NEWFOUNDLAND AND LABRADOR

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

In the matter of a General Rate Application by **Newfoundland and Labrador Hydro** for approvals of, under Section 70 of the *Public Utilities Act*, changes in the rates to be charged for the supply of power and energy to Newfoundland Power, Rural Customers and Industrial Customers; and under Section 71 of the Act, changes in the Rules and Regulations applicable to the supply of electricity to Rural Customers

and

IRON ORE COMPANY OF CANADA

EVIDENCE

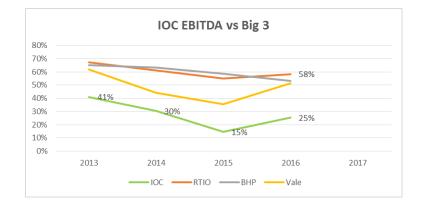
IRON ORE COMPANY OF CANADA (« IOC »)

IOC HEREBY SUBMITS:

PRESENCE OF IOC IN LABRADOR

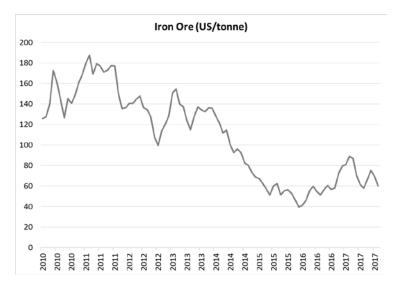
- IOC owns and operates since 1949 an iron ore mine in Labrador together with railways operations connecting the mine in Labrador to a port in the province of Québec and a pelletizing plant and an ore concentrator in Labrador City. Its Labrador operations have earned the company numerous safety, sustainable development and operational excellence awards.
- 2. Under the Labrador Mining and Exploration Company Limited Act, IOC has the benefits of water rights. Former Wabush Mines and IOC created Twin Falls Power Corporation Limited in 1960 and build a hydroelectric power generation facility to supply power to their Labrador West mining operations. In 1969, the river used by Twin Falls for power generation was diverted for the purpose of the Churchill Fall project in exchange of a power supply agreement to IOC at favorable rate (equivalent to generation cost). The power supply agreement ended December 31, 2014.

- 3. IOC is the primary operating mine in Labrador. It employs approximately 2,350 employees and contractors and supports the local economy with spending in excess of 1,000M\$ per year in Canada with the majority of the expenditures in Labrador.
- 4. In 2017, IOC announced an additional investment of 79 million \$ to develop the Wabush 3 pit, extending the life of its operations in Labrador. First ore is expected in the second half of 2018, contributing to a ramp up of IOC annual capacity from 19 towards 23 million tonnes of iron ore.
- 5. For its operations in Labrador, IOC is a major consumer of power purchased from NLH and is its largest customer in Labrador with a forecasted Power on Order of 250 MW, representing around 60% of the peak demand on the Labrador Interconnected System.
- 6. Iron ore mining and processing is a cyclical business. IOC does well when prices are high, but struggles to survive as it did in 2015 when prices reached below US\$50/t. and EBITDA falling to 15%.



www.riotinto.com/investors/results-and-reports-2146.aspx and miners public websites.

7. Since, new market conditions have brought new challenges to the industry and to IOC.



www.marketindex.com.au/iron-ore

- 8. The "Big 3" iron ore producers: Rio Tinto, BHP Billiton and Vale all are significantly lower cost producers and do not have to process the iron ore whereas IOC must process its ore. These three producers account for greater than 50% of the iron produced globally and greater than 70% of production exports come from two countries, Brazil and Australia.
- 9. IOC, a Canadian-based iron ore producer, suffers from several cost disadvantages versus the "Big 3":
 - (a) A lower iron content, below 40% compared with 55% for Australian ore and greater than 60% in Brazil. Thus, IOC must spend significantly more to process the ore before it can sell it,
 - (b) Subarctic winter temperatures that increase its energy expenditures, and
 - (c) Significant distance to China, the largest market for its product, where the industry growth has occurred for the last 15 years.
- 10. As a result, IOC, more than its competitors, must rigorously control its costs to survive on the international market. This includes its electricity costs and NLH's transmission rate regulated by the P.U.B.
- 11. Cost increases make the difference between surviving or failing when iron ore prices are depressed. Unjustified or avoidable rate increases damage competitiveness, local employment prospect and the Labrador economy.

COSTS SUPPORTING THE LABRADOR INDUSTRIAL TRANSMISSION RATE INCREASE ARE LOWER

- 12. NLH's request to increase its Labrador industrial transmission rate is predicated on increasing costs, mainly resulting from an increased depreciation expense, higher debt and cost of equity.
- 13. IOC enquired about the capital expenditures that trigger these increases. In its response to IOC-NLH-028 (extract below), NLH provided the list of capital expenditure that were made expected to lead to assets used and useful over the period covered by the present application. The bulk of these assets is not and is unlikely to be in service.

