-2
 21 (iii) NLH 2017 GRA, Evidence, chapter 5, page 5.1
 22 (iv) NLH 2017 GRA, Evidence, chapter 5, page 5.14, table 5-1
 23 (v) NLH 2017 GRA, Evidence, chapter 5, page 5.34
 24

25
 26 **Table 1-1 Proposed Average Interim and Final Rate Changes by Customer Class (%)⁷**

Customer Class	Interim 2018 TY Increase Relative to July 1, 2017 Rates	2019 TY Increase Relative to January 1, 2018 Interim Rates
Newfoundland Power – Wholesale	9.7	9.4
Newfoundland Power – Retail	6.6	6.4
Island Industrial	6.2	7.2
Labrador Interconnected	5.9	6.5
Labrador Industrial Transmission	15.0	28.5 ⁸
Hydro Rural Government Diesel	9.0	12.7
Hydro Rural Other ⁹	6.6	6.4

- 27 (i)
 28 (ii) « *On the Labrador Interconnected System, Hydro serves approximately 11,200 Rural Customers and two Industrial Customers: the Iron Ore Company of Canada (IOC) and the Wabush Mines facility.* »

29 **Table 5-1 Required Increase in Customer Billings to Recover Revenue Requirement¹⁶**

Customer Class	2018 TY Increase Relative to July 1, 2017 Rates		2019 TY Increase Relative to July 1, 2017 Rates	
	\$ million	%	\$ million	%
Newfoundland Power	58.2	14.1	72.0	17.4
Island Industrial	3.8	9.6	4.8	11.9
Rural Labrador Interconnected	1.4	7.1	2.4	11.6
Labrador Industrial Transmission	0.9	19.7	2.1	44.9
Hydro Rural Government Diesel	0.2	10.4	0.5	22.0
Hydro Rural Other ¹⁷	5.7	9.6	6.9	11.8
Total	70.0		88.6	

- (iii)

1 (iv) « Hydro has two mining facilities served on the Labrador Industrial rates, IOC and
2 Wabush Mines. IOC's Power on Order is forecast to be 245.0 MW for 2018. Wabush
3 Mines is currently not operational but still using a minimal amount of demand. »
4

5 **IOC – NLH – 1:** Confirm that for Labrador Industrial customers, the electricity bill is composed of:
6 (i) a Demand Charge and (ii) a non-regulated Energy charge? If not, please elaborate.
7

8 **IOC – NLH – 2:** Confirm that said Demand Charge is composed of: (i) the regulated Labrador
9 Industrial Transmission rate plus (ii) 42¢ per kW-month for a “standby generation
10 component”? If not, please explain.
11

12 **IOC – NLH – 3:** Confirm that the billing of the Development Energy Block rate is increased by
13 transmission line losses at a rate of 7.05% from CF(L)Co to the Wabush substation,
14 consistent with the approach determined by this Board? Please provide the detailed
15 calculation of such transmission losses.
16

17 **IOC – NLH – 4:** Considering that in its Application NLH forecasts that Wabush Mines only consumes a
18 minimal amount of power in 2018 and 2019, please confirm that 99%, if not all, of the
19 successive Interim 2018 increase of 15% and the Final 2019 increase of an additional
20 28.5% of the Labrador Industrial Transmission rate is expected to be paid by IOC?
21



23
24 **MUSKAT FALLS**
25

26 **References:** (i) NLH 2017 GRA, Evidence, chapter 1, page 1.4
27 (ii) NLH 2017 GRA, Supplemental Evidence, chapter 6, page 6.2
28

29 (i) « The key factors underpinning the requests made in this Application are: [...]
30 - It is well known that the impact of the Muskrat Falls Project on customer rates will be
31 significant. [...] »
32 (ii) « At its next GRA, Hydro will be proposing increased customer rates to begin recovery of
33 the cost of the Muskrat Falls Project upon completion of its full commissioning expected
34 in late 2020. Given that future rates will increase to provide recovery of the costs of the
35 Muskrat Falls Project, Hydro considers it reasonable that those same future customers
36 responsible for the recovery of the Muskrat Falls Project costs receive the benefit from
37 any savings that can be achieved through early use of the LIL and LTA. Therefore, Hydro
38 is proposing the net savings from off-island power purchases prior to Muskrat Falls
39 Project commissioning be set aside to be used to reduce the customer rate impact of the
40 future recovery of the costs of the Muskrat Falls Project »
41

