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1	Q.	(Re: 2016 Standby Fuel Deferral Application, February 5, 2016 Report, Appendix B
2		and Appendix E) Please provide a proof based on assumptions in Appendix E that
3		the RSP and the proposed deferral account would not over-collect from customers.
4		
5		
6	Α.	Please see attachment 1 for the requested calculation which shows that no over-
7		collection will occur between the RSP and the proposed deferral.
8		
9		As noted in Hydro's response to CA-NLH-003, the 2016 Standby Fuel Deferral, as
10		proposed in the Application, would capture variances from the 2015 Test Year in
11		both price and volume for all Standby Generation (Part A). It would also capture
12		volume variances only, associated with hydraulic power purchases (Part B).
13		
14		These variances are offset by the costs or savings of avoided Holyrood TGS energy
15		production, as calculated in Part C of the 2016 Standby Fuel Deferral. The
16		calculation of Part C, as defined, ensures no over-collection from customers in
17		conjunction with the RSP.
18		
19		Attachment 1 shows the requested proof for the Average Inflows scenario. As noted
20		in Appendix E Line 8 of the Application, the amount to be collected from customers
21		is reduced by approximately \$2.3 million. This amount will be collected from
22		customers through normal operation of the RSP, as shown in the attached proof.
23		
24		Line 1 of Attachment 1 shows that hydraulic production has increased by 0.5 GWh
25		when compared to the 2015 Test Year. The RSP assumes this increase in hydraulic
26		production will result in decreased thermal production at the Holyrood TGS. As

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1	such, customers are credited for 0.5 GWh at the cost of Holyrood TGS production,
2	\$0.1061.
3	
4	Line 14 of Attachment 1 shows that Load has decreased by 88.6 GWh when
5	compared to the 2015 Test Year. The RSP assumes this reduction in load will result
6	in less thermal production at the Holyrood TGS. As such, customers are credited for
7	88.6 GWh at the cost of Holyrood TGS production, \$0.1061.
8	
9	The net impact of the RSP on this scenario is that customers are credited for 89.1
10	GWh of production, priced at the cost of production at the Holyrood TGS. ¹
11	
12	In the Average Inflows scenario, Hydro will produce 111.4 GWh less than the 2015
13	Test Year at the Holyrood TGS. This is 22.2 GWh less than the 89.1 GWh reduction
14	as assumed by the RSP. As such, customers will have paid for 22.2 GWh (\$2.3
15	million) of production at the Holyrood TGS which did not occur. However,
16	additional production was provided through use of Standby Generation for which
17	the costs will be recovered through the proposed Standby Fuel Deferral account.
18	
19	In order to ensure customers are not over-charged, Part C of the proposed deferral
20	account reduces the amount to be collected by this same \$2.3 million. This ensures
21	no over collection occurs and that both the RSP and 2016 Standby Deferral are
22	harmonized.
23	
24	Hydro has also provided the same proof for both the 1961 and 1985 Inflows
25	scenarios as attachments 2 and 3.

¹ 0.5 GWh + 88.6 GWh.

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		Average Inflows			
				Varia	nce
Line No.	Production (GWh)	2015 Test Year	2016 Average Inflows	RSP	Standby Fuel Deferral
		(a)	(b)	(c) = (a) - (b)	(d) = (a) - (b)
	NLH Hydro				
1	Total Hydroelectric ¹	4,603.6	4,604.1	(0.5)	-
	NLH Standby				
2	Holyrood CT	6.5	68.4	-	(61.9)
3	Hardwoods Gas Turbine	3.2	6.4	-	(3.2)
4	Stephenville Gas Turbine	1.2	1.2	-	-
5	St. Anthony Diesel	0.2	0.2	-	(0.0)
6	Hawkes Bay Diesel	0.1	0.2	-	(0.1)
7	Blackstart Diesel	-	1.7	-	(1.7)
8	NP Thermal	-	0.6		(0.6)
9	Total Standby	11.3	78.9	-	(67.6)
	NLH Purchases				
10	Nalcor Exploits	633.5	588.0	-	45.5
11	Star Lake	142.2	142.2	-	(0.0)
12	Rattle Brook	15.0	14.8		0.2
13	Total Purchases	790.7	745.0	-	45.7
14	Total Load ²	7,239.0	7,150.4	(88.6)	
15	Variance (GWh) (Line 1 + Line 9 + Line 13 + Line 14)			(89.1) ³	(21.9)
	NLH Thermal				
16	Holyrood Thermal ⁴	1,593.0	1,481.6	111.4	
17	Net Variance (GWh) (Line 15 + Line 16)			22.2	(21.9)
18	Cost of production at Holyrood (\$/kWh) (\$64.41 per bbl / 607 kWh/bbl)			0.1061	0.1061
10	$O_{\rm Ver}/(1)$ and $r_{\rm Ver}$ is a property of the PSD for No. 6 Eucl. (\$)				
20	Part C - Holyrood TGS Fuels Costs/(Savings) Appendix C (\$)2,536,792(2,3)(2,3)			(2,321,519)	
21	Variance				35 ,27 3 ⁵
	¹ The RSP hydraulic variation balance capture	s the difference be	tween Actual and Test Y	'ear hydraulic produc	tion. According
	to RSP rules, any hydraulic production variar	nce is priced at the	cost of production at th	e Holyrood TGS (\$0.1	061 cents /
	kWh). This results in \$57,725 owing to custo	mers (0.5 GWh * \$0	0.1061).		
	² Total Load includes all sources of supply, inc such as wind and CBPP Cogeneration. The R Load. According to RSP rules, any Load varia	luding those not no SP load variation b nce is priced at the	ormalized in either the F alance captures the diff cost of production at th	RSP or the 2016 Stand Ference between Acture The Holyrood TGS (\$0.2	by Fuel Deferral, Ial and Test Year 1061 cents /
	kWh). This results in \$9,401,482 owing to cu	stomers (88.6 GWh	n * \$0.1061).		
	³ 89.1 GWh is the net reduction in assumed p	roduction from the	Holyrood TGS in the RS	Р.	

