

1 Q. Please provide the number of air-blast circuit breakers which have been replaced to
2 date, by voltage level, with SF6 circuit breakers. Describe the current plans for
3 replacing air-blast circuit breakers in the future.

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6 A. To date, Hydro has replaced two 230 kV air-blast circuit breakers with SF6 circuit
7 breakers. Sunnyside breaker L03L06 was replaced in 2012 and Hardwoods breaker
8 B1L36 was replaced in 2013.

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10 The current plan for replacing air-blast circuit breakers is outlined in PUB-NLH-098
11 Attachment 1. This plan is currently under review by Hydro to determine if changes
12 are required as a result of the events of January 4 and 5, 2014.

AIR-BLAST CIRCUIT BREAKER REPLACEMENT PLAN								
LOCATION	NLH ID	TYPE	MODEL	YEAR BUILT	VOLTAGE (kV)	AGE	OVERHAUL YEAR	REPLACEMENT YEAR
BDE TS1	B1T2	Air Blast	DCVF 245 mc6	1966	230	47	1999	2014
BDE TS1	B2T4	Air Blast	DCVF 245 mc6	1968	230	45	2000	2014
OPD TS	B1L18	Air Blast	DCVF 245 mc6	1969	230	44	2008	2014
HRD TS	B2L42	Air Blast	DLF 245 nc2	1973	230	40	-	2014
HRD TS	B2B11	Air Blast	DLF 245 nc2	1974	230	39	-	2014
HRD TS	B12L42	Air Blast	DLF 245 nc2	1978	230	35	-	2014
HWD TS	B1L01	Air Blast	DLF 245 nc2	1972	230	41	-	2014
BDE TS1	B2T3	Air Blast	DCVF 245 mc6	1966	230	47	2000	2015
BDE TS1	B3T6	Air Blast	DCVF 245 mc6	1966	230	47	2001	2015
SSD TS	B1L03	Air Blast	DCVF 245 mc6	1966	230	47	2002	2015
HRD TS	B1L17	Air Blast	DLF 245 nc2	1973	230	40	2014	2015
HRD TS	B1B11	Air Blast	DLF 245 nc2	1974	230	39	-	2015
HRD TS	B12L17	Air Blast	DLF 245 nc2	1973	230	40	-	2015
BDE TS1	B1T1	Air Blast	DCVF 245 mc6	1966	230	47	2002	2016
SSD TS	L02L07	Air Blast	DCVF 245 mc6	1966	230	47	2002	2016
BDE TS1	B4B5	Air Blast	DCVF 245 mc6	1964	230	49	2003	2016
SSD TS	B1L02	Air Blast	DCVF 245 mc6	1966	230	47	2003	2016
OPD TS	B1L36	Air Blast	DCVF 245 mc6	1969	230	44	2008	2016
BBK TS	B1L11	Air Blast	DLF 245 nc2	1971	230	42	-	2016
BBK TS	B1L09	Air Blast	DLF 245 nc2	1971	230	42	-	2016
BBK TS	L09L33	Air Blast	DLF 245 nc2	1973	230	40	-	2016
BBK TS	L11L33	Air Blast	DLF 245 nc2	1978	230	35	-	2016
HRD TS	B3L18	Air Blast	DLF 245 nc2	1978	230	35	-	2016
HRD TS	B12B15	Air Blast	DLF 245 nc2	1978	230	35	-	2016
HRD TS	B3B13	Air Blast	DLF 245 nc2	1978	230	35	-	2016
BDE TS1	B3T5	Air Blast	DCVF 245 mc6	1969	230	44	2000	2017
BDE TS1	B1B2	Air Blast	DCVF 245 mc6	1966	230	47	2004	2017
MDR TS	B5L11	Air Blast	DCVF 245 mc6	1967	230	46	2006	2017
BDE TS1	B6B10	Air Blast	DCVF 245 mc6	1968	230	45	2005	2018
WAV TS	B1L37	Air Blast	DCVF 245 mc6	1968	230	45	2005	2018
BDE TS1	B2B3	Air Blast	DCVF 245 mc6	1968	230	45	2006	2018
MDR TS	B1L28	Air Blast	DCVF 245 mc6	1966	230	47	2007	2019
STB TS	B1L31	Air Blast	DCVF 245 mc6	1966	230	47	2008	2019
STB TS	L05L35	Air Blast	DCVF 245 mc6	1966	230	47	2009	2019
BDE TS1	B5B6	Air Blast	DCVF 245 mc6	1968	230	45	2007	2020
STB TS	B1L35	Air Blast	DCF 245 mc6	1966	230	47	2010	2020
WAV TS	B1L08	Air Blast	DCVF 245 mc6	1968	230	45	2010	2020
STB TS	B2L04	Air Blast	DCVF 245 mc6	1966	230	47	2011	2020
STB TS	L05L31	Air Blast	DCF 245 mc6	1969	230	44	2008	2021
STB TS	B1L32	Air Blast	DCVF 245 mc6	1968	230	45	2009	2021
SSD TS	L06L07	Air Blast	DCVF 245 mc6	1968	230	45	2014	2021
WAV TS	L03L17	Air Blast	DCVF 245 mc6	1969	230	44	2009	2022
WAV TS	B1L17	Air Blast	DCVF 245 mc6	1969	230	44	2009	2022
WAV TS	L01L03	Air Blast	DCVF 245 mc6	1969	230	44	2014	2024
BDE TS1	B3B4	Air Blast	DCVF 245 mc6	1972	230	41	2005	2025
BUC TS	L05L33	Air Blast	DLF 245 nc2	1973	230	40	2013	2025
BUC TS	L28L32	Air Blast	DLF 245 nc2	1972	230	41	2014	2026
BDE TS1	B1B10	Air Blast	DCVF 245 mc6	1975	230	38	2016	2026

AIR-BLAST CIRCUIT BREAKER REPLACEMENT PLAN								
LOCATION	NLH ID	TYPE	MODEL	YEAR BUILT	VOLTAGE (kV)	AGE	OVERHAUL YEAR	REPLACEMENT YEAR
BUC TS	B1L05	Air Blast	DLF 245 nc2	1973	230	40	2014	2027
BUC TS	B1L28	Air Blast	DLF 245 nc2	1975	230	38	2014	2028
WAV TS	B1B3	Air Blast	DLF 245 nc4	1977	230	36	2014	2031
SSD TS	B2T1	Air Blast	DCF 170 mc4	1969	138	44	-	2015
STB TS	B3L22	Air Blast	DCF 170 mc4	1967	138	46	2014	2021
SSD TS	B3T4	Air Blast	DCF 170 mc4	1966	138	47	2012	2022
STB TS	B3L130	Air Blast	DCF 170 mc4	1968	138	45	2012	2022
STB TS	B3T2	Air Blast	DCF 170 mc4	1969	138	44	2012	2023
SSD TS	B2L12	Air Blast	DCF 170 mc4	1966	138	47	2014	2023
SSD TS	L19L100	Air Blast	DCF 170 mc4	1966	138	47	2014	2023
SSD TS	L109T4	Air Blast	DCF 170 mc4	1968	138	45	2015	2023
SSD TS	L100L109	Air Blast	DCF 170 mc4	1968	138	45	2015	2024
STB TS	B3L133	Air Blast	DCF 170 mc4	1969	138	44	2015	2024
STB TS	B3T1	Air Blast	DCF 170 mc4	1969	138	44	2016	2025
STB TS	B3L10	Air Blast	DLF 145 nc2	1977	138	36	2015	2031