42 **IOC – NHL – 5:** Please confirm whether Muskat will impact the Labrador Industrial customers since
43 they are not intended to benefit from the generation from Muskrat Falls?
44



RECAPTURE ENERGY

- References:**
- (i) NLH 2017 GRA, Evidence, chapter 1, page 1.9
 - (ii) NLH 2017 GRA, Evidence, chapter 1, page 1.9, footnote 10
- (i) « For 2018 and 2019, the availability of off-island purchases will primarily be from Recapture Energy. [...] For the period from 2018 until full-commissioning of the Muskrat Falls Project, the use of off island purchases could provide a reduction in the range of 1.3 to 2.3 TWh in Holyrood generation »
 - (ii) « ¹⁰ Under the terms of the Power Purchase Agreement between Hydro and Churchill Falls (Labrador) Corporation (CF(L)Co) (the NLH-CF(L)Co PPA), Hydro is able to, and does, purchase approximately 300 MW of Recapture Energy from CF(L)Co at a cost of 0.2¢ per kWh for use outside of the Province of Quebec. Hydro currently uses a portion of the Recapture Energy to supply its customers in Labrador (the Labrador Load) with the remainder of the Recapture Energy sold to Nalcor Energy Marketing (NEM) at a cost of 0.2 cents (¢) per kWh for resale in external markets. »

IOC – NLH – 6: Please provide the detailed allocation of the Recapture Energy including the portion allocated to Labrador Industrial Transmission rate customers through the Development Energy Block or otherwise:

Customers	Recapture Energy (av-MW)			
	2016	2017	2018	2019
IOC				
Wabush mines				
Labrador Interconnected				
Newfoundland Power				
Island Industrial				
Out-of-Province sales (NEM)				
...				
Total =	300 MW	300 MW		

IOC – NLH – 7: Please explain if and how transmission losses are incorporated in this allocation or influenced the quantity of Recapture Energy available to Labrador Industrial customers.

IOC – NLH – 8: Is the availability of Recapture Energy subject to pending litigation with Hydro-Québec over the CF(L)Co contract and scheduling rights?



OPEN ACCESS

- References:**
- (i) NLH 2017 GRA, Evidence, chapter 1, page 1.10
 - (ii) NLH 2017 GRA, Evidence, chapter 1, page 1.19
- (i) « **1.2.3 Obligation to Provide Open Access**
As a result of the Muskrat Falls Project transmission assets and the [Maritime Link] providing service in advance of the full commissioning of the Muskrat Falls Project, Hydro and Nalcor will be expected to provide open access to its transmission facilities. The

1 *provision of open access requires the implementation of a transmission tariff, which*
2 *conforms to reciprocity standards. »*

- 3 (ii) *« Hydro is preparing for the integration of its electrical system with the North American*
4 *grid, which is anticipated to take place in 2018. »*

5
6 **IOC – NLH – 9:** Is NLH expecting to provide open access according to a FERC Open Access
7 Transmission Tariff (“OATT”) to its transmission network to Labrador Industrial
8 Transmission customers? Please provide details on the timing and process of
9 implementation of the NLH OATT?

10
11 **IOC – NLH – 10:** Please state your latest estimate of the cost and regulatory burden resulting from the
12 implementation of NERC’s mandatory reliability standards to NLH and Labrador
13 Transmission Industrial customers?

14
15 *~ ~ ~ ~ ~*

16
17 **OFF-ISLAND PURCHASES DEFERRAL ACCOUNT**

- 18
19 **References:** (i) NLH 2017 GRA, Evidence, chapter 1, page 1.10
20
21 (ii) *« Hydro is also proposing to establish a deferral account which will include both the fuel*
22 *savings from off-island purchases and the actual costs attributable to off-island power*
23 *purchases, including transmission costs for delivery. The deferral account will permit the*
24 *savings from off-island purchases to offset the transmission costs to be incurred by*
25 *Hydro. Any additional savings will be set aside for the benefit of customers.»*

26
27 **IOC – NLH – 11:** Please state which customer’ classes will benefit from the alleged benefits and
28 deferral account? State what portion of the alleged benefits will accrue to the Labrador
29 Industrial Transmission customers and how any such benefits will be allocated to
30 them?