- ⁴ 111.4 GWh is the actual reduction in production at the Holyrood TGS versus the Test Year. This is compared to the 89.1 GWh reduction assumed in the RSP on Line 15.
- ⁵ A difference of approximately \$35,000 exists between the amount collected through the RSP and Part C of the 2016 Standby Fuel Deferral. This difference is primarily due to the energy from NP Thermal, as defined in the proposed deferral, which was not included in the forecast load of 7,150.4 GWh as shown in Appendix A of the Application.

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		1961 Inflows			
				Varia	nce
Line		2015	2016	RSP	Standby
No.	Production (GWh)	Test Year	1961 Inflows		Fuel Deferral
		(a)	(b)	(c) = (a) - (b)	(d) = (a) - (b)
	NLH Hydro				
1	Total Hydroelectric ¹	4,603.6	3,617.6	986.0	-
	NLH Standby				
2	Holyrood CT	6.5	204.3	-	(197.8)
3	Hardwoods Gas Turbine	3.2	6.4	-	(3.2)
4	Stephenville Gas Turbine	1.2	1.2	-	-
5	St. Anthony Diesel	0.2	0.2	-	(0.0)
6	Hawkes Bay Diesel	0.1	0.2	-	(0.1)
7	Blackstart Diesel	-	1.7	-	(1.7)
8	NP Thermal	-	0.6	-	(0.6)
9	Total Standby	11.3	214.7	-	(203.5)
	NLH Purchases				
10	Nalcor Exploits	633.5	472.9	-	160.6
11	Star Lake	142.2	117.4	-	24.8
12	Rattle Brook	15.0	11.4	-	3.6
13	- Total Purchases	790.7	601.7	-	189.0
1/	Total Load ²	7 220 0	7 150 /	(88.6)	_
14		7,239.0	7,150.4	(88.0)	
15	Variance (GWh) (Line 1 + Line 9 + Line 13 + Line 14)			897.4 ³	(14.5)
	NLH Thermal				
16	Holyrood Thermal ⁴	1,593.0	2,475.5	(882.5)	
17	Net Variance (GWh) (Line 15 + Line 16)			14.8	(14.5)
18	Cost of production at Holyrood (\$/kWh) (\$64.41 per bbl / 607 kWh/bbl) 0.1061				0.1061
19	Over/(Under) Contribution from the RSP for No. 6 Fuel (\$) 1,571,552				
20	20 Part C - Holyrood TGS Fuels Costs/(Savings) Appendix C (\$) (1,5				
21	Variance				35 ,22 9 ⁵
	 The RSP hydraulic variation balance capture to RSP rules, any hydraulic production variat kWh). This results in \$104,622,001 owing frc Total Load includes all sources of supply, inc such as wind and CBPP Cogeneration. The F Load. According to RSP rules, any Load varia kWh). This results in \$9,401,482 owing to cu 897.4 GWh is the net increase in production 	s the difference between nee is priced at the common customers (986.0 cluding those not not SP load variation bar nce is priced at the stomers (88.6 GWh assumed from the P	ween Actual and Test Y cost of production at th) GWh * \$0.1061). rmalized in either the R alance captures the diff cost of production at th * \$0.1061). Holyrood TGS in the RS	ear hydraulic produc e Holyrood TGS (\$0.1 SP or the 2016 Stand erence between Actu ne Holyrood TGS (\$0.2 P.	tion. According 061 cents / by Fuel Deferral, Ial and Test Year 1061 cents /