IOC-NLH-028, Attachment 1 Page 1 of 1, NLH 2017 GRA

In-Service Year	Asset Name		Average NBV ¹	Original Cost
		2016 Sub-Total	2,621.6	4,100.6
2017	Replace Instrument Transformers		381.6	391.9
	Replace Recloser - WAB		195.8	199.2
	Upgrade Circuit Breakers - 2017		5,904.3	5,989.4
	Upgrade Terminal Station - Wabush		2,546.2	2,585.3
		2017 Sub-Total	9,027.9	9,165.8
2018	Project Proposal - Interconnect MFA to HVY		11,721.5	23,513.9
	Replace Instrument Transformers - Various Sites		40.1	80.3
	Replace Insulators - Various Sites		349.4	700.7
	Upgrade Circuit Breakers - 2018		1,671.4	3,349.8
	Upgrade Power Transformers - Various Sites		2.2	4.3
	Upgrade Terminal Station - Wabush 2018		163.3	327.3
		2018 Sub-Total	13,947.8	27,976.3
Grand Total		-	25,597.4	41,242.8

Newfoundland and Labrador Hydro Summary of Projects and Investments made to Labrador Transmission System (\$000s)

14. Questioned on the timing of such investments, NLH admitted in its response to delays and the need for reduced rates. NLH did not, on the other hand provide its assessment of the rate reduction.

"Due to the materiality of the reduction in the capital expenditure requirements on the Labrador Interconnected System (LIS) as a result of the reduced expenditures in 2017 on the circuit breakers provided in response to a) and the filing of the revised Muskrat Falls to Happy Valley project in the 2018 CBA noted in part b), Hydro will revise its 2018 and 2019 revenue requirements for the LIS in its compliance filing to reflect the reduced capital expenditure adjustments." (IOC-NLH-018, page 4, lines 6-11)

15. The impact on rates is material.

NLH'S LABRADOR LOAD FORECAST IS TOO LOW

- 16. NLH underestimates the Labrador load forecast.
- 17. First, IOC's Power on Demand for 2018 is 250 MW, not 245 MW.
- 18. Secondly, on July 19, 2017, Tacora Resources inc., the new owner of Wabush Mines, announced its desire to restart of the mine at the end of 2018. It is actively seeking rail access and information on energy supply (Tacora's News Release www.tacoraresources.com/wp-content/uploads/2017/07/Tacora-Announces-Purchaseof-Scully-Mine-20170719.pdf). It was publicly announced, in June 2017, that Tacora Resources inc. and its unionized employees had agreed to a new collective labour (www.cbc.ca/news/canada/newfoundland-labrador/wabush-mines-newagreement owner-1.4148945). It is now advertising for jobs at the mine.
- 19. It is unfair for IOC, whose business is not electricity transmission, to bear the entire market risk of NLH. If NLH did include the load of the Wabush Mine in 2019, assuming the costs mentioned in the application, the Labrador industrial transmission rate would decrease to 1.68 \$/kW-month, a 10% reduction (IOC-NLH-020).
- 20. According to NLH's application, shifting the entire risk on its single industrial customer impacts IOC's by 2m\$ in 2019.

TWO-TIER TRANSMISSION RATE DESIGN WILL NOT BE REVENUE NEUTRAL

- 21. IOC objects to a rate design that increases its cost. The underlying assumption that IOC can be responsive to the proposed price signal is not supported by evidence from NLH.
- 22. The proposed drafting of the rate sheet lacks clarity on the billing demand and the ability to limit it to 90% of the Power on Order without foregoing firm transmission. Until such new drafting can be decided or agreed to, the proposed rates will not be demonstrated to be revenue neutral.

TWO-TIER TRANSMISSION RATE DESIGN IS INEFFECTIVE

- 23. The proposed rate design will not induce IOC to reduce its transmission requirement.
- 24. IOC cannot be expected to become NLH's sole load management instrument, especially if it increases its business risk while remaining ineffective because it cannot be expected to be price responsive and because the expected load growth on the Labrador Transmission System is larger than its capacity to modulate.
- 25. IOC expects NLH to define a lower cost alternative to its proposal on manage the capacity constraints on the network, including the usage of IOC static compensator that can provide relief in the order of 40 MW on the Labrador West transmission system. This

finding is supported by an engineering study from the firm BBA that can be made available to NLH and the Board in confidence as it contains material that is commercial and confidential in nature.

IMPACT OF THE TWO-TIER TRANSMISSION RATE DESIGN ON NEWFOUNDLAND AND LABRADOR CLIMATE OBJECTIVES

- 26. IOC can only substitute clean hydroelectricity with more expensive GHG emitting heavy oil generators. With the imminent arrival of carbon taxes, this would add further to IOC's costs amplifying its disadvantage *vis-à-vis* its competitors.
- 27. Even if the price signal incentivized IOC to curtail its demand, IOC cannot currently avail itself of it without suffering from production losses. Should IOC faced an increased marginal cost of energy during a period of low iron ore prices, IOC would struggle to remain cash flow positive.
- 28. Also, IOC cannot substitute its electricity supply with a prolonged use of its heavy oil generators, since they require regular maintenance.
- 29. Assuming for a moment that the oil generators are available, this would incentivize IOC to increase the use of heavy oil, an outcome contrary to Canada's commitment and policy on carbon reduction.
- 30. The Canadian Federal Government seeks to impose a minimum national price on carbon. Assuming Newfoundland and Labrador sets it own price on carbon at the minimum national price proposed by the Federal Government, the cost of carbon will rise gradually from 10 \$ up to 50 \$/t CO₂e between 2018 and 2022, imposing further costs on IOC.
- 31. IOC estimates that running its heavy oil generators will impose costs on the range of 40,000\$ per day on its Labrador operations.

CONCLUSIONS

- 32. IOC requests that NLH's Labrador Industrial Transmission rate increase be rejected, as well as its proposed two-tier rate design.
- 33. IOC requests that the cost of its intervention be reimbursed by NLH as the Board sees fit.

Respectfully submitted,

Montréal, December 4, 2017

Benoît Pepin for the Intervenor Iron Ore Company of Canada