31
32 *~ ~ ~ ~ ~*

- 33
34 **References:** (i) NLH 2017 GRA, Evidence, chapter 1, page 1.11
35 (ii) NLH 2017 GRA, Evidence, chapter 1, page 1.20
36
37 (i) *« Reflecting the forecast savings from off-island purchases to customers in the 2018 and*
38 *2019 Test Year revenue requirements is anticipated to keep rates flat, or potentially*
39 *reduce rates slightly. »*
40 (ii) *« Hydro’s proposed revenue requirement has increased by \$88.2 million in the 2019 Test*
41 *Year over the Board approved 2015 Test Year, as shown in Figure 1-3. The increase in*
42 *revenue requirement since 2015 is primarily a result of an increase in capital investment,*
43 *and fuel and other costs, with an offsetting reduction in Hydro’s weighted average cost of*
44 *capital due to lower debt and changes in Hydro’s capital structure. »*

45
46 **IOC – NLH – 12:** State your expected forecast of savings from off-island purchases in 2018 and 2019?

47
48 **IOC – NLH – 13:** Quantify the amount of the offset reduction in NLH’s revenue requirement resulting
49 from the lower debt and changes in capital structure?

50
51 *~ ~ ~ ~ ~*

1
2 **CORPORATE AND GOVERNANCE STRUCTURE**
3

- 4 **References:** (i) NLH 2017 GRA, Evidence, chapter 1, page 1.13
5
6 (i) « *Key aspects of the new organizational structure include:*
7 • *a dedicated and separate executive team that report directly to, and are accountable*
8 *to, the President of Hydro;*
9 • *a Production division, encompassing Hydro Generation, the Holyrood Thermal*
10 *Generating Station, Hydro’s fleet of gas turbines and diesels, and Exploits*
11 *Generation, as well as Resource and Production Planning;*
12 • *a Transmission and Distribution division that will include the Newfoundland and*
13 *Labrador System Operator (NLSO), Transmission Planning, Rural Planning, and*
14 *Transmission and Rural Operations;*
15 • *An Engineering Services division focused on Hydro’s engineering activities, project*
16 *execution, asset management, and operational and information technology;*
17 • *a Corporate Services and Regulatory Affairs division which includes Customer*
18 *Service, Energy Efficiency, as well as Human Resources, Safety and Health,*
19 *Environmental Services, Communications and Regulatory Affairs;*
20 • *a Corporate Secretary and General Counsel division responsible for providing legal*
21 *advice to Hydro and corporate secretarial services; and*
22 • *a Financial Services division, which includes Controller, Treasury, Risk and Controls,*
23 *Commercial Management , Internal Audit, and Supply Chain administration.»*
24

25 **IOC – NLH – 14:** Please confirm that transmission and system operator functions are under the same
26 vice-presidency, similar to Hydro-Québec?
27

28 **IOC – NLH – 15:** Please explain how the transmission and distribution functions can be under the same
29 vice-presidency and conform to FERC’s separation of functions and *pro forma* OATT?
30

31 **IOC – NLH – 16:** Please confirm that employees of the “*Transmission and Distribution division that will*
32 *include the Newfoundland and Labrador System Operator (NLSO), Transmission*
33 *Planning, Rural Planning, and Transmission and Rural Operations*”, can work from
34 the same premises?
35



37
38 **WIND POWER COST ALLOCATION**
39

- 40 **References:** (i) NLH 2017 GRA, Evidence, chapter 5, page 5.12
41
42 (i) « **5.3.4 Classification of Purchases 1 of Wind Generation**
43 *Hydro purchases wind generation from the wind farms at St. Lawrence (27 MW) and*
44 *Fermeuse (27 MW), which began commercial operation in fall of 2008 and spring of 2009,*
45 *respectively. In the 2013 Amended GRA, the Settlement Agreement provided for the*
46 *purchase cost of wind generation to be classified as 100% energy-related.*
47 *Wind generation on the Island Interconnected System was initially cost-justified on the*
48 *basis of reduced production at Holyrood.»*
49

50 **IOC – NLH – 17:** Please confirm that no wind generation costs are allocated to the Labrador Industrial
51 Transmission rate?