- ⁴ 882.5 GWh is the actual increase in production at the Holyrood TGS versus the Test Year. This is compared to the 897.4 GWh increase assumed in the RSP on Line 15.
- ⁵ A difference of approximately \$35,000 exists between the amount collected through the RSP and Part C of the 2016 Standby Fuel Deferral. This difference is primarily due to the energy from NP Thermal, as defined in the proposed deferral, which was not included in the forecast load of 7,150.4 GWh as shown in Appendix A of the Application.

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		1985 Inflows			
				Varian	ce
Line		2015	2016	RSP	Standby
No.	Production (GWh)	Test Year	1985 Inflows		Fuel Deferral
		(a)	(b)	(c) = (a) - (b)	(d) = (a) - (b)
	NLH Hydro				
1	Total Hydroelectric ¹	4,603.6	3,861.4	742.1	-
	NLH Standby				
2	Holyrood CT	6.5	88.1	-	(81.6)
3	Hardwoods Gas Turbine	3.2	6.4	-	(3.2)
4	Stephenville Gas Turbine	1.2	1.2	-	-
5	St. Anthony Diesel	0.2	0.2	-	(0.0)
6	Hawkes Bay Diesel	0.1	0.2	-	(0.1)
7	Blackstart Diesel	-	1.7	-	(1.7)
8	NP Thermal	-	0.6	-	(0.6)
9	Total Standby	11.3	98.5	-	(87.2)
	NLH Purchases				
10	Nalcor Exploits	633.5	472.9	-	160.6
11	Star Lake	142.2	117.4	-	24.8
12	Rattle Brook	15.0	11.4	-	3.6
13	 Total Purchases	790 7	601.7		189.0
15	Total Fulliases	/50./	001.7	-	105.0
14	Total Load ²	7 220 0	7 150 4	(99.6)	
14	10141 2014	7,239.0	7,150.4	(88.0)	
15	Variance (CWh) (line 1 + line 0 + line 12 + line 14)			652 F ³	101.9
15	Variance (GWN) (Line 1 + Line 9 + Line 13 + Line 14)			053.5	101.8
	NLH Thermal				
16	Holyrood Thermal	1,593.0	2,348.0	(755.0)	-
17	Net Variance (GWh) (Line 15 + Line 16)			(101.4)	101.8
18	Cost of production at Holyrood (\$/kWh) (\$64.41 per bbl / 607 kWh/bbl) 0.1061 0.1061				
10					
19	Over/(Under) Contribution from the RSP for No. 6 Fuel (\$) (10,763,186)				10 709 120
20		C (\$)			10,798,139
21	Variance				3/ 953 5
21	Variance				34,333
	¹ The RSP hydraulic variation balance capture	s the difference bety	ween Actual and Test Y	ear hydraulic product	ion. According
	to RSP rules, any hydraulic production variar	nce is priced at the c	cost of production at th	e Holyrood TGS (\$0.10	061 cents /
	kWh). This results in \$78,749,767 owing from	n customers (742.1 (GWh * \$0.1061).	,	
	² Total Load includes all sources of supply, including those not normalized in either the RSP or the 2016 Standby Fuel Deferral,				
	such as wind and CBPP Cogeneration. The R	RSP load variation ba	lance captures the diff	erence between Actu	al and Test Year
	Load. According to RSP rules, any Load variance is priced at the cost of production at the Holyrood TGS (\$0.1061 cents /				
	kWh). This results in \$9,401,482 owing to customers (88.6 GWh * \$0.1061).				
	³ 653.5 GWh is the net increase in production	assumed from the H	Holyrood TGS in the RS	Р.	
	⁴ 755.0 GWh is the actual increase in producti	ion at the Holyrood ⁻	TGS versus the Test Yea	ar. This is compared to	o the 653.5 GWh
	increase assumed in the RSP on Line 15.				
	⁵ A difference of approximately \$35,000 exists	s between the amou	int collected through th	ne RSP and Part C of th	ne 2016 Standby
	Fuel Deferral. This difference is primarily due	e to the energy from	n NP Thermal, as define	d in the proposed def	erral, which was
	not included in the forecast load of 7,150.4 GWh as shown in Appendix A of the Application.				