Q. LAB-NLH-59: Re: LAB-NLH-028

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Citation:

- d) This project was placed on hold pending a restart decision by Alderon.
- e) The existing transmission system supplying western Labrador has a transfer capacity of 345 MW (delivered to the 46 kV bus). Schedule 3-II indicates an IOC load forecast of 245 MW in 2018 and 2019. Of the 162.4 MW required for Hydro Rural Interconnected in 2018, 89 MW is forecast for supply to western Labrador. Combined, the 2018 peak load for western Labrador equals 334 MW, excluding transmission system losses. Load growth of 11 MW would therefore require an expansion of the transmission system.
- f) ...
- g) Hydro is presently studying the power supply options for Labrador West including supply from Hydro-Quebec.

Table 1 Forecast Electricity Sales for Labrador West

	2017 Forecast		2018 Test Year		2019 To	2019 Test Year	
	MW	GWh	MW	GWh	MW	GWh	
Hydro Rural Interconnected							
Domestic		175.2		175.0		174.9	
General Service		156.3		163.8		172.4	
Other		18.9		19.3		19.8	
Total Hydro Rural Interconnected	79.5	350.4	80.6	358.3	81.7	367.0	
Industrial Customers	245.4	1735.5	245.3	1734.3	245.0	1733.1	
Total Deliveries	324.9	2085.9	325.9	2092.6	326.7	2100.1	

Notes:

- 1. Other includes area lights, distribution losses and Hydro company use.
- Demands by retail class are not separately forecasted. Demands for Total Deliveries are the sum of the noncoincident peaks.
- 3. Table includes rounding errors.
- On October 11, 2017, Hydro received a request from IOC to increase their power on order for 2018. The requested increase is 5MW relative to the 2018 Test Year customer requirement.

1	Preamble:				
2	LAB-NLH-027, Attachment 1 indicates the 2018 capacity forecast for Labrador as				
3	fol	lows:			
4		HVGB:	81.5 MW		
5		Churchill Falls:	0.3 MW		
6		Wabush	22.5 MW		
7		Labrador City:	58.1 MW		
8					
9	a)	Has NLH received any ind	lication that the Alderon project is likely to be restarted		
10		in the foreseeable future	? Please elaborate.		
11					
12	b)	Please explain the source	of the value of 89 MW in paragraph e), given that		
13		Table 1 indicates Rural In	terconnected load of 80.6 MW in 2018;		
14					
15	c)	Please correct paragraph	e), if necessary.		
16					
17	d)	Please explain how trans	mission losses are treated in Table 1 ("Forecast		
18		Electricity Sales", which s	hows 80.6 MW for Hydro Rural Interconnected		
19		customers in 2018, and in	n LAB-NLH-027, Attachment 1 (" Electricity		
20		Requirements"), which	shows a total of 80.9 (0.3 + 22.5 + 58.1) MW for		
21		Labrador West in 2018.			
22					
23	e)	Please explain why Hydro	sees the need for new transmission in Labrador West,		
24		given that Table 1 shows	an increase in forecast deliveries of just 1.8 MW from		
25		2017 to 2019.			

1		f)	Please provide further details concerning the discussions of supplying power to
2			Labrador West from Hydro-Quebec, including but not limited to the following
3			questions:
4			a. Under what eventualities would such additional supply be required?
5			
6			b. What volumes and prices are under discussion?
7			
8			c. Would this option in any way reduce pressure on the Labrador West
9			transmission system? If so, please explain how.
10			
11			
12	A.	a)	Hydro has not received any indication from Alderon regarding restarting the
13			Kami Mine Project.
14			
15		b)	The value of 89 MW in paragraph e) in Hydro's response to LAB-NLH-028 is
16			incorrect. The correct value is 80.6 MW, as per Hydro's response to LAB-NLH-
17			028, Table 1.
18			
19		c)	The paragraph is corrected as follows:
20			The existing transmission system supplying western Labrador has a
21			transfer capacity of 345 MW (delivered to the 46 kV bus). Schedule 3-II
22			indicates an IOC load forecast of approximately 245 MW in 2018 and
23			2019. Of the 162.4 MW required for Hydro Rural Interconnected in
24			2018, 80.6 MW is forecast for supply to western Labrador. Combined,
25			the 2018 peak load for western Labrador equals approximately 326
26			MW, excluding transmission system losses. Load growth of

1		approximately 19 MW would therefore require an expansion of the
2		transmission system.
3		
4	H	ydro has revised its response to LAB-NLH-028 to reflect the correct information.
5		
6	d)	Hydro's forecast electricity sales provided in Hydro's response to LAB-NLH-028,
7		Table 1 reflects delivered power at the Wabush Terminal Station that does not
8		include the transmission losses associated with delivering power between
9		Churchill Falls and the Wabush Terminal Station.
10		
11		Please note that the forecast 80.6 MW for Hydro Rural Interconnected
12		customers in 2018 reflects forecast power requirements for Labrador City and
13		Wabush and does not include the power requirements for Churchill Falls retail
14		customers. The forecast power requirements for Churchill Falls retail customers
15		of 0.3 MW is not served by the transmission lines serving Labrador West.
16		
17	e)	Transmission system expansion in Labrador West would not be required for the
18		loads forecasted in Hydro's response to LAB-NLH-028, Table 1. However, as per
19		Hydro's responses to IC-NLH-078 and PUB-NLH-035, additional service
20		applications have been received relating to the set up and operation of data
21		processing centers in Labrador West. Transmission system expansion would be
22		required if forecasts increase beyond system capacity.
23		
24	f)	As per Hydro's response to LAB-NLH-052, it has been agreed that the two
25		utilities will work cooperatively to perform regional transmission planning for
26		the area. On this basis, a joint analysis will be undertaken to investigate
27		interconnection alternatives that will allow for increased capacity and security

1	tor	both utilities. Further details concerning the discussions with Hydro Quebec
2	are	e summarized as follows:
3	a.	The requirement for additional capacity is summarized in Hydro's response
4		to Part e) above.
5		
6	b.	Hydro is not discussing volumes and prices at this stage of the investigation
7		Rather, the initial analysis will involve an assessment of the technical
8		viability of interconnection alternatives and the transmission system
9		capacity that would be afforded by each.
10		
11	c.	As the analysis with Hydro Quebec is not yet complete, Hydro is unable to
12		comment in detail with respect to how an interconnection would impact
13		power flows in the existing transmission system. However, such an
14		expansion would allow for increased capacity under normal operating
15		conditions and under contingency. The capability for such an
16		interconnection to reduce pressure on the Labrador West transmission
17		system would depend on the ratio of forecasted load to the interconnected
18		system capacity.