TRANSMISSION LOSSES

- References:**
- (i) NLH 2017 GRA, Evidence, chapter 5, page 5.27
 - (ii) « For non-firm service, Hydro is proposing to retain the previously approved calculation for the energy charge with an update to the loss factors. The loss factor has been updated to the five-year average Island Interconnected System losses, from 3.47% to 3.34%. »

IOC – NLH – 18: Please confirm or state the transmission loss factor and forecast applicable to the Labrador Industrial Transmission customers from CF(L)Co to the Wabush substation?

Year	2014	2015	2016	2017	2018	2019
Loss factor	0%	7.05%	6.5%			

IOC – NLH – 19: Please provide the detailed calculation; including assumptions, of the said transmission loss factor. Please indicate if the calculation and methodology has been presented to the Board by NLH? If so, please provide the reference to the relevant filings.



LOAD FORECAST

- References:**
- (i) NLH 2017 GRA, Evidence, chapter 5, page 5.34
 - (ii) NLH 2017 GRA, Evidence, chapter 5, page 5.34, footnote 50
 - (i) « Hydro has two mining facilities served on the Labrador Industrial rates, IOC and Wabush Mines. IOC's Power on Order is forecast to be 245.0 MW for 2018. Wabush Mines is currently not operational but still using a minimal amount of demand.⁵⁰ Wabush Mines has been recently purchased and may reopen in late 2018. »
 - (ii) « ⁵⁰ The forecast demand requirement for Wabush Mines in the 2018 Test Year is 0.3 MW. »

IOC – NLH – 20: Please quantify the impact on the Labrador Industrial Transmission rate of a reopening of Wabush Mines, assuming its load returns to a level similar to its historical consumption, or if you are privy to it, to its expected load.



TRANSMISSION RATE AND METHODOLOGY

- References:**
- (i) NLH 2017 GRA, Evidence, chapter 5, page 5.35
 - (ii) NLH 2017 GRA, Evidence, chapter 5, page 5.35, footnote 51
 - (iii) NLH 2017 GRA, Evidence, chapter 5, page 5.36

- 1 (i) « Labrador West transmission is nearing its capacity limitations. The cost of providing
 2 new transmission to meet load growth on the Labrador Transmission System is high and
 3 can materially impact future customer rates. »
 4 (ii) « ⁵¹ In OC2014-034, Hydro was directed to construct a new 230 kV transmission line
 5 between Churchill Falls and Labrador West; the budget for this line was approximately
 6 \$330 million. The project was suspended in September 2014. »
 7 (iii) « The capital cost of new transmission line facilities servicing Labrador West from
 8 Churchill Falls is projected to be in the range of \$5 to \$6 per kW. »
 9

10 **IOC – NLH – 21:** What other alternative has NLH explored to manage a capacity constraint on the
 11 Labrador Transmission System?
 12

13 **IOC – NLH – 22:** Has the commissioning of series compensation been explored to increase available
 14 transmission in Labrador West been explored?
 15

16 **IOC – NLH – 23:** Does the \$5 to \$6 per kW mentioned above amounts to a kW-month or a kW-year
 17 increase of the Labrador Industrial Transmission rate or does it relate to the capital
 18 cost of the project? Please clarify the evidence.
 19

20 **IOC – NLH – 24:** Please quantify the impact on the Labrador Industrial Transmission rate of the
 21 construction of a new 230 kV line between Churchill Falls and Labrador West. Please
 22 specify the assumptions and provide the detailed calculation of the impact on rates.
 23



- 25
 26 **References:** (i) NLH 2017 GRA, Evidence, chapter 1, pages 1.7 and 1.8
 27 (ii) NLH 2017 GRA, Evidence, chapter 5, schedule VII, page 5-VII-3
 28 (iii) NLH 2017 GRA, Evidence, chapter 5, pages 5.35 and 5.36
 29
 30 (i) « Hydro is also seeking approval of the following: [...] »
 31 • a revised transmission demand rate for Labrador Industrial Customers to promote the
 32 efficient use of customers' demand requirements (see Chapter 5). »
 33 (ii)

Proposed Rates Reflecting Proposed Methodology (per kW per month)

	Proposed January 1, 2018 Interim Rate	Proposed January 1, 2019 Rates
First Block (90% of Power on Order)	\$1.34	\$1.86
Metered Demand in Excess of First Block	\$2.83	\$3.95

- 34
 35
 36 (i) « Hydro is proposing to continue to use the same methodology to determine the costs to
 37 be recovered from the Labrador Industrial Transmission Customers. The average
 38 embedded cost for transmission demand allocated to Labrador industrial Customers has
 39 increased from the \$1.19 per kW approved for the 2015 Test Year to \$1.44 per kW for the
 40 2018 Test Year and \$1.86 per kW for the 2019 Test Year. »
 41 (ii) « The proposed modification to the rate design does not change the total Test Year cost
 42 to be recovered from Labrador Industrial Transmission Customers. However, the
 43 proposed rate design provides a stronger financial incentive for the Labrador Industrial
 44 Customers to reduce their winter peak demands. Reduced peak demand from this

customer class can contribute to reduced costs for all customers on the Labrador Interconnected System. »

IOC – NLH – 25: Does NLH's two-tiered transmission rate pursues other objectives than the reduction stated above in its Application?

IOC – NLH – 26: Has NLH investigated the impact of a reduced peak demand on Labrador Industrial customers, their industrial processes and profitability?

IOC – NLH – 27: Justify the apparent absence of revenue neutrality of the proposed inclining block rate structure for the Labrador Industrial Transmission demand charge?

Average rate	1,44	100%	1,86	100%
First tier	1,34	90%	1,86	90%
Second tier	2,83	10%	3,95	10%
Average rate	1,49	100%	2,07	100%

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ADDITIONS TO THE RATE BASE

- References:**
- (i) NLH 2013 Amended GRA – Order no. P.U. 49 (2016) Compliance Application, Exhibit 11 – 2015 Test Year Cost of service for 2015 Revenue Deficiency, line 6, column 5
 - (ii) NLH 2017 GRA, Evidence, Exhibit 14 – 2018 Test Year Cost of Service Study, line 24, column 5
- (i) Indicates a 2015 Net Book Value for Transmission of \$8,261,530.
 - (ii) Indicates a 2018 Net Book Value for Transmission of \$36,867,919.

IOC – NLH – 28: Please describe the projects and investments made on the Labrador transmission system that amount to the difference in net book value of more than \$28.6 million.

Dated in Montréal, province of Québec, on September 22, 2017.

Iron Ore Company of Canada

Per: Benoît Pepin

1 To: Ms. Cheryl Blundon
2 Director Corporate Services & Board Secretary
3 **Board of Commissioners of Public Utilities**
4 Prince Charles Building
5 120 Torbay Road, P.O. Box 21040
6 St. John's, NL A1A 5B2
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8 To: Ms. Tracey Pennell
9 **Newfoundland and Labrador Hydro**
10 P.O. Box 12400
11 St. John's, NL A1B 4K7
12
13 To: Mr. Dennis Browne, Q.C.
14 **Consumer Advocate**
15 Terrace on the Square, Level 2, P.O. Box 23135
16 St. John' s, NL A1B 4J9
17
18 To: **Island Industrial Customers Group**
19 Mr. Dean A. Porter Mr. Paul L. Coxworthy
20 Poole Althouse Stewart McKelvey
21 Western Trust Building Suite 1100, Cabot Place
22 49-51 Park Street, P.O. Box 812 100 New Gower Street
23 Corner Brook, NL A2H 6H7 St, John's, NL A1C 6K3
24
25 To: **Labrador Interconnected System Customers**
26 Mr. Senwung Luk
27 Olthuis Kleer Townsend LLP
28 250 University Avenue, 8th floor
29 Toronto, ON M5H 3E5
30
31 To: **Newfoundland Power Inc.**
32 Mr. Liam O'Brien and Gerard Hayes
33 P.O. Box 8900
34 St. John's, NL A1B 3P6